

Approval

Name: Suzanne Lawrence

Degree: Master of Public Policy

Title of Project: **BC Tuition Strategies: A review of international graduate tuition policy options in British Columbia**

Supervisory Committee:

Dr. Doug McArthur
Senior Supervisor
Public Policy Program

Dr. Jonathan R. Kesselman
Supervisor
Public Policy Program

Date Approved: _____

Abstract

Universities in many Canadian provinces charge relatively high tuition fees to their international graduate students. In British Columbia, by contrast, international graduate students are charged the same or modestly higher tuition fees as those paid by domestic students with much of their education costs funded by the Province. A review of the existing literature, empirical data and experiential information offered by faculty and administrators suggests that this favourable treatment of international graduate students is a product of the limited revenue potential associated with higher fees, the perceived value of international students to research and institutional partnerships, and the influence of faculty in the setting of tuition fees. It is recommended, on the basis of these results and given the lack of a policy window allowing for change, that the Government of British Columbia maintain the status-quo and allow universities to set their own tuition fee levels for this population.

Keywords: Tuition fees; post-secondary education; BC education policy; international education; tertiary level education

Acknowledgements

My sincere gratitude is extended to Dr. Doug McArthur for his support and advice in the face of the many challenges I experienced during this paper's development. I thank Kim Fleming and my capstone group for their input and words of encouragement. Also, thanks to Dr. John Kesselman for his insightful comments and recommendations related to my defence.

I would like to acknowledge the assistance and advice provided by Heather McMartin, Iain Snee, Nell Hodges, Dawn Geil, Dr. Hilary Perraton, Derek Andrew, Aron Strumecki, Robert Meyer, Percy Buffam, Susi Foerg, Michelle Lawrence, Wayne Lawrence, and Sheilia Lawrence.

Credit is due to everyone who took part in the interviews. Their contribution was critical to this research and much appreciated.

Table of Contents

Approval	ii
Abstract	iii
Acknowledgements	iv
Table of Contents	v
List of Figures	vii
List of Tables	viii
Glossary	ix
1: Introduction and Policy Problem.....	1
2: Background and Literature Review	3
2.1.1 International education in Canada and global trends	3
2.1.2 International education and BC universities	8
2.1.3 Differential tuition fees	11
2.1.4 Valuing international graduate students	17
3: Methodology and Study Limitations	21
3.1 Methodology Description	21
3.1.1 Statistics	21
3.1.2 Interviews	22
3.2 Study Limitations	23
4: Research Results.....	25
4.1.1 Review of statistics	25
4.1.2 Interview results	31
4.2 Summary: Key research findings	43
5: Policy Alternatives.....	44
5.1 Alternative One: Status quo	44
5.2 Alternative Two: Removal of Provincial support for international graduate students.....	45
5.3 Alternative Three: Elimination of differential tuition fees.....	46
5.4 Alternative Four: Remove differential fees for international graduate research students and require full-cost tuition for non-research students.....	47
6: Objective, Criteria, and Measurements	49
6.1 Policy Objective	49
6.2 Criteria and Measurements.....	50
6.2.1 Financial savings.....	50
6.2.2 Administrative ease.....	51
6.2.3 Political support	51
6.2.4 Equity	52

6.2.5	Effectiveness	52
7:	Evaluation of Policy Options.....	54
7.1	Alternative One: Status quo	54
7.1.1	Finance - <i>Low</i>	54
7.1.2	Administrative ease - <i>High</i>	55
7.1.3	Political support – <i>Medium-high</i>	55
7.1.4	Equity – <i>Low-medium</i>	56
7.1.5	Effectiveness - <i>Medium</i>	57
7.2	Alternative Two: Removal of support for international graduate students	58
7.2.1	Finance - <i>High</i>	58
7.2.2	Administrative ease – <i>Low</i>	59
7.2.3	Political support – <i>Low-medium</i>	59
7.2.4	Equity - <i>Medium</i>	60
7.2.5	Effectiveness – <i>Medium-high</i>	61
7.3	Alternative Three: Elimination of differential tuition fees.....	62
7.3.1	Finance - <i>Low</i>	62
7.3.2	Administrative ease - <i>High</i>	63
7.3.3	Political support - <i>Low</i>	63
7.3.4	Equity – <i>Low-medium</i>	64
7.3.5	Effectiveness – <i>Low-medium</i>	64
7.4	Alternative Four: Full cost tuition fees for international students in non-research programs and no differential fees for research students	65
7.4.1	Finance – <i>Low-medium</i>	65
7.4.2	Administrative ease - <i>Medium</i>	66
7.4.3	Political support – <i>Medium</i>	66
7.4.4	Equity – <i>Low-medium</i>	67
7.4.5	Effectiveness - <i>Medium</i>	68
7.5	Analysis Summary	69
7.5.1	Policy matrix	69
7.6	Recommendation	70
8:	Conclusion.....	72
	Appendices	74
	Appendix A.....	75
	Appendix B.....	77
	Bibliography.....	79
	Interviews and Correspondence.....	84

List of Figures

Figure 1: Tuition as a percent of university operating revenue, by province	6
Figure 2: Enrolled international graduate students, 2000-2006	27
Figure 3: International students in graduate studies, as a percent of all graduate students in BC	77
Figure 4: Percent of international students enrolled in a graduate level program in Canada, by year	77

List of Tables

Table 1: Enrolment of international graduate students in Canada, by year and level of study	4
Table 2: Federal cash transfers for post-secondary education, as a percent of GDP	4
Table 3: Minimum university tuition fees for international graduate students, 2008/09	7
Table 4: Graduate level FTEs versus funded spaces in British Columbian universities	9
Table 5: Top three countries of origin of BC international graduate students, 1997-2005	26
Table 6: Revenue estimates for international graduate students in BC	27
Table 7: International graduate tuition fee levels, and 2005 enrolment	29
Table 8: Operating expenses in Canadian provinces, 2007-08	30
Table 9: Criteria, definition, and measurements.....	50
Table 10: Policy matrix	69
Table 12: Policy matrix: Numeric values	70
Table 13: Government transfers per FTE by province	78
Table 14: Share of provincial expenditures on post-secondary education	78

Glossary

Advanced research students	Generally referred to as PhD students or thesis-based master's students
AUCC	Association of Universities and Colleges of Canada
AVED	BC Ministry of Advanced Education and Labour Market Development
BC research universities	For the purpose of this study, four BC research universities have been identified: University of British Columbia, University of Northern British Columbia, University of Victoria and Simon Fraser University. All of these universities were chosen due to their number of graduate students at both a doctoral and master's level. In addition, all four institutions are members of the Research Universities Council of British Columbia – an independent advocacy group representing their interests.
CAUT	Canadian Association of University Teachers
COSEPUP	Committee on Science, Engineering and Public Policy in the United States
Full Time Equivalents (FTE)	FTE is a unit term employed by institutions and government to calculate per unit costs and revenues. The Government will generally fund a certain number of FTE positions at a university, which can also be referred to as graduate or undergraduate seats. The funding allocated for a graduate FTE in the 2009/2010 academic year was \$20,000 per seat, determined by the BC Ministry. If a student is designated as part time, they will usually account for a third of a FTE.
International students	According to the BC Ministry of Advanced Education and Labour Development, an international student is defined as “[s]tudents who have moved from outside of Canada to British Columbia and do not meet the residency requirements of Section 82 of the <i>School Act</i> ” (BC Ministry Glossary, 2009).

OECD	Organisation for Economic Co-operation and Development
RUCBC	Research Universities' Council of British Columbia
SFU	Simon Fraser University
UBC	University of British Columbia
UNBC	University of Northern British Columbia
UNESCO	United Nations Educational, Scientific and Cultural Organization
UVic	University of Victoria
Tertiary-level education	Post-secondary education
Tuition fees	A student in a Canadian university may face a number of different fees upon enrolment. Some of these fees include: application fees, student society fees, recreation fees, dental plan fees, medical plan fees, and others. For the purpose of this study, I will examine only tuition fees. The Oxford Dictionary defines 'tuition' as "teaching or instruction, especially of individuals or small groups" and fees as "a payment made in exchange for advice or services".(Compact Oxford English Dictionary, 2009).

1: Introduction and Policy Problem

Under Provincial policy, BC universities can charge international students any rate of tuition fees they deem fit. In comparison, domestic students fees are restricted to a two percent annual increase. Universities have reacted to this policy by charging full cost tuition fees to international undergraduate students. In 2008-09, three of British Columbia's research universities charged minimum undergraduate tuition fees that ranked in the top seven of the highest cost programs out of a Canadian comparison of 44 universities (Canadian Federation of Students, Fall 2009). However, at a graduate level, BC institutions charge some of the lowest international graduate tuition fees in the country (see Table 3). BC universities charge foreign graduate students fees that are similar or equivalent to that of domestic students. These graduate fees do not cover the cost of graduate degree programs. The Province supplements foreign students' education by providing graduate seat grants and operational grants to universities.

BC research universities thus offer international graduates subsidized tuition fee rates. This presents a policy problem for the Province of BC as international graduate students and their families have no history of making tax contributions in Canada. They also represent an investment risk when graduates leave the country after their studies and Canadian citizens forfeit on the benefits accruing from an educated population. The policy problem rests in selecting the level of subsidization for international graduate students through an appropriate setting of tuition fee levels.

The University of British Columbia's (UBC) Committee on Tuition Policy identified this policy problem as an area requiring further study in 1999. Their mandate states:

Non-resident Canadian students do not contribute to the support of post-secondary education in British Columbia by paying taxes as Canadian residents.

If the parents of these students are also non-residents of Canada, they also do not financially support post-secondary education through taxes... This is an important policy issue for the Provincial Government because it financially supports all students, whose enrolment is counted toward the Provincial grant, including all Canadian citizens who pay domestic tuition. (Committee on Tuition Policy, 1999)

The Committee's comments relate to UBC's tuition policies, but they acknowledge that this issue is a Provincial concern. Low fees represent a loss in potential revenue. Universities are particularly susceptible to these losses as they face financial constraints.

Despite these concerns, international students are important to universities' development and contribute to research and institutional rankings. Low cost international graduate programs may attract a larger number of applicants, but top students are often offered scholarships or financial packages at their institution of choice to cover education costs, regardless of tuition levels. There are arguments to be made in providing accessible education to persons of high academic merit, despite their country of origin, as well as to financially disadvantaged persons. Finance is just one factor in a student's choice, but it can weigh heavily when prospective students from most of the world would find the cost of living in Canada, let alone tuition fees, significantly off-putting. Considering how quickly international education is growing and the importance of competing for high calibre international students, BC research universities need innovative and progressive policies.

The challenge for the Government of British Columbia is to develop international graduate tuition policies that give due credit to tax paying citizens, while at the same time attracting high calibre students that will contribute socially, academically and economically to their hosting community. British Columbia, offering the lowest international graduate tuition levels in Canada after Saskatchewan, must balance these competing interests.

2: Background and Literature Review

2.1.1 International education in Canada and global trends

At an UNESCO conference in Paris in June 2009, experts from around the world gathered to discuss a massive growth and transformation that had taken place in higher education over the previous decade. They identified several issues including an exploding demand for international education. The number of tertiary level students in the world rose by 50% to 152.5 million from 2000 to 2007. Moreover, students studying outside their country of origin increased 53 percent over the ten-year period since 1999 (UNESCO, June 24, 2009) (UNESCO, July 7, 2009). This rapid growth in overseas tertiary-level education is impacting university development. Two new features often considered when identifying competitive universities are the emerging importance of international students and internationalization of education (UNESCO, July 7, 2009).¹ Combined with the increased emphasis on research, cross-border graduate education is rapidly rising in prominence among higher education planners.

Canada's well-developed, English language universities attract a large number of international students. The last decade has shown a dramatic increase in enrolment numbers in Canada; there were approximately 70,000 full-time and 13,000 part-time international students in 2006 (AUCC, August 2007). Within this market, undergraduate enrolment tripled over the last decade and graduate enrolment doubled from 11,000 to 22,000 students (AUCC, August 2007).

¹ According to Tamil Salmi, Tertiary Education Coordinator in the World Bank's Human Development Network and author of *The Challenge of Establishing World-Class Universities*, "the key elements to make a world class university were a concentration of talent, an abundance of resources and favourable governance. American universities, for example, spend three times more per student than European ones and had large endowments" (Salmi, 2009). Universities from around the world compete for this student talent and the market is great, with more than 2.8 million students studying outside of their home country in 2007 alone. The top destinations for these students were the United States (595,900), the United Kingdom (351,500), and France (246,600) (UNESCO, June 24, 2009). However, the dominance of this market is being threatened by a growing movement towards regional centres and through the emergence of ever more sophisticated international programs (UNESCO, June 24, 2009).

Around one third of graduate enrolment consists of those taking doctoral programs (AUCC, August 2007). According to the OECD in 2005, 21.4 percent of advanced research students in Canada were international students. This percent is low when compared to 2006 figures for the United Kingdom (40.8 percent) and the United States (23.7 percent) (OECD, 2008).

In approaching this market, Canada is at a disadvantage. Canada lacks a nationally coordinated approach and instead is heavily reliant on the provinces, which have jurisdictional authority over post-secondary education. This can be challenging for many foreigners who may not be familiar with the provinces. Nations such as the United States of America, the Commonwealth of Australia, and the United Kingdom are organizing on a national level to capture students. Canada's programs and policies - or lack thereof - are increasingly important to its efforts to maintain global competitiveness. BC universities thus face increasing pressure to attract top graduate research students within this multi-jurisdictional and supra-national context.

Table 1: Enrolment of international graduate students in Canada, by year and level of study

	FTE	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
International students	Master	6,289	6,913	7,795	8,778	10,169	11,109	11,721	11,694
	PhD	4,411	4,479	4,743	5,476	6,672	7,323	7,721	7,408
	Total	10,700	11,392	12,538	14,254	16,841	18,432	19,442	19,102
International students (percent of total graduate enrolment)	Master	8.5%	9.2%	9.8%	10.2%	11.4%	11.8%	12.5%	12.2%
	PhD	16.6%	16.8%	17.3%	18.7%	20.8%	21.1%	21%	20.1%
	Total	10.6%	11.2%	11.7%	12.4%	13.9%	14.3%	14.9%	14.4%

Source: CAUT Almanac of Post-secondary Education (2009)

Table 2: Federal cash transfers for post-secondary education, as a percent of GDP

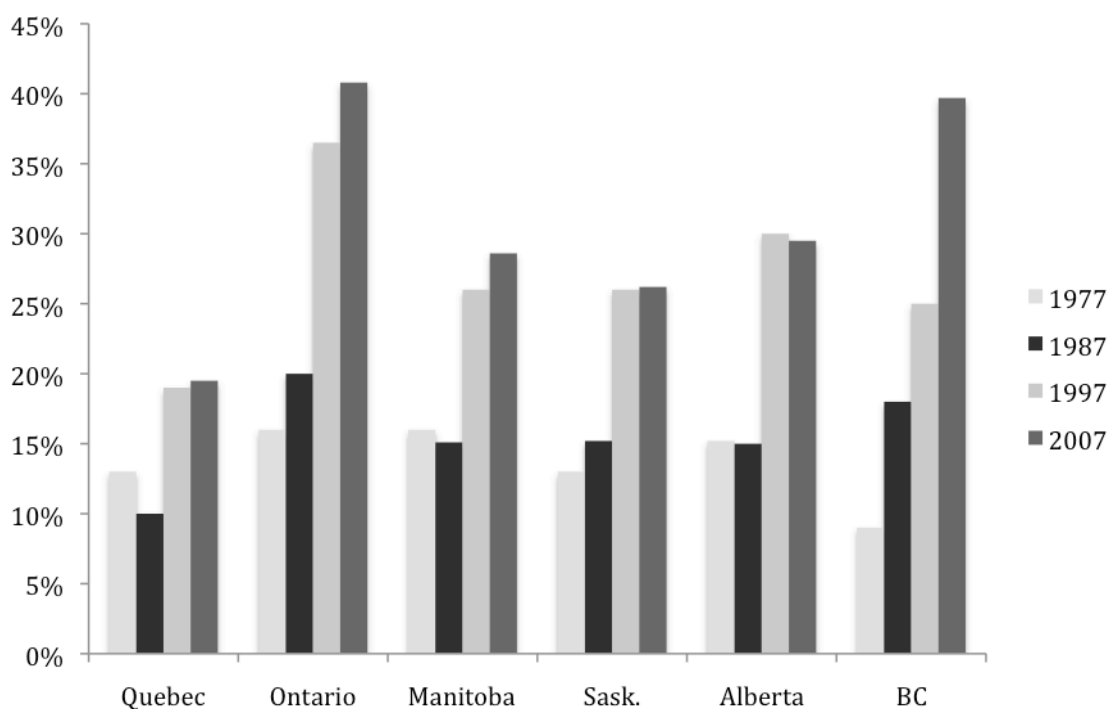
Year	1983-84	1986-87	1989-90	1992-93	1995-96	1999-00	2001-02	2004-05	2007-08	2008-09
% of GDP	0.50%	0.44%	0.33%	0.41%	0.29%	0.19%	0.23%	0.25%	0.16%	0.21%

Source: CAUT Almanac of Post-Secondary Education (2009), figure 1.1

The Province of BC receives post-secondary funding from the federal government. Transfer payments between the federal and provincial governments first began in 1967. The funds were reduced in 1995, when they were merged with dedicated health money into the Canadian Health and Social Transfer. In 2004, the funding scheme changed again into two separate streams: the Canadian Health Transfer and the Canada Social Transfer. The Canada Social Transfer does not earmark specific amounts for post-secondary education. Instead, provinces allocate funding between post-secondary education and other uses on their own terms (AUCC, 2006).

Table 2 shows the reduction in federal transfers of cash to post-secondary education in Canada as a percent of gross domestic product (GDP). Reduced transfer payments have come under the critical eye of several groups. The Association of Universities and Colleges of Canada (AUCC) argues that Canadian universities are underfunded. They estimate that in constant dollars “per student operating and research funding from Government for Canadian universities was nine percent lower in 2004 than it was in 1990 and 20 percent lower than in 1980” (AUCC, 2006). American public universities received an average of \$5,000 more per student from the government than those enrolled in Canadian universities in 2004 (AUCC, 2006). In some ways the Canadian Government is compensating for this decrease despite the AUCC’s criticism. The federal government has increased its investments in sponsored research from \$1.2 billion in 1996/97 to \$2.4 billion in 2006/07 (AUCC, 2008). Nevertheless, the government’s share of university funding has tangibly declined. In 1980, 84 percent of the university funds for teaching and unsponsored research came from government and 10 percent from student fees whereas the rest came from private sector contributions (AUCC, 2008). In 2006, 66 percent of funds came from the government, 24 percent from student fees and 10 percent from other contributions.

Figure 1: Tuition as a percent of university operating revenue, by province



Source: Estimated and adapted from CAUT Almanac of Post-Secondary Education (2009), figure 1.2

Many universities have developed greater financial reliance on tuition income in the face of the rising costs, reduced federal transfers, and shifting provincial funding priorities. Figure 1 shows the rise in tuition fees as a percent of university operating revenue from 1977 to 2007. Some provinces display a large difference in tuition fees as part of revenue between 1987 and 1997. During the 1990s, some provinces removed tuition freezes, thus allowing universities to increase their fees. The subsequent rapid increases led to political pressures to re-cap domestic tuition. Today, all provincial governments regulate domestic tuition fee increases.

Tuition fee policies vary across the nation. BC currently imposes a domestic student tuition cap allowing for a maximum of a two percent annual increase. In Alberta, students originally paid 30 percent their program costs through tuition fees. However, the Government of Alberta now regulates fee increases based on the Consumer Price Index. The Government of New Brunswick negotiates tuition fees separately with each institution. In Quebec and Nova

Table 3: Minimum university tuition fees for international graduate students, 2008/09

<i>University</i>	<i>Min. Fees for 2008/09</i>
University College of Cape Breton	\$17,500
Ryerson University	\$14,250
University of Toronto	\$13,892
Dalhousie University	\$13,641
Mount Saint Vincent University	\$12,910
Trent University	\$12,896
St. Francis Xavier University	\$12,895
McMaster University	\$12,525
University of Western Ontario	\$12,400
University of Calgary	\$11,686
École Polytechnique	\$11,610
Université de Montréal	\$11,308
McGill University	\$11,307
Concordia University	\$11,070
Queen's University	\$11,025
University of Waterloo	\$10,172
University of Windsor	\$10,050
Université Laval	\$9,963
Lakehead University	\$9,467
University of New Brunswick	\$9,450
Université d'Ottawa	\$9,311
Laurentian University	\$9,236
Wilfrid Laurier University	\$9,041
Carleton University	\$8,900
Brock University	\$8,872
University of Manitoba	\$7,936
York University	\$7,515
University of Alberta	\$7,040
University of Victoria	\$5,662
University of Guelph	\$5,650
University of PEI	\$4,918
Brandon University	\$4,095
University of British Columbia	\$4,059
Simon Fraser University	\$3,070
University of Regina	\$3,000
University of Northern BC	\$2,704
University of Saskatchewan	\$2,000
Memorial University	\$1,896

Source: Canadian Federation of Students, Tuition fees for international graduate students (Fall 2009)

Scotia, provincial residents pay a lower fee than those from out-of-province. In 2007, Quebec lifted a ten-year tuition freeze, but it continues to provide some of the lowest cost university degrees with tuition fees less than half the national average for a domestic student (Statistics Canada, October 18, 2007). In Ontario, the Government regulates domestic tuition fee increases and, since 1995, has not counted international students for operating grant purposes (Government of Ontario, 2009, Section 4.1.3). The diversity of tuition fee policies across the country reflects the provinces' usage of different methods in managing student enrolment and university revenue.

This diversity of provincial policies echoes the diversity of tuition levels applied to international graduate students in Canada. Table 3 sets out minimum university tuition fees for international graduate students attending Canadian Universities in 2008/09. These are minimums in that tuition fees at some universities may exceed these fee levels depending upon the type and length of the program. BC's four research universities rank in the lowest ten Canadian institutions listed according to tuition fee costs. Similarly, Saskatchewan institutions also offer low tuition fees and rank in the bottom four.²

2.1.2 International education and BC universities

Pursuant to section 27(2)(m) of the *University Act* (British Columbia), the Board of Governors for each institution has authority "to set, determine and collect the fees to be paid for instruction, research and all other activities in the university"(Government of BC, *University Act*, 1996). The Board exercises their authority through a sub-committee, which reviews graduate tuition fees. The Dean of Graduate Studies, the Vice President Academic, and other delegates often sit on this sub-committee (Associate Vice President of Financial Planning and Operations interview, 2009). Committee composition is dependent upon the institution. The Faculty of Graduate Studies generally directs discussions and research on international graduate tuition fee

² Saskatchewan also hosts a Graduate Retention Program, which provides graduate students with a tuition rebate of up to \$20,000 for those filing Saskatchewan tax returns. For more information visit <http://www.aeel.gov.sk.ca/grp>

levels. The Faculty may commission policy documents, surveys and task forces to review tuition fees.

Universities receive funds to host graduate study programs through tuition fee revenue, provincial operating grants, other revenue sources, and graduate space grants of \$20,000 per student per year. Based on a \$20,000 grant per student, a PhD would cost the BC government more than \$120,000 in cumulative transfers, and approximately \$40,000 for a master's degree based on average degree durations.³ The provincial government funds a fixed number of these graduate spaces at an institution. The university chooses who fills these positions. However, between 1994 and 2006, the Government funded few new graduate student spaces. Universities continued to expand their programs despite these restrictions. The Confederation of University Faculty Associations of BC (CUFA) estimated approximately 4,400 graduate seats in BC were unfunded by 2007 (Clift, 2007). Table 4 provides more recent estimates based on the number of full-time equivalent (FTE) graduate students enrolled in BC research universities in 2008/09 compared to the BC government funded target spaces announced for 2009/10. It is not possible to trace the exact origin of the financing of unfunded seats but, over the last ten years, several universities characterized their graduate programs as an essential part of their function and they continued to find necessary funds needed to supply departments with students.

Table 4: Graduate level FTEs versus funded spaces in British Columbian universities

	<i>2008/09 FTE</i>	<i>2009/10 Funded graduate spaces</i>	<i>Unfunded graduate spaces</i>
Simon Fraser University	3,331	1,986	1,345
University of British Columbia	7,224	5,532	1,692
University of Northern BC	496	426	70
University of Victoria	2,251	1,914	337
Total	13,302	9,858	3,444

Source: BC Headset (<http://www.bcheadset.com/>) and AVED, Letters of Expectation, 2009/10

³ The average full-time doctoral program takes approximately six years and a full-time master's degree takes on average two years (Canadian Association for Graduate Studies, 2006, p29).

Domestic and international graduate student fees differ little in BC, resulting in relatively low tuition fee levels for international graduate students relative to other Canadian institutions. In Table 3, all four of BC's institutions rank in the bottom quartile of tuition fee levels. Simon Fraser University (SFU) and the University of Northern British Columbia (UNBC) do not charge different tuition fees to their international graduates students. The University of Victoria charges a small differential fee of approximately \$300 per term. The University of British Columbia (UBC) guarantees all international graduate students a partial tuition scholarship⁴, which effectively results in their fees being equal to that of domestic students. Low fees are being used as a recruitment incentive. UBC's website boasts fees for international graduates that are almost \$10,000 less than the University of Toronto and almost \$20,000 less than Oxford University (UBC website, Fees and Costs).

In addition to setting international fees, universities are also responsible to recruit and admit foreign graduate students. Individual graduate departments shoulder much of this responsibility. Departments enjoy a large degree of freedom from the university administration to develop recruitment strategies. As described in this paper's research findings, an education faculty even developed an internationalization strategy and international education office to cater to its students, while its Faculty of Graduate Studies had none. This decentralized recruitment method suggests that admissions is a product of personal faculty initiatives and networks, where interactions with overseas institutions or individuals meeting at international conferences can result in developing personal ties leading to academic exchanges and recruitment opportunities. Subsequently, an arbitrary international student body develops through the lack of a dedicated

⁴ UBC's international partial tuition fee awards offer up to \$3,101.70 per year. The following programs are ineligible for these awards: Master of; Food Science, Health Administration, Journalism, Jurisprudence in Common Law, Landscape Architecture, Management, Occupational Therapy, Architecture, Business Administration, Executive Business Administration, Business Administration and Law combined, Education {Adult Learning and Global Change , off campus, Counselling Psychology}, Educational Technology, Engineering, Fine Arts in Creative Writing, Distance Education, Physical Therapy, Rehabilitation Science, Genetic Counselling, Science/Diploma in Dentistry, Software Systems: Doctor of; Education in Educational Leadership, Pharmacy, Philosophy/Medicine.

university recruitment strategy (see Appendix B for more information on international graduate student enrolment in BC between 1985 and 2005).

2.1.3 Differential tuition fees

Differential tuition fees were first introduced in the United Kingdom in 1967. Initially, they covered only a small portion of the full costs associated with the students' education at the host institution (Perraton, 2009). In the early 1980s, however, the Conservative government of Prime Minister Margaret Thatcher implemented significant fee increases. The net effect was to eliminate any form of subsidization for overseas students.

The purported purpose of fee increases was to curb the rapidly growing numbers of overseas students in Britain and the associated burden on British taxpayers. However, Britain was not alone in its decision to increase fee differential. Woodhall describes this policy shift as part of a "world-wide phenomenon" (Woodhall as cited in Perraton, 2009), which he describes as follows:

By 1979 a number of countries, including Britain had become concerned about this rapid growth, either on the grounds of the cost of public subsidies for overseas students or because of fears that their growing numbers would displace home students or cause imbalances to develop, particularly in the most popular courses and institutions. (Woodhall as cited in Perraton, 2009, p59)

The decision to implement differential fee increases was nonetheless controversial. In Britain, the public responded in protest (Perraton, 2009). The Government responded with increased funding to international scholarship schemes. These awards offset some of the outstanding costs to 'academically meritorious' foreign students (Perraton, 2009). Britain experienced an initial decline in enrolments of overseas students after fee increases. However, admissions shortly returned to previously levels.

In Canada, seven of the ten provinces implemented differential fee regimes around this same time (Woodhall, 1987). Ontario and Alberta had differential fees in effect by 1976

(Perraton, 2009). Quebec introduced the same in 1979. The Maritimes followed later that same year (Perraton, 2009). As noted by Karel Reus in his review of international education in Australia, international education began to shift at this time from “*international aid to international trade*” (Reus, 2006, p6). This idea flourished internationally and domestically. International education is now described by the General Agreement on Tariffs and Trade (GATT) as an exportable commodity.

As differential fees were rising, university representatives in Canada were becoming increasingly more vocal in the defence of foreign students and their contributions to campus life. In 1987, at a National Forum on Post-Secondary Education, 600 university representatives supported the following statement of principle with respect to overseas students:

Foreign students now are seen as being a necessary component of post-secondary education. Their present contribution to higher education and future contributions to Canada’s international influence is recognized. There is a consensus that... an “open door” policy and support for these should be developed. (Tillman, 1991, p392-393)

This statement, and others articulated by these representatives, were reviewed by George Tillman on behalf of the Department of the Secretary of State of Canada and later published in *Higher Education*.

Tillman observed, on the basis of his review of the reports of the National Forum on Post-Secondary Education and the events surrounding it, an institutional trend towards the view that international students are important in affecting perspectives and life experiences related to academic and campus life. He also observed a feeling of moral obligation to “assist the educational and economic development of other nations...” (Tillman, 1991, p393). In general, there was an emphasis on open and accessible education. Differential fees could be seen as contrary to this objective as they create financial barriers for students.

In British Columbia, students have lent similar support for international students and have raised similar objections to differential tuition fees. In 1984, when differential fees were being considered for undergraduate students, UBC student reporter Robert Beynon argued that such fees discriminated against those from developing countries who could not afford increased tuition costs. In an article published in the *Ubysey* in 1984, Beynon criticized the reasons underlying fee increases, suggesting instead that they were motivated by politics and xenophobia (Beynon, 1984). He quoted Margaret Copping, an outgoing student government representative, as follows:

I'm sure a great deal of pressure comes from, if not racism, then xenophobia (fear of foreigners). When the public is economically strapped, people become wary of students not Canadian born using the university system" (Beynon, 1984, p3).

In a similar article published in 1985, a student member of the board of governors described the differential tuition fee regime as a "redneck policy" (Ubysey staff, 1985). This individual complained that "uninformed people in BC who fear UBC is being taken over by foreigners are putting pressure on government and public bodies" (Ubysey staff, 1985, p3). These fees were introduced in 1985 despite these complaints. However, they were limited to undergraduate students. It was not until 1997 that UBC implemented differential tuition fees for graduate students.

Regrettably, there is little literature which speaks specifically to differential fees for graduate students. Most reports relate to undergraduate students. One notable exception Lyakhovetska's 2002 paper on the introduction of differential tuition fees and their impact on international students at UBC. In the course of her research, she uncovered UBC's Draft Policy 72 from 1995. It relates specifically to international graduate students and states as follows:

Recognizing that the University's research-based graduate programs encompass activities that benefit from the presence of international students who can bring with them new ideas and techniques, domestic students and international students in research-based programs should pay the same proportion of program costs. (Lyakhovetska, 2002, p7)

This draft policy characterizes international students as important contributors to UBC research activities and, on that basis, excludes them from differential tuition fees. Despite this declaration, two years later in 1997, the University Board voted to increase tuition fees for international research graduate students to 2.5 times the level of domestic students (UBC Committee of Tuition Policy, 1999) (Lyakhovetska, 2002).

Several questions arise as to why this change in policy approach. According to Lyakhovetska, the 1997 tuition fee increase resulted from BC Government pressures. The Province apparently threatened to decrease its funding support unless higher fees were introduced for graduate students (Lyakhovetska, 2002). Lyakhovetska's claim in this regard is consistent with those made in 1984, when Beynon accused the provincial government of pressuring universities to raise their differential fees for undergraduates.

In response to the 1997 fee increases, students led a protest and sit-in at the President's office (Gunn and Quan, 1997). The increase in graduate tuition fees coincided with the introduction of a \$135 ancillary fee, which also drew protest. In response to demands for lower international graduate fees, UBC President Dr. David Strangway reportedly remarked:

The decision on the international student fee increases was made some time ago. There has been extensive consultation over the last four years, the decision was made just a few months ago and there is no change. (Gunn and Quan, 1997, p3)

The same year as the introduction of differential graduate fees, the Board of Governors faced a number of concerns related to these increased education costs. They found that departments had reduced their number of international graduate student offerings and that they required additional research grants and funding to support students (UBC Board of Governors, May 22, 1997). In a May 1997, meeting, the Board articulated some issues with this policy:

Whereas a reduction in the number of graduate international students harms research at UBC by reducing the amount of international intellectual transfer necessary at a world class research university. (UBC Board of Governors, May 22, 1997)

The Board also proposed introducing a special fund to support overseas students in financial need. Shortly after, UBC introduced its International Partial Tuition Awards, which resulted in international graduates paying the same level of tuition fees as domestic students.

In 1999, despite the introduction of these awards, the Committee on Tuition Policy reported opposition to the partial tuition awards. Committee members called for the total elimination of differential fees at the graduate level. They adopted Principle 12, in which they stated that “[a]ll students in research-based graduate program, both domestic and international, should pay the same tuition level for a given program” (UBC Committee of Tuition Policy, 1999). The Committee took the view that these students were “collaborators and co-workers in research projects and should, therefore be considered colleagues rather than clients” (UBC Committee of Tuition Policy, 1999). Its members emphasized research as not bounded by national borders and university benefits from international students who bring new ideas and techniques into research programs.

The Committee also noted that differential fees increased the financial burden on hosting departments to provide students with supporting funds:

Tuition differentials also place a significant burden on faculty who support these international students via their research funds. UBC’s current approach of offering partial tuition scholarships on an individual basis to international student in research-based graduate programs is counterproductive both administratively and in our recruiting efforts. (UBC Committee of Tuition Policy, 1999)

The Committee’s concerns may be part of the reason why UBC now offers tuition awards across the board for all research degrees. However, Principle 12 remains posted on the Vice President Academic’s website and UBC continues to offer partial tuition awards.

In comparison, York University in Ontario charges full-cost tuition fees to international graduate students. The corresponding revenue is split between university accounts based on a set funding formula. In total, the University generates approximately \$33 million from differential

fees each year. This accounted for five percent of the 2008 operating budget (McMartin, 2009). Of this revenue, 40 percent is directed to internationalization strategies through the Office of Vice President Academic and Provost and the Associate Vice President International, 10 percent covers the cost of recruitment trips, processing and international student programs, and the remaining 50 percent is absorbed into general revenue (McMartin, 2009).

University administration enjoys a portion of the revenue generated by differential fees, but departments perceive an associated cost with hosting foreign students. Top international graduates often request full funding to complete their studies. Consequently, individual departments are required to find resources to attract and maintain these candidates. Heather McMartin, who investigated the funding of international students in Ontario, found that “international doctoral students cost the university \$12,000 to \$13,000 per student because they receive funding from the university through the guaranteed funding package for graduate students, yet the university does not receive this from the Government”(McMartin, 2009, p47).⁵ McMartin suggests that, because these students are seen as a cost rather than a source of funding, departments make little effort to recruit international graduate students.

The cost of international education was recently an issue for the Government of BC. It expressed an interest in knowing whether taxpayers subsidize foreign students. In 2005, the Ministry of Advanced Education and Labour Market Development (AVED) requested an internal audit to determine if foreign students are paying the full cost of their post-secondary education. The report prepared by Internal Audit and Advisory Services in response to this request concluded as follows:

On the basis of our review results, we established that there was likely no subsidization of international students by BC taxpayers at the institutions we examined. In most cases, a surplus still remained after all relevant direct, indirect

⁵ As noted previously in the paper, in Ontario international students are not counted as ‘enrolled’ for operating grant purposes.

and capital costs were allocated. (Internal Audit and Advisory Services, September 2005, p1)

The report did not distinguish between undergraduate and graduate students. Conspicuously absent was any mention of the fact that undergraduate and graduate students pay different rates.

2.1.4 Valuing international graduate students

Knowing the values associated with hosting international graduate students can help determine the appropriate level of public subsidies, via tuition fee rates, to provide to students. Literature suggests, aside from personal benefits, universities and countries see multiple benefits in hosting international research students. Universities value these students for their ideas, perspectives, and connections. Countries value these students for their skills and potential to immigrate. However, quantifying these values can be challenging given little previous research on them and students' high levels of mobility.

Universities value international students for their unique research perspectives, institutional and diplomatic ties as well as sources of revenue and skilled labour. University administrations are becoming increasingly aware of these potential benefits and more internationally orientated. They have introduced university-wide internationalization strategies, resourced international education offices, and established targeted international scholarships. Within this context, universities compete to recruit the best minds from around the world. Markets have developed around 'high calibre students' who enhance an institution's reputation (Hatakenaka, 2004). These students also enhance the research capacity of institutions, improving an institution's ranking (Horta, 2009; Mohrman, Ma, & Baker, 2008). In Canada, there has been an increase in the number of scholarships for international students. According to the AUCC's 2007 report entitled "Canadian Universities and International Student Mobility," 62 percent of their survey respondents indicated that they had developed international scholarships. This represents an increase of 24 percent from 2000 levels (AUCC, 2007).

At the community level, international graduate students may provide skilled labour, contribute to higher productivity levels and advance the development of international ties. They could also immigrate, adding to the nation's skilled human resource base. In a report issued in 2005, the Committee on Policy Implications of International Graduate Students and Postdoctoral Scholars in the United States outlined these benefits and presented its argument for international graduate students in the fields of science and engineering (COSEPUP, 2005). In the report, field experts and representatives from industry, government, and academia suggest that top international recruits are critical to the success and competitiveness of the USA as a global knowledge producer:

International students who remain in the United States after their studies often become part of networks that support knowledge transfer and economic development in the United States and the sending country... Those who return home after their studies or after some period of employment may go to work for US-owned multinational firms, continue research that adds to global knowledge, and form collaborations with US partners. (COSEPUP, 2005)

The Committee notes that the benefits associated with international students are driving an international competition for bright minds and that success in this competition is becoming even more critical, as fewer Americans are enrolling in advanced science and engineering studies (COSEPUP, 2005). The US is increasingly dependent on international research students and their contribution to American innovations as measured through patent applications. A 2008 study investigated the relationship between international graduate student enrolment and patent applications (Chellaraj et al., 2008). It concluded that a 10 percent increase in the number of international graduate students could result in a rise in patent applications of 4.5 percent, university patent grants of 6.8 percent and non-university patent grants of 5 percent (Chellaraj et al., 2008).

In addition to the high number of patent applications, international graduate students have also been associated with increased international partnerships. Gingras, Godin, and Foisy's 1999

study demonstrated that Canadians have, to some extent, been able to monitor international academic collaborations arising from greater internationalization. They measure this collaboration through the number of publications involving international cooperation (Hatakenaka, 1999). Their research suggests a correlation between the presence of international researchers and international collaboration on research projects. This relationship is not surprising as many students continue to work with their supervisors and program peers after graduation.

Despite these apparent benefits, literature is divided on the normative question of the extent to which governments should subsidize students. The debate around tuition fee policies generally can be divided between those who favour and those who oppose subsidization (Marucci and Johnstone, 2007). Historically, Western society has supported the case for subsidization. The argument for government support is generally based on the beliefs that an educated population can offer high returns to society, that education is a right, that access to education should not be hindered by availability of funding, race, location, and that the actual costs of studying is beyond the means of many families (Marucci and Johnstone, 2007).

In more recent years, however, that the cost burden of higher education has shifted to the individual (Marucci and Johnstone, 2007). The rationales articulated for this policy shift include: higher education yields substantial private returns; those who benefit from higher education tend to be from the middle and higher classes and therefore have a greater ability to pay; fee-paying individuals will demand more accountability and education will become more consumer focused and efficient; and it has become more difficult to tax at a rate needed to support the growing cost of post-secondary education (Marucci and Johnstone, 2007).

American scholars have studied the apparent commodification of education. According to Johnstone, in the United States, students clamour to get into high cost universities because of its 'worth' and are willing to borrow or work part-time to help pay for their studies (Johnstone, 2001). Several studies note that the elasticity of demand for higher education in general indicates

a response of a one to two percent change per \$100 increase (Johnstone, 2001). However, others argue that greater dependency on student tuition has led to a trade-off, wherein education's broader social roles are sacrificed to meet market demand.

Howard Bowen's writings in the 1970s and 1980s include the observation that university costs have been linked to revenue rather than what may be required to produce a 'good' education. As universities' costs can vary according to revenue, high tuition fees become "more discretionary, presumably more avoidable, and thus all the more open to criticism" (Johnstone, 2001, p148). Bowen notes that this revenue dependency has led many American universities to become financially dependent on student tuition (Bowen, 1982). This dependency has resulted in the tailoring of educational programs to meet market needs as opposed to universities' social responsibility "for the advancement of the democracy, the cultural and the economy" (Bowen, 1982, p96). Interestingly, despite low levels of provincial funding for new graduate spaces, BC universities have not developed a similar dependency on international graduate tuition fee revenues. They continue to offer low tuition rates as well as expand graduate student enrolment.

Public choice theorists may agree with Bowen, that post-secondary education is increasingly dominated by job market requirements as opposed to social welfare objectives. The individual will choose a program that generates the most personal benefits, assuming they are self-interested actors. However, compared to undergraduate education, graduate level education tailors to small community. In this community, the interests of faculty and institutions play an important role in establishing policies and standards. The prestige associated with hosting high calibre international students and faculty advances in research, aided by graduate student contributions, boosts the reputation of academic supervisors as well as universities. Under these circumstances, the government must balance faculty and universities' interests against the public's interest through the setting of appropriate tuition fee levels.

3: Methodology and Study Limitations

3.1 Methodology Description

In understanding the potential challenges and characteristics of higher education planning in BC, this paper addresses the following question: Why do BC universities offer low to no differential tuition fees to international graduate students? Research results identify opportunities for change and articulate motivating factors affecting policy decisions. Features considered in this study include: university revenue sources, costs and benefits of hosting international graduate students, number of funded and unfunded graduate spaces, number of international graduate students enrolled, nationalities of graduate students, university reputation, processes of tuition fee setting, and the role of the provincial government and faculty in affecting policies. Research involved a literature and statistics review as well as in-depth interviews with 13 individuals.

3.1.1 Statistics

Statistics were collected from the Research Universities Council of BC, the Canadian Association of Graduate Studies, the Canadian Federation of Students, as well as Statistics Canada. Statistics were reviewed for predominant characteristics differentiating BC from other provinces in relation to changes in international graduate enrolment levels, students' countries of origin, and provincial funding transfers. Information on minimum graduate tuition fee levels, produced by the Canadian Federation of Students, was compared against the numbers and percent of international students enrolled in graduate programs in Canadian institutions. Attempts were made to identify a relationship between enrolment numbers and tuition fee levels to determine if tuition fees act as an obvious impediment. Estimates of potential revenue accruing through

higher tuition fees were made based on annual fee levels of \$14,000 (Canadian international student average) and \$9,000 (average calculated from Table 3). This total was compared against university operating grants to estimate the scale of potential income from higher tuition fees.

3.1.2 Interviews

The interviews were conducted to gain perspective on the policy problem and viability of policy options. Interviewees were selected for their abilities to represent the interests of affected parties, their field of expertise, and their availability. Affected parties were identified as: BC universities, faculties, individual university staff members, students, researchers, and the Province of BC. It was felt that no individual could accurately represent public opinion except as expressed through the media and previous studies. Individuals selected to offer stakeholder input were executive directors, association presidents (in one case an immediate past-president as current president was still in transition), elected representatives, deans, university administrators, and a senior policy analyst. Representatives from the following institutions were interviewed⁶: UBC, SFU, UVic, UNBC, the Canadian Federation of Students, the BC Centre for International Education, the Confederation of University Faculty Associations of BC, the Canadian University Teachers Association and the Research Universities Council of BC. Attempts were made to speak with a representative from the BC Ministry of Advanced Education and Labour Development. They declined a request for an interview, but a senior policy advisor did respond to several of my enquiries via email.

Since initial discussions suggested that faculty played a dominant role in the recruitment and retention of international graduates as well as in the process of tuition fee setting, attempts were made to contact the deans of faculties that held the largest and smallest proportion of international graduates for that institution. Only two of nine faculty members approached agreed

⁶ Of the research university representatives, three were from the Faculty of Graduate Studies, one was from a graduate awards department, and another was as an Associate Vice President of Financial Planning and Operations.

to participate in this research. One was a Dean of Education (Education held the smallest proportion of international graduates at that institution) and the other was a Dean of Applied Science (Applied Science held the largest proportion of international graduates at that institution). Both of these faculty deans were from the same university. Overall, the purpose of faculty interviews was to derive information on recruitment strategies, the value of international students to departments, attitudes towards international students, funding issues around graduate students, opinions on policy options and anything else that was not traceable in the datasets acquired.

The participants for my interviews were contacted through email and/or telephone to request an interview. Interviewees outside of the lower mainland agreed to communicate over the telephone. The interviews averaged just over 30 minutes of recorded discussions. These recordings were typed and converted into a paper transcript. Transcripts were reviewed for emerging themes, which is discussed further in the research results component of this paper. While all interviewees agreed to disclose their names, I have chosen to respect their anonymity in order to avoid any problems that might arise from comments attributed to them. A copy of the guiding questions can be found in *Appendix A*.

3.2 Study Limitations

A large limitation in this study was the absence of information on international graduate students' sources of funding (in Canada). Universities charge tuition fees, but they potentially cycle funds back to a student through teaching assistant or research assistant positions, scholarships, research grants, fellowships, or bursaries. The scale of these awards may cancel out the financial impact of tuition fees. It was noted that some institutions, such as those in Manitoba, impose surcharges on their graduate students, but 75 percent is rebated by the University (Council on Post-Secondary Education, Appendix b). Similar practices appear to occur in a number of universities. According to Statistics Canada, 59 percent of 2004/05 doctoral graduates completed their program without any debt related to their studies, 65 percent receiving a fellowship or a

scholarship through their university, 63 percent working as a teaching assistant, and 32 percent as a research assistant (King, 2008). If these statistics are similar for international PhD students, it is an indication that institutions take with one hand through tuition fees, but give back with the other through awards.

Limited information is available on ‘brain drain’ or ‘brain gain’ in BC. Information on the potential contribution and losses to BC when students stay or leave the country could be a factor in determining an appropriate level of tuition to charge. Statistics Canada produces a *Survey of Earned Doctorates*, which inquires into the intentions of foreign and domestic doctoral candidates to either stay in Canada or go overseas after graduation. Statistics Canada notes that over 60 percent of American PhD graduates and over 70 percent of foreigners born outside the US or Canada intend to remain in Canada (King, 21). No further information on mobility patterns or the intended duration of their stay is available. A BC survey of alumni would serve as a better indicator of potential brain drain/gain.

No single source of statistics is available on the enrolment of international graduate students by province and their tuition fee averages over time. Different datasets were merged. A margin of error may exist due to different data definitions. Tuition levels for Canadian universities from 2001 to 2009 were also unavailable. The only published data on international graduates was from the Canadian Federation of Students for 2005-06 and 2008-09 on minimal tuition rates from select institutions.

4: Research Results

4.1.1 Review of statistics

A provincial analysis of the country of origin of foreign graduate students over the last eight years identified British Columbia's main sending countries as China and the United States of America (see Table 5). The top three countries of origin for international students in Canada for 2007 were reported as: China (approx. 15,000), United States (approx. 7,000), and France (approx. 5,000) (AUCC, 2007). This indicates that, at least for the top two sending countries, BC's international student population is fairly consistent with national trends. The quantity of these students in BC is not high and it is unsurprising that variations exist in the third-ranked sending countries (see Table 5). This variation could be the result of arrangements made with a university to accept a cohort of funded students from a specific country or the result of market fluctuations. Data related to students' country of origin does not directly address the question of why BC does not charge differential fees, but it is important in understanding and identifying points of divergence from other markets that charge differential fees. Figure 2 compares the numbers of international graduate students enrolled between Canadian regions from 2000 to 2006.⁷ British Columbia has experienced a fairly consistent growth in numbers with a slight dip in 2006. In Ontario, where international graduate students tend to pay higher differential fees, enrolment has increased from approximately 3,542 in 2000 to nearly double the amount with 6,486 students in 2006. Growth varies from region to region, but every jurisdiction in Figure 2

⁷ The enrolment numbers for Royal Roads University and Thompson Rivers University (TRU) were not included in the BC total in Figure 2. TRU was not listed as one of the four BC research universities under review and its enrolment numbers were low. The Royal Roads University was also not included despite its large number of enrolled international graduates enrolled, which were listed as 840 for 2004, 1,128 in 2005, and 984 enrolled in 2006. A similar removal of private institutions in other provinces was not conducted.

experienced growth despite variations in tuition fee policies. This data suggests that tuition fee rates may not act as a large impediment to international graduate enrolment.

Table 5: Top three countries of origin of BC international graduate students, 1997-2005

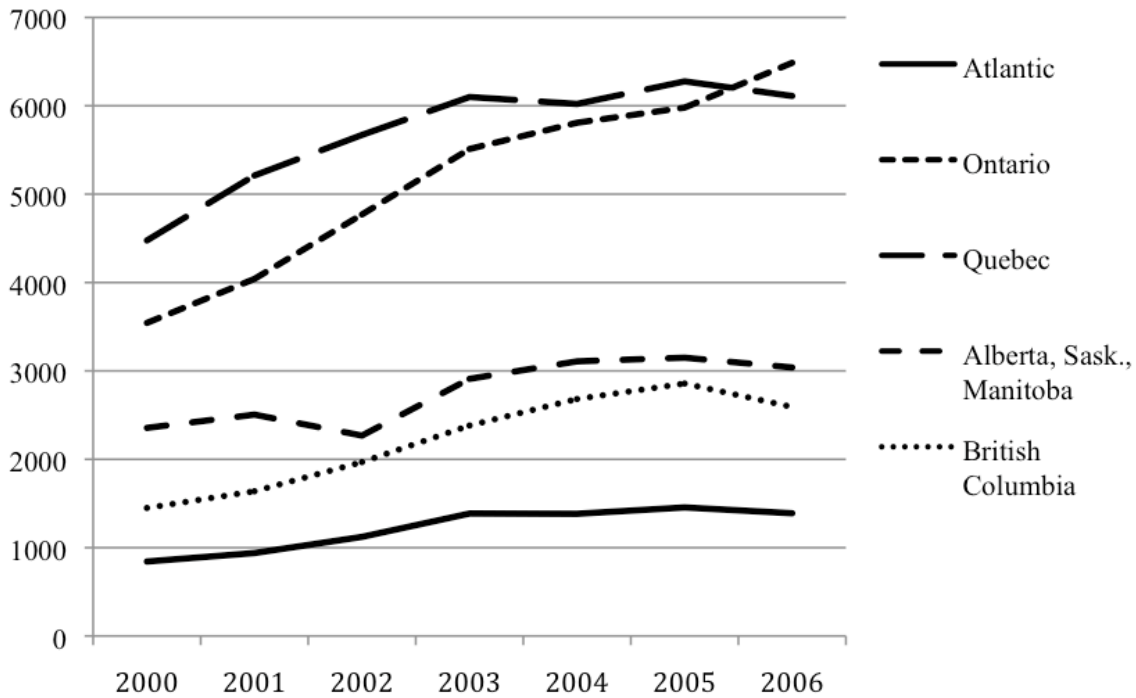
	<i>Country of origin</i>	<i>Percent of international graduates</i>
2005/6	China	23%
	US	18%
	Iran	6%
2004/05	China	27%
	US	11%
	Taiwan	11%
2003/04	China	31%
	US	12%
	Bangladesh	8%
2002/03	China	33%
	US	11%
	Bangladesh	10%
2001/02	China	26%
	US	12%
	Bangladesh	7%
2000/01	China	17%
	US	15%
	Japan	6%
1999/00	US	20%
	China	15%
	Japan	6%
1998/99	US	20%
	China	15%
	Japan	6%
1997/98	US	19%
	China	17%
	Japan	5%

Source: RUCBC, Facts and Figures, 3.5

The information in Table 6 was compiled to estimate the potential revenue loss to BC universities by offering lower tuition fees and to estimate the potential revenue to BC institutions if they should adopt the tuition fee levels of \$14,000 or \$9,000. The revenue for tuition fees from international graduate students is estimated by multiplying enrolment numbers with the graduate tuition fees listed. Revenue estimates are compared against potential revenue if the international undergraduate tuition fee average of \$14,000 (estimated by the Canadian Federation of Students

for 2008)⁸ and \$9,000 (tuition average calculated from Table 3) were applied to registered international graduate students.

Figure 2: Enrolled international graduate students, 2000-2006



Source: Adapted from 38th Statistical Report (2009), Canadian Association for Graduate Studies

Table 6: Revenue estimates for international graduate students in BC

	Inter. graduates enrolled	Inter. graduate tuition fee (\$)	Total revenue (\$)	Revenue (\$), if charged \$14,000	Difference (\$)	Revenue (\$), if charged, \$9,000	Difference (\$)
SFU	787	4,695	3,694,965	11,018,000	7,323,035	7,083,000	3,388,035
UBC	2,108	4,098	8,638,584	29,512,000	20,873,416	18,972,000	10,333,416
UVic	359	5,775	2,073,225	5,026,000	2,952,775	3,231,000	1,157,775
UNBC	25	4,137	103,425	350,000	246,575	225,000	121,575
Total	3,279	18,705	14,510,199	45,906,000	31,395,801	29,511,000	15,000,801

*Canadian average estimated for Fall 2008, by the Canadian Federation of Students: Enrollment number based on most current available information from RUCBC; UVic. (2007), SFU(2008), UBC (2008): Tuition fees for 2009 from Canadian Federation of Students

⁸ This average tuition fee is estimated for all international students in Canada. Graduate students would likely have a lower average fee, but I was unable to find information on this amount.

The differences in enrolment, and subsequently tuition revenue, for SFU, UVic, and UNBC are relatively small compared to the large number of international graduate students at UBC. These estimates assume enrolment levels remains constant. UBC would gain an additional \$20 million in revenue by charging \$14,000 and more than \$10 million by charging \$9,000 in tuition fees. These figures represent less than four and two percent, respectively, of UBC's operating grant.⁹ SFU's operating grant for 2008/09 was \$194.5 million (AVED, SFU Factsheet). The income resulting from fees of \$14,000 would be less than four percent of SFU's operating grant (see Table 6 for income estimates).. Revenue generated from \$9,000 tuition fees would constitute less than 1.8 percent of the university's 2008/09 operating grant. In effect, the total amount of revenue generated at BC institutions would be less since there would be offsetting costs, such as scholarships or tuition awards. Even by charging a high level of tuition fees of \$14,000 per year, the potential revenue would constitute a small proportion of university operating funds. However, the ability to direct these funds into strategic scholarships may be a consideration for universities, which are looking at increasing differential fees and comparing that against recruitment and research objectives.

BC universities offered some of the lowest international graduate tuition fees in Canada in 2005, as noted in Table 7. However, they also enrolled a high percent of international students in their graduate programs. UBC and SFU are listed in the top four universities with the highest percent of foreign students registered in master and PhD programs. The data does not show the enrollment breakdown between part-time and full-time students or between programs. Based on the data obtained by the Canadian Association for Graduate Studies, UBC hosted the largest number of international master's degree students in Canada in 2006 with an estimated 1,056 students enrolled. The largest number of foreign doctoral candidates in that same year was at the University of Toronto with 972 students. Though not shown on Table 7, the University of

⁹ The operating grant for UBC was estimated in 2008/09 at \$504.1 million (AVED, UBC Factsheet).

Saskatchewan had the highest proportion of international PhD candidates at 34.6 percent, which is equal to 192 students. The University of Saskatchewan does not charge differential tuition fees.

Table 7: International graduate tuition fee levels, and 2005 enrolment

	<i>International Graduate Tuition Fees</i>	<i>Percent of inter. students in master's and PhD programs</i>	<i>Number of inter. students in master's and PhD programs</i>
University of Waterloo	\$9,180	24.8%	696
University of BC	\$3,786	24.5%	1968
McGill	\$9,078	20.7%	1242
Simon Fraser	\$4,339	20.2%	567
University of New Brunswick	\$9,144	19.2%	276
University of Alberta	\$10,803	18.4%	1116
University of Concordia	\$10,068	18.4%	723
McMaster	\$12,045	18.1%	486
University of Calgary	\$10,082	17.2%	912
Memorial University	\$1,896	16.4%	354
Guelph University	\$5,650	16.4%	333
University of Quebec	\$8,808	16.2%	1641
Dalhousie	\$12,388	16.0%	459
University of Manitoba	\$7,937	14.8%	459
University of Western Ontario	\$16,500	14.5%	579
University of Toronto	\$12,000	13.9%	1668
Laval University	\$10,068	13.9%	885
Carleton University	\$8,553	13.9%	399
University of Victoria	\$5,720	13.6%	294
University of Montreal	\$9,078	13.2%	1320
University of Ottawa	\$12,786	12.1%	471
Queen's University	\$10,600	11.7%	357
UNBC	\$4,057**	7.5%	27
York University	\$7,515	6.8%	318
International Master and PhD students enrolled in 2005			

* with tuition award; ** based on 2008-09 tuition fees (AUCC website). Sources: Canadian Federation of Students, Factsheet (2006), Canadian Association of Graduate Studies (38th Statistical Report, 2009)

Table 8 provides a comparison of operating revenue for post-secondary education in Canadian provinces for 2007-08. This information compares post-secondary educational

investments based on government revenue and tuition revenue, which may affect tuition fee rates. Table 8 reflects mostly undergraduates' contribution, as they constitute the majority of student enrolment. A reader may expect provinces with lower revenue per FTE from the provincial government to have higher income from tuition fees per FTE. However, the data suggests that the revenue per FTE varies across the country. In Table 8 the calculated revenue per student for BC is fifth highest in the country where tuition and fee revenue per student is third highest. BC has the third highest enrolment numbers and second highest provincial income generated from tuition and other fees. In comparison, Quebec generates the lowest tuition and fees per FTE for the year. This is not surprising given the low provincial tuition fees applied to domestic/local students in Quebec. When the operating revenue per FTE is calculated, Ontario emerges as sixth lowest in the country. Similarly, Ontario is second to the lowest in the table under provincial funding per FTE. There could be many reasons relating to Ontario's low funding levels. Ontario has a high tuition fee income per FTE and high enrolment numbers may reduce marginal costs of education. Ontario and BC are relatively similar on the amount of funding per FTE generated from fees and tuition. However, the provincial funding per FTE and general operating per FTE is higher in BC than Ontario.

Table 8: Operating expenses in Canadian provinces, 2007-08

	<i>Fall 2007 FTE student enrolment</i>	<i>Total general operating revenue 2007-08 (000)</i>	<i>Total general operating per FTE</i>	<i>Revenue from provincial govt per FTE</i>	<i>Tuition and fees per FTE</i>
Alberta	78,400	\$1,496,432	\$19,087	\$12,303	\$5,558
British Columbia	94,690	\$1,752,562	\$18,508	\$10,896	\$6,747
Manitoba	33,550	\$532,700	\$15,878	\$10,127	\$4,245
New Brunswick	20,259	\$337,843	\$16,676	\$9,006	\$6,502
Newfoundland	15,526	\$317,625	\$20,458	\$14,777	\$3,480
Nova Scotia	37,060	\$643,898	\$17,374	\$7,885	\$7,527
Ontario	397,478	\$6,496,158	\$16,343	\$7,964	\$6,943
Quebec	194,101	\$3,057,497	\$15,752	\$11,026	\$3,273
Saskatchewan	30,694	\$481,297	\$15,680	\$9,460	\$4,121
Prince Edward Is.	3,587	\$77,398	\$21,577	\$12,290	\$5,919

*Source: Adapted from University of Alberta, website
(<http://www.uofaweb.ualberta.ca/uastatistics/nav02.cfm?nav02=88217&nav01=82809>)*

4.1.2 Interview results

Seven of the 13 interviews were conducted with individuals in managerial positions at a university. The position of interviewees ranged from the senior administration personnel to the Dean of Graduate Studies. Interview transcriptions were coded to identify predominate themes. These themes related to six main categories:

1. The value of international graduate students
2. Reasons behind differential tuition fee
3. Recruitment practices
4. Processes for changing fees
5. Opinions on policy options
6. Other results – the changing nature of international education

The following sections will discuss these findings in greater detail and compare some of perspectives, which arose during these interviews.

4.1.2.1 Value of international graduate students

It was clear in the interview transcripts that communities, institutions, students, and faculties are seen as the beneficiaries of low differential fees. Benefits accruing to these stakeholders were specified as: opportunities to showcase Canadian facilities and practices; the immigration of skilled labour to Canada; the benefits accruing to BC universities' reputation; greater institute to institute collaboration as far down as the faculty level¹⁰; meeting the objective to 'share knowledge' where "...we are curious about and committed to finding out what does 'education done well' really mean and what does it really look like? And a part of that

¹⁰ A Dean reported that his academic faculty has its own internationalization strategy and International Office. They also sign MOUs with faculties in other countries and customize academic degree programs to meet their learning needs (Dean of Education interview, 2009)

professional obligation is not just discovering but also sharing” (Dean of Education, 2009); wider perspective and diversity employed in research development; meeting demand for qualified students.¹¹

Interviewees also identified international graduate students as important to research functions at universities. They were less likely to be seen as a source of revenue, but instead as contributors to the university’s operation:

I think undergraduates are by and large seen as bums in seats who are giving paycheques to the university. Graduate students I think are seen not only as potential revenue sources, but I think primarily as... I mean not revenue sources in the sense that they are going to pay tuition fees, but more in the sense that they will help the faculty base and attract more research funding. Again, this is the other issue that is not just happening in Canada but globally. This increasing emphasis on research over teaching and kind of division between the teaching function and research function of universities. (Executive Director of Association interview, 2009)

Another interviewee echoed similar sentiments:

Probably a greater degree of emphasis is on increases in fee level at the undergraduate level for students...but at the graduate level, it is very different as you know. It continued to be very important for universities to be able to recruit strong graduate students and the universities certainly understood and I think a lot better than government did or does about the significance of the recruitment of strong graduate students internationally to maintain a research enterprise, not just as a ongoing concern, but the quality of research supported by high quality graduate students. (Association Immediate Past-President interview, 2009)

Undergraduates’ high differential fees appears motivated by financial need where the graduate students are seen as filling a research function. As one interviewee remarked “[i]n the academic world, that is where your bread and butter is at” (Executive Director of Association interview, November 3, 2009).

Those interviewed suggested that the value of international graduate students is difficult to assess in monetary terms. One interviewee remarked:

¹¹ A Dean noted that there wasn’t enough financial incentive to foster local demand and so international students were needed to fill spaces (Dean of Applied Science interview, 2009).

It is hard to put a precise monetary figure on [hosting international graduate students] but we think it is a profound social, cultural benefit and economic benefit in the long run too... We can't put a monetary value on it. (Executive Director of Association interview, December 8, 2009)

In the discussions with interviewees, only one participant referred to the value these students would bring into the local economy (Executive Director of Association interview, November 3, 2009). Another reference to the economic value of these students was the potential for students to immigrate to Canada and become part of the skilled labour pool. The BC Ministry commented on the value of these students to campus life but they went further in stressing the economic contribution they make. Emphasising the potential contribution to BC's workforce, they noted that the Government:

... recognizes that international students contribute to the social and economic development of our communities through the relationships they build with British Columbians. They enrich the learning experience of Canadian students and contribute to important study, research and innovation work at post-secondary institutions. International graduate students are also a valuable source of high quality labour for the province, particularly when they complete their studies and decide to stay in British Columbia, commencing work as skilled workers and becoming permanent residents. (Senior Policy Advisor, December 23, 2009)

These students are important to the institutions and societies in which they participate from a government, institutional and faculty perspective. However, the articulation of this value is vague and appears difficult to measure.

4.1.2.2 Reasons behind differential fees

Interviewees cited the following considerations in setting differential tuition fees: potential revenue; purposeful discrimination; intent to attract international students; fees based on services provided; creation of financial awards; and faculty influence. Of these considerations, all interviewees identified revenue as a driving factor in setting tuition fees. It was acknowledged that international graduate students are receiving a publicly subsidized education and, as one interviewee described it, "a good bargain." In some cases, differential fees was

described as a policy employed to discriminate between domestic students and ‘the others’. One interviewee added that during difficult economic times it was natural for people to protect or prioritize their own and differential fees were related to these economic fluctuations.

Interviewee responses were ambiguous when asked why institutions did not offer differential fees. Representatives from three of four universities were unable to provide any clear answers and unable to reference policy documents in response to this question. Generally, low fees were seen as a way to attract international graduate students and to assert a competitive advantage. No statistical evidence or supporting studies were presented to support this supposition. One Dean suggested the following reasons for low differential fees: To be competitive; issues of equity where both a domestic and international student “should cost the same unless we are providing additional add-on services to the international students such as English language training...”; and to provide scholarships where “many of the institutions that did charge differential fees actually provide scholarships back to international graduate students for the differential fee” (Dean of Graduate Studies interview, October 26, 2009). All respondents cited the offering of financial awards in conjunction with differential tuition fee increases as a consideration in developing policy options.

One interviewee described higher tuition fees and the redistribution of revenue into financial awards as a financial “wash”, resulting in little benefit to the universities. UBC provides a model for this financial re-distribution. Tuition fees are collected from international students and the difference between foreign and domestic fees is given back to them in the form of tuition awards, University representatives, when asked why they did not charge foreign students domestic rates instead of creating awards, said the awards did not cover all programs and would not be given to students who had scholarships to cover their tuition. The Graduate office and host faculty split subsequent revenue.

Faculty opinion is also a factor in setting tuition fee levels. Three interviewees attributed the low fees in part to faculty influence:

We were lobbied very strongly from our faculty that it doesn't necessarily make any sense to raise tuition for international grad students because you have offsetting costs for scholarships, fellowships, RA all that sort of thing, so that the net impact to the institution is very little. (Associate Vice President of Financial Planning and Operations interview, 2009)

One association representative candidly noted:

I think there is a philosophical bias on the part of the faculty members that think the government should be paying for everything...In the academic world, that is here your bread and butter is at in terms of publications, in terms of cutting edge technology and knowledge and stuff. (Executive Director of Association interview, November 3, 2009)

Faculty influence relates to their responsibilities in research as well as in recruiting and training activities. As such, it is not surprising that professors should desire a low tuition rate. A low tuition fee would keep research or sponsorship costs down and may act as an additional incentive to potential applicants. One field expert remarked that differential fees were not introduced, in part, because of this unique relationship between faculty and graduate students where "... nobody would think of charging differentials for graduate level... Graduate students were a different beast with a different dynamic..."(Executive Director of Association interview, December 13, 2009).

Although manoeuvrability in negotiations with foreign countries was not identified as a reason for differential tuition fees, one interviewee described it as a benefit. Universities may negotiate with governments and foreign organizations to reduce tuition fees or dedicate tuition awards to their funded candidates. Under these circumstances, UBC has an advantage over UNBC or SFU, because its tuition awards act as university contributions. The UBC partial tuition fee award is offered to the student regardless of their status but, because of the fee-award structure, it appears to the student's funding body as university support. In comparison, if SFU

and UNBC want to offer reduced tuition fees, they would reduce fees for these foreign students to a level below what domestic students are paying.

4.1.2.3 Recruitment

To attract top students to BC universities, it was desirable to know what recruitment activities are pursued which might influence enrollment patterns. There is little strategized international graduate recruitment being done at a government or institutional level with the exception of one university, which coordinates recruitment strategies through their Graduate Studies and International Office, and another university, which conducts activities through their Graduate Studies faculty. However, one faculty Dean said there were no recruitment targets for international graduate students and enrollment numbers were "... a byproduct, not a target" (Dean of Education interview, 2009). Interviewees cited few activities focused on international graduate recruitment. UBC has a recruitment office in Hong Kong and actively seeks international candidates. However, as previously noted, the responsibility rests primarily with faculty members to attract, select, and retain candidates (Dean of Graduate Studies interview, October 26, 2009; Executive Director of Association interview, November 3, 2009; Dean of Applied Science interview, 2009).

Interviewees suggested that other factors impacting graduate recruitment include: the reputation of a program, word of mouth, personal contact, and interest in working with specific supervisors. Seven interviewees identified establishing connections with international universities as a conduit for attracting graduate students. Interviewee also pointed to facilities and funding as important aspects in recruitment. One Dean noted that "... I think if the students appear to be high quality then where the student ends up is basically where the money is" (Dean of Applied Science interview, 2009).

The provincially funded British Columbia Centre for International Education (BCCIE) promotes international education and occasionally develops recruitment opportunities for BC research universities. However, the BCCIE does not specifically cater to smaller graduate level programs; an interviewee described it as acting as a ‘distant’ facilitator when servicing international graduate markets (Executive Director of Association interview, November 3, 2009). This is not surprising when one considers the diverse composition of the international education market in BC and the small number of international graduate students enrolled. International graduate students constituted just over 10 percent of all 29,000 international students in BC in 2006 (Rosyln Kunin and Associates, 2006). An interviewee also reported that the BCCIE confronted some of the issues previously mentioned in this paper:

...every department makes its own decisions and you don’t have one central Dean of Graduate Studies or V.P. of Research - you don’t have one central person at any of the universities, making admission decisions at a graduate level and so it is much more difficult to get whole cohorts of graduate students in. (Executive Director of Association interview, November 3, 2009)

While the BCCIE is acting on behalf of Provincial interests, jurisdictional issues need to be considered. Interviewees suggested that the role of the federal government was not significant in terms of graduate recruitment, despite the brand ‘Canada’. One association representative called for greater cooperation and coordination from various levels of government. In comparison, a former association president remarked that universities, more than governments, have a strong interest in recruitment and an awareness of the “significance of the recruitment of strong graduate students internationally to maintain a research enterprise, not just as a going concern but the quality of research supported by high quality graduate students” (Association Immediate Past-President interview, 2009).

During the interviews, the recruitment of high caliber students was often linked to the recruitment of citizens and, subsequently, skilled labour. Interviewees suggested that we should attract the “cream of the crop” because they are likely to remain in Canada. They describe this as

an investment in the future of Canada. One interviewee noted that there are ‘brain drain’ impacts from international education and Canadians must consider what they are taking from countries as well as what they are gaining. This interviewee suggested that it is possible to foster a cycle of ‘brain drain’ by recruiting underdeveloped countries’ star candidates. It was recommended that compensation be given to these countries, perhaps through efforts to develop local capacity. This association representative also stressed the importance of ethical recruitment practices when discussing international education. Overall, the lack of concern expressed over recruitment practices could be the result of a number of factors, including the format of the interview questions and the representation of interviewees’ constituencies.

4.1.2.4 Process for changing fees

Interviewees confirmed that the process for changing fees in universities is conducted through subcommittees of senior university members. All faculty interviewed had a clear understanding of how tuition policies were decided within their institute. Faculty members were able to name representatives to whom they would report if they had any concerns about tuition fee levels. These representatives were identified as their faculty Dean, peers, the Dean of Graduate Studies and the Vice President Academic. Interviewees did not mention any public or private sector individuals who would advise the university on this subject except for those on the Board of Governors. Faculty member interviewees saw the setting of differential fees as an internal decision.

University administration and provincial association interviewees reported that Provincial policies on domestic student fees and funding packages indirectly influenced universities’ choices. One former government employee noted,

governments exert a lot of power and control because they are the parties that determine the size and the scope of the Provincial grants for the universities. So, they do have a very significant and very persuasive capacity to influence policy if they choose to do that (Association Immediate Past President interview, 2009).

Five interviewees expressed the opinion that the provincial government's current policy on limiting domestic tuition fee increases at two percent per year acted as a constraint on international graduate tuition fee increases. These comments were unexpected as universities are within their authority to increase graduate differential fees and are not subject to provincial restrictions. Interviewees felt they could not significantly raise them for one category and not the other: "I think the context we are working in right now is constrained in terms of Provincial limit policy" (Associate Vice President of Financial Planning and Operations interview, 2009). A further explanation by one field expert pointed out that increases to tuition fees "would have stood out all by itself as a glaring pressure on international students at home, where no increases were happening elsewhere, were probably putting a bit of an angle on any substantive increases that could have taken place" (Association Immediate Past President interview, 2009). One Dean of Graduate Studies commented, "...we are all stuck under the Provincial guideline that only allows a two percent increase. So we are always dancing between 'that really doesn't seem like a lot' or the mandatory fees are caught under two percent" (Dean of Graduate Studies interview, November 23, 2009). An Associate Vice President of Financial Planning and Operations remarked "... we don't think there is a case to make for increasing them beyond what we increase everybody else" (Associate Vice President of Financial Planning and Operations interview, 2009). Another Dean of Graduate Studies commented:

[w]e have to work within the limits of what the provincial government sets for us. And so we could not unilaterally change international tuition fees right now because the Government has it at two percent increment be it domestic or international and so you are tied to whatever your fees were set at one time. (Dean of Graduate Studies interview, October 26, 2009)

Several deans talked about the value of consultation between faculty members and the managing bodies of universities when discussing international graduate student policies. Faculty members have a financial incentive to participate in these consultations. Higher differential fees

at a graduate level could result in higher costs to departments to host international students. One interviewee, when recalling a BC university review of international graduate tuition fees, noted:

[w]e were lobbied very strongly from our faculty that it doesn't necessarily make any sense to raise tuition for international grad students because you have offsetting costs for scholarships, fellowships, RA all that sort of thing, so that the net impact to the institution is very little. (Dean of Graduate Studies interview, October 26, 2009)

Researchers would need to raise sufficient funds to support the higher costs of sponsoring a student, so costs “get turned around back into the university” (Dean of Applied Science interview, 2009). Further, there was a shared opinion that high caliber students receive financial support, often in the form of department awards, which would be increased to cover the extra tuition costs.

Interviewees did not identify any particular individual as having more authority than others in setting fees. However, the Dean of Graduate Studies was referred to as a director of policy reviews. One interviewee, when recounting the first implementation of differential fees at UBC, noted that university leadership at UBC of Dr David Strangway, who was President at that time, played an important role in setting the precedence of low differential fees in BC (Association Immediate Past-President interview, 2009). He went further to suggest that UBC acts in a leadership capacity with its larger enrollment numbers and greater access to resources. Other BC universities wait to see the response to UBC's announcements before setting their own policies. UBC offers differential fees, but they can be seen as funding international students when, as a representative from one association noted, UBC “...flips the money as a scholarship on the way in which does deter a couple people but not significantly. UBC doesn't have to worry about deterring graduate students. It has significant lineups for all its programs anyways” (Executive Director of Association interview, November 3, 2009).

4.1.2.5 Potential for differential fees and funding formulas

The form of redistribution of income from differential tuition fees impacts the support for specific policy options. If differential fees were introduced, the distribution of tuition revenue to university departments through awards could offset costs for students. Differential fees as a source of revenue for departments may also act as an incentive to recruit fee-paying students. In reviewing these options, faculty expressed little support for differential fees. However, one Dean said he would support differentials if there was a cost recovery formula attached. He suggested a 50-50 split of excess revenue between the university and the department (Dean of Education interview, 2009).

One interviewee emphasized the fact that often when you try to increase access, there is an increase in expenses. International students demand special support to ensure they excel in the system: “We are interested in bringing them in and giving them the structures they need to be successful. And that often costs more” (Dean of Education interview, 2009). Two Deans of Graduate Studies said that they would consider raising differential fees if the number of international graduate students continued to increase and they required extra services. These costs were identified as any additional burden on the international office resources and English language training. Further, as already discussed, a cost arising from the introduction or increase in differentials would increase the burden on professors and departments to generate additional funding to support international students. British Columbia “requires at least significant commitments to address scholarships support and making it very clear to international students that that is available” (Association Immediate Past-President interview, 2009).

Overall, interviewees did not articulate support for increases in international graduate fees. They expressed concern about market dependencies arising from income from differential fees. An interviewee pointed out that the international education market can be very unstable,

Moreover, once you create a strong, fee-paying base there might be an inclination to service those income generators instead of focusing on universities' core activities.

One interesting element discussed by two interviewees was that universities have had to cope with growth in graduate studies without public financial support for additional seats. One Dean noted that he hosted 1,200 unfunded graduate seats. Another interviewee expressed his surprise that funding had not increased to universities given these pressures, but attributes university leadership and recognition of the important role of international graduates as leading factors in keeping tuition fees low (Association Immediate Past-president interview, 2009).

4.1.2.6 Changing nature of international education

Some interviewees suggested that international graduate education was becoming much broader in scope than a traditional university degree program. During the interviews, education programs were described as flexible and not all international education initiatives were degree-related. A Dean of Applied Science commented that, compared to other nations, “there are very little programs available in Canada that we can bring international students for a short period of time or can send students...” (Dean of Applied Science interview, 2009). He suggested that investments in international graduate education are not necessarily focused on degree qualification but on encouraging collaboration and short-term exchanges. Many interviewees cited non-degree programs as important in international education to establish ties and meet education goals. Two interviewees mentioned a recent Mathematics of Information Technology and Complex Systems (MITACS) initiative, which brought students from the Indian Institutes of Technology to BC for a short duration. They emphasized the value and prestige associated with hosting such high achieving students. These accounts suggest that this study may be missing an important component of international graduate level education, which is short-term exchange opportunities. The public investment in international graduates may not necessarily need a broad application through degree-level tuition fees, but could be flexible based on demand for

international non-degree education, potential for research collaborations, and the prestige associated with hosting certain programs.

4.2 Summary: Key research findings

Based on the research findings above, I offer the following summary of key findings:

- The Government of BC exercises direct authority allowing universities to set international graduate tuition fee levels and indirectly in capping domestic fee levels. The existing restriction on domestic tuition increases acts as an informal standard on universities' ability to increase international graduate fees.
- The status quo was supported by the faculty members interviewed. Some interviewees expressed the opinion that it was acceptable to charge higher or differential fees for 'market-based' programs.
- Interview results corresponded to literature on the perceived value of international graduate students. Of those interviewed, higher education was seen as benefiting Canadians socially and economically (in general terms).
- BC attracts 'top calibre students' through university ties, reputation, and faculty members' networks.
- To be competitive and fulfil research objectives, an increase in differential fees cannot occur without a corresponding increase in awards.
- Potential revenue from increased tuition fees would be less than four percent and two percent of BC universities' operating grants, before considering the introduction of graduate awards.

5: Policy Alternatives

The policy alternatives chosen for review were selected based on feedback from the interviews, literature, and tuition policy models employed in other jurisdictions. These alternatives have also been identified for their potential to address the policy problem as outlined previously. These options are considered as mutually exclusive and require various implementation timelines, dependent upon the outcome of negotiations with universities.

5.1 Alternative One: Status quo

International graduate tuition fees vary among BC universities. However, universities have introduced little change in graduate level differentials fees over the last 15 years. Despite a freeze on increases in provincial student grant transfers during the 1990s, universities have expanded their graduate programs and the number of international graduate students enrolled in BC continues to increase. The current policy stability and lack of controversy around its operation suggests that the status quo remains an important contender in this review.

At present, universities are authorized to set international graduate tuition fee levels. Universities can adjust these student fees based on their finances, institutional objectives, stakeholders' needs, and market position. Within this context, they have the flexibility to decrease or increase these fees and develop fiscally prudent strategies. This flexibility is enhanced by the fact that international student fees are exempt from the Government's two percent annual tuition fee increase restriction. Further, the provincial government makes no distinction in its graduate student funding between domestic or international students. It is at the discretion of universities to decide how they fill their graduate spaces.

Most universities charge little to no graduate differential fees with the exception of UBC. However, UBC offers scholarships to all graduate students except for those in a few designated programs.¹² These awards make up the difference in tuition fees, ultimately offering them the same tuition rates as domestic students. UVic offers a small differential fee of approximately \$300 per term. UNBC and SFU do not offer graduate level differential fees.

5.2 Alternative Two: Removal of Provincial support for international graduate students

Canadian citizens invest in post-secondary education through tax payments. The investment of taxes into the education of foreigners, who occupy student seats that may have otherwise been filled by Canadian candidates, is a concern to citizens. Under this alternative, the Government of BC would exclude international students from graduate enrollment counts and withhold funding to universities for students under this category. Similar to Ontario, this policy option would pressure universities to determine a new tuition fee for international graduate students or to find funding from other sources to cover costs.

Any rise in tuition fees would put a strain on graduate students' funds and on research projects. To offset these impacts, this option would be introduced with a set of international financial awards to support and attract bright students. Similar to the UK model, where full-cost tuition fees were introduced with increased funding to scholarship commissions, these awards would defuse some public opposition. Moreover, this policy alternative would be gradually implemented over a set number of years. For students who are already committed to a graduate level program, a grandfather clause would be negotiated with the universities.

¹² The following programs are ineligible for awards - Master of: Food Science; Health Administration; Journalism; Jurisprudence in Common Law; Landscape Architecture; Management; Occupational Therapy; Architecture; Education, Adult Learning and Global Change; Counselling Psychology; Educational Technology; Engineering; Fine Arts in Creative Writing; Rehabilitation Science; Genetic Counselling; Dentistry; Software Systems; Educational Leadership; and, - Doctor of: Pharmacy; Philosophy/Medicine. (UBC website, 2010)

The exclusion of international graduate students from enrollment numbers will have less of an impact on universities with unfunded, occupied graduate seats than those with funded and occupied graduate seats. UNBC hosted approximately 70 unfunded graduate spaces in 2009/10. Their 25 international graduate students (enrolled in 2008) can easily be shifted into the unfunded category. However, the University of BC will lose over 400 graduate seat grants as they host more international students than unfunded spaces. Further, future enrollment may be geared towards domestic students who will represent provincially funded student spaces. This alternative will require universities to become resourceful in financing existing as well as future international graduate students.

5.3 Alternative Three: Elimination of differential tuition fees

International graduate students are important contributors to campus life and research. However, the high cost of university tuition fees in Canada may be off-putting to foreigners who cannot afford to enroll. Potential applicants may assume that BC tuition fees are as high as those in Ontario and elsewhere. The official elimination of differential tuition fees would clarify BC tuition policies for overseas students. It could be used as a recruiting tool and encourage candidates, who might not have otherwise considered BC as a destination, to apply to study. While many BC universities already offer low international graduate fees, British Columbia's non-differential fee declaration could result in larger numbers of international applicants for whom cost plays an important role in their decision to study abroad.

Under this policy option, the Province could prohibit charging differential tuition fees at a graduate level in universities. A policy – or legally binding regulation - of non-discrimination based on country of origin would result in the same tuition fee rates to both domestic and international students. This policy would be limited to graduate level students. The spirit of 'non-discrimination' policy will be carefully worded, otherwise international students may seek the same privileges as domestic equivalents in accessing loans and scholarships. Universities

would officially include international graduate students as equal in status to domestic students. The government would assert control over international graduate tuition fee levels and leave international undergraduate tuition fee levels under university jurisdiction.

5.4 Alternative Four: Remove differential fees for international graduate research students and require full-cost tuition for non-research students

Research results indicate that international graduate students make an important contribution to research. Given these considerations, the Government of BC could enact legislation requiring international students pay the minimum of full-cost tuition fees for ‘taught’ graduate programs and domestic-level fees for ‘research’ graduate programs.¹³ As such, international research students would receive a publicly subsidized education. The Province would continue to provide funds for research students, not distinguishing between international and domestic enrolment. In comparison, undergraduates and professional programs are considered ‘taught’ programs and not eligible for lower tuition fee rates. Universities would be required to identify non-research programs (non-thesis and professional degrees) and revenue formulas for splitting surplus income between departments and administration..

This alternative removes universities’ power to unilaterally increase tuition fees through the application of the current two percent annual increase restriction. The implementation of a cost-recovery policy on non-research programs would generate extra revenue to support post-secondary education. A similar policy already exists at UBC. International graduate students receive a partial tuition award reducing tuition costs, but students enrolled in several programs

¹³ Most research degrees are defined as PhD programs and thesis-based master degrees

(non-research programs) do not receive these funds.¹⁴ The university thus targets subsidies to support research students.

¹⁴ UBC international graduate students receive a partial tuition award to reduce their tuition costs, but students enrolled in several programs (non-research programs) do not receive these funds. International partial tuition fee awards offer up to \$3,101.70 per year. For more information on eligibility requirements, visit <http://www.grad.ubc.ca/awards/international-partial-tuition-scholarship>.

6: Objective, Criteria, and Measurements

6.1 Policy Objective

The goal of the Province’s international graduate tuition policy is to provide high quality education for Canadians that enhances BC’s economy, is fiscally responsible, and offers social returns. This goal encompasses the following objective:

<i>Objective</i>	<i>Objective components and description</i>
<p>To encourage the enrolment of high calibre international graduate students, who will contribute to the cost of their studies and to research in BC, and enhance the quality and accessibility of educational experiences for Canadians.</p>	<ul style="list-style-type: none"> ➤ To attract qualified international students to meet research and market needs. <ul style="list-style-type: none"> ○ High calibre international students may contribute to the Province’s research activities and skilled labour pool, subsequently to the economy and to institutional development. ➤ To ensure international students contribute to the cost of their education. <ul style="list-style-type: none"> ○ Policies seek to ensure international students’ financial contributions to their graduate education, in the form of tax payments and tuition, meet those of domestic graduate students. ➤ To avoid the crowding out of domestic students <ul style="list-style-type: none"> ○ Accessible education ensures policies do not marginalize domestic students in favour of international candidates. Appropriate tuition fee levels will reduce the likelihood of crowding out qualified domestic students. ➤ To encourage the attendance of international students to enhance BC campus diversity. <ul style="list-style-type: none"> ○ Quality educational experiences are those in which diversities are fostered. The exchange of ideas from people of different backgrounds can enhance opportunities for innovation and enrich the learning experience.

This objective is based on the most recent Service Plan report from the BC Ministry of Advanced Education and Labour Market Development’s as well as information from the literature review.

6.2 Criteria and Measurements

Criteria employed to assess the best policy alternative are: Financial cost; administrative burden; political support; equity - horizontal and vertical; and, effectiveness. Criteria are measured and ranked for each policy option on a scale from *low* to *high*. The ranking of the criteria is part of the evaluation of alternatives and is meant to inform decision makers of various considerations within each option. Criteria are not weighed but considered equally in the final analysis. An outline of these criteria, definitions, and rankings can be found in Table 9.

Table 9: Criteria, definition, and measurements

<i>Criteria</i>	<i>Definition</i>	<i>Measurement Ranking</i>
Financial savings	What is the savings to the Government of BC – Are transfer increases or reductions required? To what extent?	Low Low-medium Medium Medium-high High
1. Administrative ease	Does this option enable low administrative burdens for the Province and universities?	<i>As above</i>
2. Political support	Who supports and opposes the policy? To what degree is this option acceptable to stakeholders?	<i>As above</i>
3. Equity	To what extent does this option provide equitable access and opportunities to both Canadians and international citizens?	<i>As above</i>
4. Effectiveness	To what extent does this alternative meet the four components of the policy objective?	<i>As above</i>

6.2.1 Financial savings

The Province subsidizes graduate students through grants offered to BC universities. These subsidies are an investment in post-secondary education, which the Province makes on

behalf of taxpayers. This criterion will attempt to capture potential monetized costs and savings on these educational investments to the Province. The savings to universities is considered but not a determining factor in ranking this criterion due to universities' numerous sources of finance and aforementioned flexibility in financing graduate level students. A policy option will rank *high* in terms of savings, if the policy demonstrates financial benefits combined with low maintenance and implementation costs for the Province. An alternative with little financial returns to the Government and high costs will rank as *low*.

6.2.2 Administrative ease

This criterion considers current administrative capacity and estimates any potential adjustments required of universities and the Province in the implementation and maintenance of policy alternatives. Fund transfers and technical support to universities are reviewed as Provincial administration duties. A review of universities' administrative responsibilities include the categorization of programs and students as well as potential challenges arising in the management of these categories, the ease of policy implementation and long-term implications. Administrative ease is ranked *high* for those alternatives requiring little adjustment or maintenance, where *low* signifies large adjustments and increases in resources.

6.2.3 Political support

This criterion is evaluated based on the appropriateness and acceptability of policy alternatives. The measurement of the criterion considers support from potential stakeholders as well as public opinion. Stakeholders reviewed include: universities (administration), faculty members, domestic graduate students, international graduate students, undergraduate students, and the BC business community. A *low* ranking indicates opposition from stakeholders and the public in general. A *high* ranking indicates widespread support and acceptability.

6.2.4 Equity

Two perspectives are the focus of my equity analyses: 1) equity to tax-paying investors; and, 2) equity from a global perspective stressing accessibility. The global citizen seeks affordable and accessible educational experiences based on academic merit, regardless of a person's place of birth or income. A person's socio-economic background may limit their opportunities to afford to study overseas. Equity concerns related to this perspective seeks to ensure citizens of the world have equal opportunity to education based on academic qualifications as opposed to financial means. The Canadian taxpayer perspective is conscious of the fact that Canadians may forfeit on benefits arising from educated international students when they leave the country after receiving a publicly subsidized education. As the Government chooses to make educational investments, the public interest is in an equitable return for these investments. Canadians will be conscious of the role of the university as a place of learning and research. Therefore, this perspective also considers the equitable treatment of students between departments and programs as well as the use of resources in the fulfillment of university functions. Based on these qualifications, a *low* ranked policy option is one in which there is an inability to reconcile any of these equity issues. A *high* ranked policy option is one that enhances equity to both domestic and international stakeholders.

6.2.5 Effectiveness

This criterion will identify options which best meet the policy goal. Effectiveness is measured by testing the policy alternatives against the components of the policy objective. As cost will be reviewed in the financial criterion, effectiveness will be judged against the alternative's ability to enroll high caliber students to meet research and human resource needs, to enhance campus diversity, and to avoid domestic crowding-out, A *low* rank indicates its inability to meet one or fewer of these policy objective components. A *medium* ranks meets two of the

specified objective components. A *high* rank suggests the policy option meets the objective as articulated by the objective's description.

7: Evaluation of Policy Options

7.1 Alternative One: Status quo

7.1.1 Finance - *Low*

This policy option is ranked as *low* because of the high financial cost to the Province in providing provincial transfers for international graduate students who may leave the country after graduation. Graduate students are considered highly mobile once they complete their programs of study (Moussaly-Sergieh and Vaillancourt, 2009). The Province risks missing out on future tax returns as well as multiple benefits accruing through their research and presence in a country. Returns might accrue to the Province in the long run through the development of business ties with the country or through continued academic collaboration. No long-term studies have been conducted on British Columbia's alumni to assess this value.

One method of measuring potential returns is by calculating future tax payments. However, future tax payments made by international graduate students are difficult to measure as, according to studies, the mobility of students correlates positively with higher levels of education (Philippe, 2002) (Moussaly-Sergieh and Vaillancourt, 2009). Under this policy option, there are no restrictions on students to remain in the country. Therefore, the Province forgoes potential tax returns when students leave immediately after graduation and do not continue to hold any connections to Canada.

It is possible to estimate the amount of provincial graduate educational investments that leave the country when international students move *ex juris*. If 70% of international graduate students choose to stay in Canada, then approximately 900 graduates leave the country (assuming approximately 3000 international graduate students are enrolled in BC each year) (King, 2008).

Based on the BC government transfers per year per seat of \$20,000 and the estimate of 900 international graduates intending to leave the country, approximately \$18,000,000 per year invested in individuals would move *ex juris*. Some Canadian students will also choose to leave the country, but they are not included in this analysis.

7.1.2 Administrative ease - *High*

This is an easy policy for the Province of British Columbia to maintain. It requires little administration from the Government except through monitoring and funding of graduate space enrolment. Again, the application of a flat policy for funding of graduate students regardless of their country of origin and for all BC research universities simplifies its administration.

The status quo is similarly a small administrative burden for universities. Generally, tuition policy committees do not employ international graduate tuition fees as a revenue generator. This simplifies the option's administration. The policy of a flat graduate tuition rate is easier to operate than differentiation between student statuses. Moreover, leaving the power to set fees under the authority of the universities gives universities the freedom to determine appropriate policies in relation to their administrative capacity.

The two percent increase limit per year on domestic students act as an unofficial constraint that universities have applied to international graduate student tuition fees. Universities have elected to apply this limit, despite its category exemption, and in doing so have set an undisputed, non-controversial standard of practice. As a result, the administrative burden of this policy option for both the Province and the universities is low as long as the current environment, practices, and objectives are maintained.

7.1.3 Political support – *Medium-high*

Universities are the largest supporters of the status quo. The current policy gives them the flexibility to develop tuition rates, which they deem appropriate for their institutional needs.

In the interviews, faculty members reported satisfaction with the current policy. The current lack of differential fees also wins support from student bodies. In contrast, two interviewees representing Canadian student and university teachers' associations expressed their concern over this tuition fee 'de-regulation' (Treasurer, December 15, 2009) (Associate Executive Director December 8, 2009). One of these interviewees argued that this policy allowed universities to arbitrarily set tuition fees with little mathematical reasoning behind their rates (Associate Executive Director, December 8, 2009). They supported the Province taking a stronger role in the setting and minimizing of tuition fees. These interviewees represented federal interests, which may differ from province to province.

It is challenging to gauge popular political support for international graduate students and the extent of public willingness to subsidize their education. Interviewees mentioned that many people are not aware that there are low differential fees at a graduate level. Much research and publicity are focused on undergraduate students. The Province has faced questions over the subsidization of international undergraduate students, but not concerning graduate level students. The Provincial government is able to deflect criticism and continue this policy application without opposition as long as the issue maintains a low profile and under the direction of universities' Boards. These circumstances warrant a rank of *medium-high* political support, but this ranking is tenuous and based on the past stability of this policy and its non-controversial application.

7.1.4 Equity – *Low-medium*

This policy alternative offers *low* equity benefits to Canadian citizens and students, and tenuously *high* equity for international citizens. Canadians have invested in public education and expect a return for their contribution. These citizens are not necessarily receiving these returns when international students choose to leave the country. On the other hand, this alternative increases its equity ranking from a global perspective as it offers equal educational opportunities

to individuals regardless of their citizenship – based on universities’ maintenance of low or no differential fees.

Other equity issues arise between BC universities from the administration of these fees. The lack of fee regulation implies that BC institutions can be flexible in setting international tuition rates. Universities can apply this fee flexibility during negotiations with governments or institutions to host cohorts of funded, foreign students. For example, UBC’s international graduate fee structure charges students differential fees supplemented with a partial tuition fee award. The tuition award, which cancels out the differential fees, appears to students’ funding bodies as a university contribution. In comparison, if SFU and UNBC want to offer a tuition reduction to a foreign government, it would reduce the tuition fees for international students to a level below that which domestic students are paying (as international graduate tuition fees are equivalent to domestic students). This naturally presents certain equity problems between domestic and international candidates. Equity issues also arise in relation to fairness to those students from other countries who pay full tuition fees and those at an undergraduate level who pay full cost. Making a distinction between undergraduate and graduate programs could bias higher-level education towards research where universities’ mandates are broader in scope.

7.1.5 Effectiveness - *Medium*

In meeting the policy objective, this option is ranked as *medium* as it is dependent upon the universities’ abilities to continue to balance tuition fees with any changes in enrolment levels. International graduate students account for a small number of those enrolled in BC. However, foreigners account for a high percent of graduate students on BC campuses. Since research results indicate that these students enhance the educational experience of Canadian students, they can be seen as contributing to campus life. Furthermore, they can be assumed to be contributing to university research. Although it is difficult to assess whether international students are taking away seats from Canadian candidates, one interviewee did note the a low supply of qualified

domestic students to fill graduate seats at BC universities in certain fields relative to international candidates (Dean of Applied Science interview, 2009).

7.2 Alternative Two: Removal of support for international graduate students

7.2.1 Finance - *High*

Under this policy alternative, universities would no longer receive provincial graduate seat transfers for enrolled international students. Subsequently, this alternative ranks *high* in terms of savings to the Government. In 2008, 3,279 international graduate students enrolled in BC (see Table 6). If we assume the Province transfers \$20,000 to the universities for each registered international graduate student, the Province could potentially save over \$65,000,000 in post-secondary funding. If 50 percent of these funds were dedicated towards student scholarships, the Province could still save more than \$32,000,000 per year once the policy had been fully implemented.

These savings appear large, but the high number of unfunded graduate spaces in BC universities creates room to shuffle enrolment figures and reduce these potential savings. In 2007 BC hosted an estimated 4,400 unfunded graduate spaces. These graduate spaces are funded through research grants and other university revenue sources. It is unknown how many unfunded seats are occupied by international graduate students. The universities may be able to shift their enrolment numbers to move unfunded domestic students into funded seats and reassign the provincially unfunded spaces to international students. In reviewing the numbers above, BC universities still support 1,121 more non-funded graduate spaces than there are international graduate students. The distribution of these seats varies between BC universities. In universities, with a large number of non-funded international graduates, the financial impact would be less severe. Comparing the data in Table 4 and Table 6 the University of Northern BC and Simon Fraser University host more unfunded graduate seats than international students and are less

likely to suffer under this policy. However, the University of British Columbia and the University of Victoria host more international students than unfunded seats and together will lose approximately 440 graduate space transfers, equivalent to \$8,800,000 per year.

7.2.2 Administrative ease – *Low*

This policy alternative is ranked *low* in administrative ease as implementation requires universities to find resources to fund student spaces or, alternatively, recruit students who are willing to pay full-cost tuition fees. International offices would increase their efforts to recruit paying international graduate students, where their previous focus was on undergraduate students. The inclusion of a grandfather clause will add to the universities' administrative burden. This clause will create separate categories of international graduate students to which different tuition fee levels will apply. The grandfather clause will allow all current international graduate students to complete their studies while paying tuition rates under the tuition fee category in which they began their studies (allowing for a two percent annual increases).

The Province and universities will increase awards to attract and support high calibre students. There will be an increase in applications to the awards departments at universities. Universities and the Province may choose to direct a higher level of financial support to specific departments who are recruiting international students. The awards could be strategically employed to attract international students in specific fields, which correlate to the institute's research priorities and meet provincial human resource development goals. Developing and distributing targeted awards may require additional administrative support at both the Provincial and university level.

7.2.3 Political support – *Low-medium*

This policy alternative is ranked as *low-medium* due to divisions between groups supporting and opposing this option. Communities likely to oppose this policy include: student

groups, faculty members, and universities. Communities likely to support this policy are taxpayers and those within government who are concerned about subsidizing higher-level education for non-citizens. To soften any adverse political reaction to this policy, the Government would introduce a guarantee of merit-based international scholarships for a limited time-period.¹⁵ Provincial scholarships could target candidates from specific countries or fields of study to meet the Province's human resource and business development needs. Supporting the studies of high calibre international graduate students in areas where BC experiences skilled labour shortages will garner political support from affected sectors and the business community. A dramatic increase in tuition fees could also attract media attention. However, a gradual increase in differential fees coupled with a grandfather policy may ease implementation and diffuse some political opposition. This transition period would be a key component of the BC government's strategy to reduce subsidization.

University faculty and students will emerge as strong opponents to this alternative. The universities may challenge the Government's authority to enact such policies. Pursuant to section 27(2)(m) of the *University Act (British Columbia)*, the universities' Board of Governors has the power to set fees. Universities could suggest that the Province is interfering with the Board of Governors' responsibilities. To date, no jurisdictional challenges have arisen related to these clauses.

7.2.4 Equity - *Medium*

This policy alternative receives *medium* ranking as it benefits Canadians, but it will generate inequities between departments and limit opportunities for global citizens. This policy will increase Canadians access to funded graduate-level spaces. However, it also provides a financial barrier to international students and contributes to 'brain drain.' The use of

¹⁵ A similar tactic was employed in 1991, when the Ontario government established a \$5,000,000 fund to equal to 1,000 scholarships for academically meritorious international graduate students. These scholarships lowered award holders' tuition fees to equal domestic fee levels (Tillman, 1991).

scholarships to attract high calibre students may also be applied in some departments more than others. This could exasperate inequities between departments' access to resources.

Scholarships that attract top international graduate students contribute to a global phenomenon called 'brain drain'. These graduates are recruited to study abroad and do not contribute directly to research projects being developed in their home country's institutions. This 'brain drain' is part of the widening the gap between in the research capacity in developed and developing countries (Varghese, 2007). Candidates coming from countries with access to a higher number of scholarships or from countries with a higher GDP have a greater advantage in accessing educational opportunities abroad. Those who do not come from wealthy families or rich countries are most likely to suffer under this policy. Further investigation into the income sources of international graduate students will determine the full extent to which these students will suffer. Some students are funded by their home countries or external awards and will not be directly affected by this policy change.

While Canadians are also educated abroad, few dominant host countries provide subsidized tuition fees. Canadian citizens going overseas are often required to compete for foreign scholarships or Canadian grants, which may cover only a portion of the total degree cost. Furthermore, although the internationalization of Canadian campuses has been greatly encouraged over the years, these individuals may be taking jobs that would otherwise go to Canadian citizens. This distribution of employment is not necessarily a negative consequence, but it should be considered in relation to equity issues.

7.2.5 Effectiveness – *Medium-high*

This option is ranked *medium-high* as it would be effective in generating new funded graduate spaces for domestic students, but may temporarily reduce international graduate enrolment levels. Research suggests that international students contribute to campus life and the

educational experience of Canadian students. They are also linked research activities and patent applications. In the short term, decreased enrolment may impact negatively on the quality of Canadian students' educational experiences and on research developments. In the long term, by comparing undergraduate enrolment records to tuition fee increases, past experience suggests that an initial reduction in international students may not result in any long-term challenges to enrolment levels. Other market experiences (eg. the introduction of differential fees in the UK) also support the idea that, in the long term, this policy's impact on enrolment numbers will not be significant. Moreover, access to a greater number of funded graduate seats will enhance educational opportunities for Canadian students.

7.3 Alternative Three: Elimination of differential tuition fees

7.3.1 Finance - *Low*

This policy option represents a potential loss in revenue to the Province that is equal to the status quo policy and, as a result, is ranked as *low* in financial savings. The implementation of this alternative would result in no additional cost to the Province, but UVic and UBC would face income reductions. UVic charges a small differential fee to international graduate students of approximately \$300 per term. UVic would lose \$215,400 per year based on the 2007 enrolment estimates of 359 international graduate students and assuming that students pay differentials worth \$600 per year. UBC does not provide data on their revenue from differential fee-paying students. Interviewees reported that UBC's revenue was not large but it justified the administrative costs of the partial tuition awards as well as a slight profit. The cost to SFU and UNBC will be nothing, except in long-term options when they might consider increasing tuition fees for this group.

7.3.2 Administrative ease - *High*

This option would be easy to enact for universities as well as for the Province and ranks as *high* in administrative ease. The policy will be more complicated for UBC and UVic as they will eliminate their differential fee category, but these alterations will require simple processing and no additional administrative support. Since the Province currently regulates domestic tuition fee increases, the inclusion of international graduate students under this regulation would require a small adjustment in tuition policy statements and no changes to financial transfers. The universities' provision of extra services required by international graduate students would need to be funded through alternative sources, which may draw upon administrative resources. The number of overseas applicants may increase, but universities are adept at handling variations in applicant numbers.

7.3.3 Political support - *Low*

Similar to the imposition of full-cost fees, this would be a politically contentious option and is ranked *low* for political support. This option transfers tuition fee setting powers from the universities' Boards of Governors to the provincial government, which may cause resentment from university administrators. It is unlikely to have much popular support, except by select faculty members and students. This policy option would draw attention to the fact that international graduate students in BC are receiving a publicly funded education. As in the past, the media may argue that this policy takes away seats from domestic students. It provides cheap education to international students who have no history of paying Canadian taxes. It is difficult to judge the potential strength of public reaction. The country is in a period of slow economic growth and there is sensitivity to, as one interviewee described it, protecting the interests of 'us' versus the 'others'.

7.3.4 Equity – *Low-medium*

Similar to policy alternative two, many inequity issues relate to this option which lead to a *low-medium* rank. Canadians would express concern as to why graduate students do not pay differential fees while undergraduates do. Faculty argue that international graduate students play an important role in research activities at universities. However, universities' core functions go beyond research to providing high quality educational experiences at all levels.

Lower tuition fees translate into more affordable education for many of the world's citizens. A policy of non-discrimination purports principles of equal access at a global level and emphasizes academic merit over financial means. Nevertheless, financial constraints on many global citizens and the high cost of living in Canada will still prevent some from enrolling in BC universities, regardless of the tuition costs.

Universities will be unable to use their international graduate tuition fees as a means of controlling the number of international graduate student applications. Any competitive advantage an institution, such as UNBC, may hold through offering low differential fees will be removed as provincial competitors eliminate differential fees. However, the effect would also reduce universities ability to arbitrarily raise tuition rates or potentially exploit international graduate students for the sole purpose of revenue generation.

7.3.5 Effectiveness – *Low-medium*

The effectiveness of this policy is similar to the status quo, which results in its lower ranking. However, this option is ranked less effective than the status quo as it removes the universities' power to set international tuition fees and developed customized tuition policies to meet the policy objective. The diverse characteristics of BC universities suggests that a broad policy application may not be as effective as institution-based policies, assuming institutions and the Province share the same objectives.

As mentioned previously, when students leave the country after obtaining their degree they represent a loss in public post-secondary investments, which is a concern for Canadian taxpayers. Further, there is the possibility that institutions will show preference to international students over domestic students to enhance the prestige of the institution and promote international research. Preference shown towards international students will impinge upon the Province's objective to avoid the crowding out of domestic students. Nevertheless, increases in overseas student enrolment could enhance BC's reputation as an international research centre and contribute to the educational experience for Canadian students. Overseas students may also become part of BC's skilled labour pool, if they decide to remain in the Province after graduation.

7.4 Alternative Four: Full cost tuition fees for international students in non-research programs and no differential fees for research students

7.4.1 Finance – *Low-medium*

This policy option is ranked as *low-medium* as it assumes reduced Provincial transfers to universities for international graduate students in taught programs. However, the Province will continue to transfer funds to support international students in research graduate programs. Research degrees are expensive. Lab costs, supervisors' time, and paid research services can cost more than a taught program, where there is a lower marginal cost per student. Furthermore, efforts to fill the maximum number of funded graduate spaces may result in taught program students being shuffled in the enrolment count. As such, the Province would not significantly reduce transfer payments. The University of Victoria will lose some revenue with the removal of differential fees currently applying to international research students. These losses will be similar to those described under policy alternative three.

7.4.2 Administrative ease - *Medium*

This option is ranked as *medium* as it will prove administratively challenging in setting up differential fees for taught program students, but will require few adjustments for those in research programs. Universities may find it difficult to calculate a ‘full-cost’ tuition fee for taught programs. Legislation will specify the universities’ responsibility in determining an appropriate minimum fee. The Province and universities also need to establish a clear and mutually agreed upon definition of a research program. Universities with Government support would categorize existing academic programs into research or non-research.

A key aspect of the administration of this option is the management of revenues arising from these students. Some of those interviewed suggested a profit split of 50-50 between the university’s general revenue and the hosting department. The universities will be responsible for managing these revenues appropriately.

7.4.3 Political support – *Medium*

This option is ranked as *medium* political support as it reduces subsidization of international graduate students but not completely, which will generate mixed reactions from stakeholders. This option would meet faculty members’ preferences expressed during the interviews for low tuition fees for international research students. Students will express opposition to tuition fees increases. University administrations may oppose this policy as they could perceive this legislation as a provincial intrusion on their authority. However, the policy would act as a source of additional revenue for universities.

Some professional programs already charge more for tuition than traditional academic programs. As such, the application of full-cost tuition fees to taught programs would be less contentious than the removal of any potential differential fees for research students. Taxpayers will express concern over subsidizing international research students and that foreigners are

occupying graduate spaces that would have otherwise been given to domestic students. These concerns would correspond to those outlined in alternative three.

7.4.4 Equity – *Low-medium*

This policy option is ranked *low-medium* as, similar to the status quo, Canadians will continue to subsidize international research students, but will no longer support those in taught programs. Fewer international students may enrol in taught graduate programs due to higher tuition fee expenses. This policy thus favours international student enrolment in research programs and disadvantages those registering in taught programs. While universities include research as a component of their mandate, interviewees and literature note that international students at all levels play an important part in the learning experience and campus life. The subsidization of research students over taught-program students signals a preference to invest funds in research over classroom experiences.

Taught programs are geared toward professional qualifications. It is often assumed that professional qualifications teach a skill set which will lead to a job or pay rise. As such, higher tuition fees tend to be tolerated in professional graduate programs for the assumed pay-off the qualification brings in employment opportunities and income. In some ways, a precedent for higher tuition fees for professional degrees has already been set: A Master of Business Administration degree and a law degree charge higher tuition fee levels than a research-based master's program. However, there is no evidence to make this connection to all taught programs.

This policy reduces the institutional power of universities to set international graduate fees. It forces universities to implement cost recovery and/or differential fees for those enrolled in taught programs. International students who can afford the program will register, but others will be unable. Individuals from countries that provide full funding to their overseas students or from countries with higher GDPs will be more financially capable of registering in programs.

Those from developing countries are at a disadvantage - most do not have access to the same financial support or loans as domestic students.

7.4.5 Effectiveness - *Medium*

This policy option is ranked *medium* as it splits international graduate students into two categories, yielding variations of effectiveness in meeting policy objectives. Full cost fees for international graduate students in taught programs generate additional income for universities. These programs may become geared towards specific international markets and sideline Canadian interests. Entrance requirements may be reduced to encourage more ‘taught program’ international students, which generates more income and, in the process, lowers education quality.

This option encourages international student participation in research programs. Since international research students add to campus diversity, high enrolment numbers enhance domestic students’ learning experience. Research graduates who remain in Canada are also seen as skilled labour. Similar to previous policy options, the Province risks losing funds invested in international graduate students. Furthermore, research graduate students may also be occupying subsidized graduate spaces, which would have otherwise gone to Canadian students.

Universities may change their programs’ curriculum to reflect the characteristics of a ‘research’ or ‘taught’ degree, depending on the availability of funds and students. These changes may be to the advantage of the international students and act as an additional revenue source for departments, but domestic student needs should also be considered, particularly the need for accessible educational programs.

7.5 Analysis Summary

7.5.1 Policy matrix

In Table 10, the policy matrix provides a basic comparison of each of the policy options presented against the criteria for analysis.

Table 10: Policy matrix

<i>Policy alternatives</i>	<i>Financial savings</i>	<i>Administrative ease</i>	<i>Political support</i>	<i>Equity</i>	<i>Effectiveness</i>
1. Status quo	Low	High	Medium-high	Low-medium	Medium
2. No funding for international graduates	High	Low	Low-medium	Medium	Medium-high
3. No differential fees for international graduates	Low	High	Low	Low-medium	Low-medium
4. Differential fees for taught graduate programs	Low-medium	Medium	Medium	Low-medium	Medium

The application of numeric values in place of word ranking is an alternate method of comparing policy options' strengths and weakness. Table 11 is a representation of Table 10 with the substitution of ranks with number values. In Table 11, the numeric values applied to the criteria are: Low (1), Low-medium (2), Medium (3), Medium-high (4), High (5). The columns are totaled to compare the options' cumulative values. A high total value indicates that numerous benefits are attributed to the policy alternative. The highest possible cumulative value is 25 and the lowest value is five. Table 11 totals show the same value of 15 for the first and second alternative. The removal of provincial support for tuition fees and the status quo are ranked as the

top policy alternatives based on this policy analysis. The elimination of differential fees is the lowest valued option with 11 points.

Table 11: Policy matrix: Numeric values

<i>Policy alternatives</i>	<i>Financial cost</i>	<i>Admin. Burden</i>	<i>Political support</i>	<i>Equity</i>	<i>Effectiveness</i>	<i>Total</i>
1. Status quo	1	5	4	2	3	15
2. No funding for international graduates	5	1	2	3	4	15
3. No differential fees for international graduates	1	5	1	2	2	11
4. Differential fees for taught graduate programs	2	3	3	2	3	13

7.6 Recommendation

Based on the above analysis of policy alternatives and considering the matching value of the matrix’s highest ranked policies (alternative one and two), this study recommends that the Province of BC maintain the status quo for the time being. The following justifications are given for this recommendation:

- The status quo ranks as a *high* cost to the Government compared to alternative two, but potential savings to the Province from reduced transfers are not large after the introduction of scholarships and considering the large number of unfunded graduate spaces

- The administration of this option presents little burden to the Province and universities. In comparison, alternative two would result in departments expending increased time and resources on finding and applying for funds to support international research students, who may be important contributors to their research.
- Interview findings indicate that universities and faculty support the status quo. The lack of media attention and the stability of this policy over the last 15 years suggest a high level of public acceptance. In comparison, the second alternative would draw strong criticism from universities who would be reluctant to give up their tuition fee setting powers.
- BC currently attracts a large percent of international students to its graduate programs.
- The status quo ranks lower than alternative two in equity and effectiveness, but these divisions are not wide.
- BC post-secondary institutions host large variations in their graduate enrolment numbers and student demographics. They also share different scholastic objectives. Policy options that enforce an across-the-board regulation will not address institutions' unique characteristics. The status quo policy gives universities the opportunity to customize international student tuition fees to levels they deem appropriate to meet institutional needs.

Universities have identified international students as an important component of their graduate programs and have chosen not to raise tuition fees. In this environment, and given the information presented in the analysis summary, the current policy should continue with the Province deferring the responsibility to universities to set fees and manage international graduate enrollment.

8: Conclusion

British Columbia has an opportunity to develop its tuition fee policies for international graduate students. Other jurisdictions have set a precedent in applying differential fees and providing scholarships to attract top students. Most of these scholarships are designed to attract top talent at a global level. In comparison, higher tuition fees generally attract students who are willing to pay for a foreign education. The university is main benefactor of these high caliber and fee-paying students. However, international students who have not had access to quality educational opportunities and cannot afford a foreign education are the principle losers.

Unfortunately, there are few international awards available to persons lacking the financial means to attend undergraduate or graduate programs in the developed world. Development aid programs, such as the United Nations' Millennium Development Goals, have focused on lower level education. The international community's neglect of tertiary-level educational support to developing countries threatens to enhance the capacity of those who can afford international education and in ways that benefit the host country, as opposed to enhancing the capacity of those with the greatest potential or in the greatest need of educational opportunities. As a global citizen, it is important to remember the broad purposes and benefits arising from graduate programs. Australian Prime Minister Kevin Rudd once pointed out that "education is both a tool of social justice as well as a fundamental driver of economic development" (Rudd, 1998).

Universities' development of international programs outside of graduate degree courses may enhance educational opportunities and reach a wider spectrum of individuals. Governments and universities are developing student exchanges and non-degree programs that foster global partnership and generate affordable opportunities for foreigners. These internationalization strategies introduce greater program flexibility, multi-media educational tools, and customized

curriculum. The focus of this study has been on degree program tuition levels, but the widening ‘education ladder’ reminds us that the scope, purpose, and impact of international graduate degree programs are not always easy to measure and is quickly shifting in this new post-secondary environment.

Appendices

Appendix A

Interview questions addressed to the university representatives (either Deans of Graduate Studies or their delegate) include:

- How are tuition fee determined? If there is a committee, who is on it? Do faculty or students report to or are represented on these committees?
- What are the reasons or motivations behind non/differential tuition fee program?
- What are the possibilities of changing tuition fees structure in the future?
- What types of opposition and support are there for differential tuition fees?
- How can I access tuition policy documents?
- Is there an internationalization strategy related to international graduate students?
- What value do international graduate students hold for your institution?
- How does the university attract/recruit international graduates?
- How is the revenue from international students fees allocated? Does it go into general revenue?
- Is there anything else you would like to comment upon related to this topic?

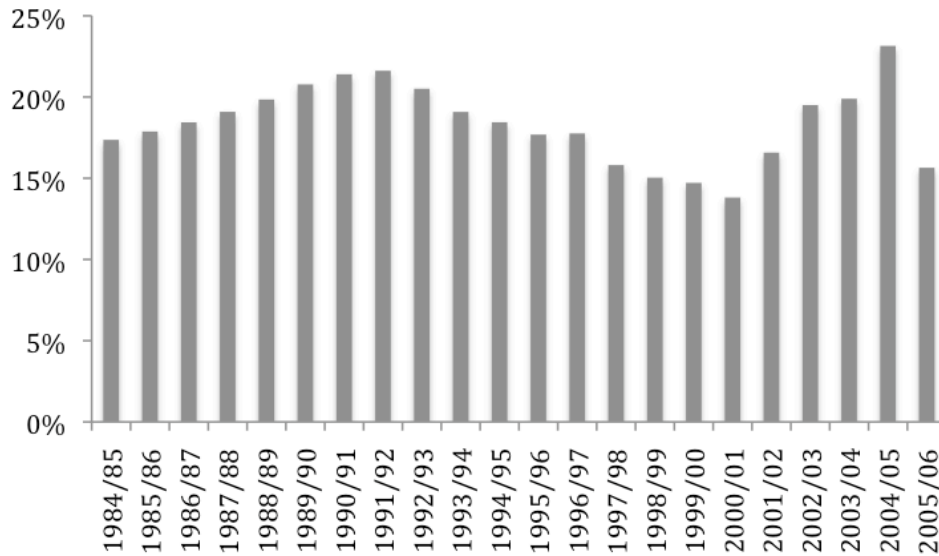
Interview questions addressed to the university academic staff, include:

- How many international graduate students are in your faculty/department?
- How do you recruit international graduate students?
- Why do you think international graduate students express/do not express interest in studying with your department?
- What do these students bring or take away from your department?
- Do you keep in contact with these students after they graduate?
Approximately what percent do you continue to communicate with?
- What do you see as the reasons or motivations behind non/differential tuition fee program?

- Do you think differential tuition fees at a graduate level would benefit or hurt your department? Please explain.
- Do you have a target for international graduate student enrolment?
- Where do most of your international students come from? Why?
- Are you consulted about tuition fee changes? Who would you talk to if you or someone from your faculty wanted to comment on tuition fee changes for international graduate students?
- Are you satisfied with the current tuition fee rates?
- If higher differential fees were introduced, where would you expect the funded to go into? General revenue or a portion towards the department funds?
- Is there anything else you would like to comment on related to international graduate students or their tuition fee levels?

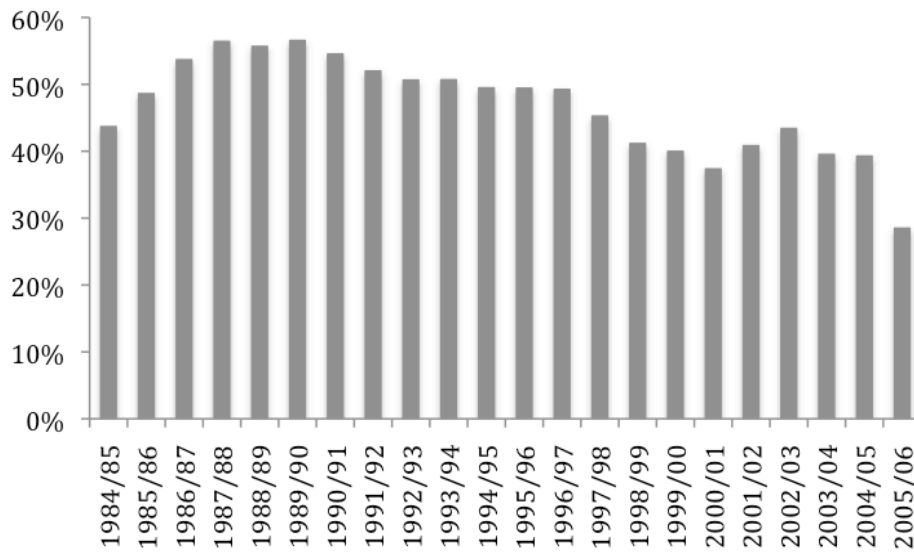
Appendix B

Figure 3: International students in graduate studies, as a percent of all graduate students in BC



Source: RUCBC website, Section 3 – 3.3

Figure 4: Percent of international students enrolled in a graduate level program in Canada, by year



Source: RUCBC website, Section 3-3.4

Table 12: Government transfers per FTE by province

Year	Maritimes Average	Quebec	Ontario	Manitoba	Sask.	Alberta	British Columbia
1993-94	\$14,213	\$12,277	\$9,901	\$14,343	\$14,544	\$17,733	\$16,330
1995-96	\$12,328	\$12,835	\$10,623	\$13,674	\$14,795	\$13,568	\$16,373
1997-98	\$10,961	\$11,323	\$9,559	\$17,165	\$15,354	\$13,950	\$15,109
1999-00	\$11,457	\$11,606	\$13,103	\$16,455	\$17,344	\$14,307	\$13,955
2001-02	\$11,774	\$10,939	\$8,694	\$13,833	\$18,276	\$16,706	\$12,766
2003-04	\$11,303	\$11,472	\$8,140	\$13,136	\$18,225	\$13,891	\$11,474
2005-06	\$12,078	\$11,837	\$8,868	\$13,290	\$18,893	\$15,574	\$11,665
2007-08	\$13,996	\$12,008	\$9,718	\$13,860	\$18,067	\$22,469	\$12,342

Source: CAUT Almanac of Post-Secondary Education (2009), table 4.1

Table 13: Share of provincial expenditures on post-secondary education

	1992-93	2007-08
Newfoundland	6.4%	5.9%
Prince Edward Island	5.1%	4.7%
Nova Scotia	7.5%	7.1%
New Brunswick	5.6%	5.4%
Quebec	7.6%	5.7%
Ontario	5.8%	5.7%
Manitoba	4.4%	4.9%
Saskatchewan	5.1%	6.8%
Alberta	6.4%	8%
British Columbia	5.9%	5.7%
Canada	6.3%	6%

Source: CAUT Almanac of Post-Secondary Education (2009), table 1.1.1

Bibliography

- Altbach, P., Reisberg, L. & Rumbley E. (2009). *Trends in Global Higher Education: Tracking an Academic Revolution*. A report prepared for the UNESCO 2009 World Conference on Higher Education. Paris: UNESCO. Retrieved from <http://unesdoc.unesco.org/images/0018/001832/183219e.pdf>.
- Association of Universities and Colleges of Canada. (August 2007). *Canadian universities and international student mobility*. Retrieved on November, 2009 from http://www.aucc.ca/_pdf/english/publications/student_mobility_2007_e.pdf
- Association of Universities and Colleges of Canada. (2006). *Transfer Payments for postsecondary education*. Retrieved on November 20, 2009 from http://www.aucc.ca/_pdf/english/reports/2006/transfer_payments_02_23_e.pdf
- Association of Universities and Colleges of Canada. (2008). *Trends in Higher Education: Finance*. (3). Retrieved in November, 2009 from http://www.aucc.ca/_pdf/english/publications/trends_2008_vol3_e.pdf
- Beynon, Robert. (January 22, 1984). Fear of Foreigners Boosts Tuition. *The Ubyyssey*. BC: University of British Columbia Archives. p3. Retrieved on February 8, 2010 http://www.library.ubc.ca/archives/pdfs/ubyssey/UBYSSEY_1984_01_27.pdf
- Bowen, Howard R. (1980). *The Cost of Higher Education*. San Francisco: Jossey-Bass.
- Brennan, John and Ulrich Teichler. (2008). The future of higher education and of higher education research. *Higher Education*, 56. 259-264.
- Campus Advisory Board on Student Development. (March 22, 1999). *Meeting Minutes*. University of British Columbia. Retrieved from <http://vpstudents.ubc.ca/minutes/19990322sry.htm>.
- Canadian Association of University Teachers. *CAUT Almanac of Post-secondary Education 2009*. Statistics Canada. Retrieved on November 26, 2009 from www.caut.ca/uploads/2009_1_Finance.pdf
- Canadian Association of Graduate Studies (December, 2006). A Profile of Master's Degree Education in Canada. Retrieved on April 16, 2010 from <http://www.cags.ca/media/docs/cags-publication/CAGS-Master.pdf>
- Chai, Tina. (Summer 1996). International Students in Canada. *Canadian Social Trends*, 41. Statistics Canada.
- Chellaraj, G., Maskus, K.E., Mattoo, A. (August, 2008). The Contribution of International Graduate Students to US Innovation. *Review of International Economics*, 16(3). 444-462.

- Clift, Robert (November 18, 2008). BC's Public Universities and Colleges Need Your Help. Confederation of University Faculty Associations of British Columbia. Retrieved on January, 2010 from http://www.cufa.bc.ca/index.php?option=com_content&task=view&id=168&Itemid=35
- Committee on Science, Engineering and Public Policy; Committee on Policy Implications of International Graduate Students and Postdoctoral Scholars in the United States. (2005). *Policy Implications of International Graduate Students and Postdoctoral Scholars in the United States*. Washington: The National Academies Press.
- Committee on Tuition Policy. (April 26, 1999). *Final Report: Establishment of the Committee on Tuition Policy and Its Mandate*. UBC: Office of the Vice President Academic. Retrieved on February 4, 2010 from http://www.vpacademic.ubc.ca/office/committees/tuition_cttee_report.pdf
- Compact Oxford English Dictionary of Current English* (2009). Retrieved in November 2009, from http://www.askoxford.com/concise_oed/tuition?view=uk
- Council on Post-Secondary Education. *Statistical Compendium 2003*. Government of Manitoba. Appendix b. Retrieved from http://www.copse.mb.ca/compendium/compendium2003/en/appendix_b_en.pdf
- Fisher, D., Rubenson, K., Jones, G. and Shanahan, T. (May 2009). The political economy of post-secondary education: a comparison of British Columbia, Ontario and Quebec. *Higher Education*, 57 (5). 549-566.
- Fisher, Donald et al. (August 2005). Canadian Federal Policy and Post-Secondary Education. *Alliance for International Higher Education Policy Studies*.
- Gingras, Y., B. Godin, and M. Foisy (1999). The internationalization of university research in Canada, Bond, S.L., and J. Lemasson ed. *A new world of knowledge: Canadian universities and globalization*. IDRC
- Gunn, Ian and Quan, Douglas (March 21, 1997). Fee protests spark President's office sit-in. *Ubyyssey*. University of British Columbia. Retrieved on March 10, 2010 from http://www.library.ubc.ca/archives/pdfs/ubyssey/UBYSSEY_1997_03_21.pdf
- Harman, G. (2003). International PhD students in Australian universities: financial support, course experience and career plans. *International Journal of Educational Development* (23). 339-351.
- Hatakenaka, Sachi. (June 2004). *Internationalism in Higher Education: A Review*. Higher Education Policy Institute: UK.
- Horta, Hugo. (February 2009). Global and national prominent universities: internationalization, competitiveness and the role of the State. *Higher Education*, 58(3). 387-405.

- Internal Audit and Advisory Services. (September 2005). *Report on International Education Review*. Office of the Comptroller General, Ministry of Finance. Victoria: Government of British Columbia.
- Jones, Glen. (1997). *Higher Education in Canada: Different systems, different perspectives*. New York: Garland Publishing.
- Jonstone, D. Bruce. (2001). Higher Education and those “Out-of-Control” Costs. Ed. by Albtach, Phillip et al. *In Defense of American Higher Education*. Baltimore: John Hopkins University Press.
- King, Darren. (April 2008). *Doctoral Graduates in Canada: Finding from the Survey of Earned Doctorates, 2004/05*. Statistics Canada: Government of Canada. Retrieved on June 17, 2009 at <http://www.statcan.gc.ca/pub/81-595-m/81-595-m2008065-eng.pdf>
- Knight, Jane. (Fall 2003). Updating the Definition of Internationalization. *International Higher Education*. Boston College. Retrieved on November 18, 2009 from http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/News33/text001.htm
- Knight, Jane. (Winter 2007). Internationalization Brings Important Benefits as Well as Risks. *International Higher Education*, Boston College Center for International Higher Education, No 46.
- Long, Bridget Terry. (March 29, 2002). *Attracting the Best: The Use of Honors Programs to Compete for Students*. Spencer Foundation: Harvard Graduate School of Education.
- Lyakhovetska, Regina. (December 22, 2002). The Impact of Differential Fees on International Student Enrolment at the University of British Columbia. Retrieved on February 11, 2010 from eduspaces.net/reginalya/files/914/2473/differential+fees+report.doc
- Marcucci, Pamela N. and D. Bruce Johnstone. (March 2007). Tuition Fee Policies in a Comparative Perspective: Theoretical and Political Rationales. *Journal of Higher Education Policy and Management*, 29(1). 25-40.
- McMartin, Heather. (August 2009). *The Intersection of Internationalization, International Student Recruitment and Government Funding Policies at Ontario Universities: a case study of York University*. Master Degree Submission: York University, School of Public Policy, Administration and Law.
- Ministry of Advanced Education. (September 2005). *Report on International Education Review*. Government of British Columbia. File No.: 019034. Retrieved from <http://www.aved.gov.bc.ca/publications/documents/InternationalEducationRptFin2.pdf>
- Ministry of Advanced Education and Labour Market Development. *Tuition Limit Policy*. Government of British Columbia. Retrieved on November 19, 2009 from http://www.aved.gov.bc.ca/tuition/tuition_policy.htm.

- Ministry of Advanced Education and Labour Market Development. (2009). *University of British Columbia Factsheet – August 2009*. Government of British Columbia. Retrieved from http://www.aved.gov.bc.ca/institutions/docs/UBC_profile.pdf
- Ministry of Advanced Education and Labour Market Development. (2009). *Simon Fraser University Factsheet – August 2009*. Government of British Columbia. Retrieved from http://www.aved.gov.bc.ca/institutions/docs/SFU_profile.pdf
- Ministry of Advanced Education and Labour Market Development (September 1, 2009). *Letters of Expectation, 2009/10*. Government of British Columbia. Retrieved in December 2009 from <http://www.aved.gov.bc.ca/budget/welcome.htm>.
- Ministry of Advanced Education and Labour Market Development. (September 2009). *Service Plan Update 2009/10 – 2011/12*. Government of British Columbia. Retrieved on February 9, 2010 from http://www.bcbudget.gov.bc.ca/2009_Sept_Update/sp/pdf/ministry/almd.pdf
- Ministry of Education. *Glossary: Ministry Policy Site*. Retrieved on November 11, 2009 from <http://www.bced.gov.bc.ca/policy/glossary.htm#top>.
- Mohrman, K., Ma, W., & Baker, D. (2008). The research university in transition: The emerging global model. *Higher Education Policy*, 21. 5-27.
- Moussaly-Sergieh, Karim and Vaillancourt, François (May 14, 2009). A Extra Earning Power: The Financial Returns to University Education in Canada. *E-brief*. C. D. Howe Institute. Retrieved on March 12, 2010 from http://www.cdhowe.org/pdf/ebrief_79.pdf
- Organisation for Economic Co-operation and Development. (2008). *Education at a glance, 2008*. OECD Indicators. Table 3.1. Retrieved from <http://www.oecd.org/dataoecd/23/46/41284038.pdf>.
- Perraton, Hilary. (2009). *Learning Abroad: A History of the Commonwealth Scholarship and Fellowship Plan*. UK: Cambridge Scholars Publishing.
- Philipe, John. (March 2002). *What's a Degree Worth? Who pays and who benefits at Atlantic Canada's universities*. Atlantic Institute for Market Studies. Retrieved in August, 2009 from [http://www.aims.ca/library/degree\(1\).pdf](http://www.aims.ca/library/degree(1).pdf).
- Postsecondary Finance and Information Management Branch. (October 2009). The Ontario Operating Funds Distribution Manual. *A Manual Governing the Distribution of Ontario Government Operating Grants to Ontario Universities and University-Related Institutions (Formula Manual)*. Ministry of Training Colleges and Universities: Government of Ontario.
- Reus, Karel. (2009). International Post-Secondary Education: the Education Gateway Speculative discussion paper. *Campus 20/20: An Examination of British Columbia's Post-Secondary Education System*. BC Ministry of Advanced Education and Labour Development. Retrieved September 2009 from http://www.aved.gov.bc.ca/campus2020/documents/education_gateway.pdf

- Roslyn Kunin and Associates (March 2006). *Economic Impact of International Education at Public Post-Secondary Institutions*. Ministry of Advanced Education. Retrieved on April 17, 2010 from <http://www.aved.gov.bc.ca/publications/documents/int-ed-report060405.pdf>
- Rudd, Kevin (November 21, 1998). *First Speech to Parliament*. House of Representatives: Parliament of Australia. Retrieved on April 19, 2010 from <http://www.aph.gov.au/house/members/firstspeech.asp?id=83t>.
- Salisbury, Mark H, Umbach, Paul D., Paulsen, Michael B., Pascarella, Ernest T. (2009). Going Global: Understanding the Choice Process of the Intent to Study Abroad. *Review of Higher Education*, 50. 119-143.
- Salmi, Jamil. (2009). The Challenge of Establishing World-Class. *Universities Global Education Digest*. UNESCO Institute for Statistics.
- Scott Metcalfe, Amy. (Spring 2008). Theorizing Research Policy: A Framework for Higher Education. Edited by John C. Mart. *Higher Education: Handbook of Theory and Research*, 23. 241-275
- Statistics Canada. (October 18, 2007). *The Daily: University tuition fees*. Retrieved in November 2009 from <http://www.statcan.gc.ca/daily-quotidien/071018/dq071018b-eng.htm>
- Statistics Canada. (June 2008). Doctoral graduates in Canada 2004/2005. *Education Matters: Insights on Education, Learning and Training in Canada*, 5(2). Retrieved August 15, 2009 from <http://www.statcan.gc.ca/pub/81-004-x/2008002/article/10645-eng.htm>.
- Statistics Canada. (October 20, 2009). *University tuition fees, 2009/10*. Table 2. Retrieved from <http://www.statcan.gc.ca/daily-quotidien/091020/t091020b2-eng.htm>
- Tillman, George. (1991). Country Report on Canada: The effects on evaluation of programmes and policies for foreign students. *Higher Education*, 21. 389-406.
- Trilokekar, Roop Desai. (2007). *Federalism, Foreign Policy and the Internationalization of Higher Education: A Case Study of the International Academic Relations Division*, Department of Foreign Affairs and International Trade Canada. Library and Archives Canada: Published Heritage Branch.
- Trilokekar, Roopa Desai. (February, 2010). International education as soft power? The contributions and challenges of Canadian foreign policy to the internationalization of higher education. *Higher Education*, 59(2). 131-147.
- Tuition Fees for International Graduate Students. (Fall 2009). *The Facts about Post-Secondary Education*. Canadian Federation of Students. Retrieved from <http://www.cfs-fcee.ca/html/english/research/factsheets/CFS-Fact%20Sheet-Int%20Grad%20Tuition%20Fees.pdf>

- Varghese, N. V. and Sanyal, Bikas C.. (2007). Knowledge for the future: research capacity in developing countries. *Research Papers*. Retrieved from International Institute for Educational Planning website www.unesco/iiep/en/publications/pubs.htm.
- Varghese, N. V.. (2008). Globalization of higher education and cross-border student mobility. *Research Papers*. Retrieved from International Institute for Educational Planning website www.unesco/iiep/en/publications/pubs.htm.
- Vickers, Phil and Bekhradnia, Bahram. (July 2007). *The Economic Costs and Benefits of International Students*. UK: Higher Education Policy Institute. Retrieved in November 2009 from <http://www.hepi.ac.uk/files/32EconomicEffectsofInternationalStudents.pdf>
- UNESCO. (July 8, 2009). The New Dynamics of Higher Education and Research for Societal Change and Development. *World Conference on Higher Education 2009* communiqué. Paris: UNESCO. Conf 402/2. Retrieved from http://www.unesco.org/education/wche/WCHE_Flyer_25032009.pdf
- UNESCO. (July 7, 2009). Launch of three reports on higher education. *World Conference on Higher Education 2009*. Paris: UNESCO.
- UNESCO. (June 24, 2009). The State of Higher Education in the World Today. *World Conference on Higher Education 2009*. Paris: UNESCO Press. Retrieved from http://portal.unesco.org/es/ev.php-URL_ID=45964&URL_DO=DO_TOPIC&URL_SECTION=201.html
- University of British Columbia. (2009) *Prospective Students: Fees and Costs*. Website. in November 2009 from <http://www.grad.ubc.ca/prospective-students/international-students/fees-costs>.
- University of British Columbia Board of Governors (May 22, 1997). Notice of Motion, Unofficial Meeting Minutes. University of British Columbia: Board of Governors. Retrieved on March 10, 2010 from http://www.bog.ubc.ca/__shared/assets/1997may225896.pdf
- Ubysey Staff. (February 19, 1985). Steep differential fees for foreign students planned. *The Ubysey*, 67(38). 3.
- Woodhall, Maureen. (Spring, 1987). Government Policy Towards Overseas Students: An International Perspective. *Higher Education Quarterly*, 41(2). 119-125

Interviews and Correspondence

- Dean of Graduate Studies (October 26, 2009). Personal Interview.
- Association Executive Director (November 3, 2009). Personal Interview.
- Associate Vice President of Financial Planning and Operations (November 20, 2009). Telephone Interview.

Dean of Graduate Studies (November 23, 2009). Telephone Interview.

Association Immediate Past-President (November 27, 2009). Personal Interview.

Dean of Applied Science (December 1, 2009). Personal Interview.

Dean of Education (December 1, 2009). Personal Interview.

Associate Executive Director (December 8, 2009). Telephone Interview.

Assistant Dean, Director of Graduate Enrolment Services, and Manager of Graduate Awards (December 10, 2009). Personal Interview.

Association Executive Director (December 13, 2009). Telephone Interview.

Treasurer, elected representative (December 15, 2009). Telephone Interview.

Senior Policy Advisor of BC Ministry of Advanced Education (December 23, 2009). Correspondence.