

ACCESS TO POSTSECONDARY EDUCATION:
A COMPARATIVE STUDY OF BRITISH COLUMBIA AND ONTARIO.

By

Jacy S.H. Lee

B.A. Hons. (Law) University of Sheffield, U.K., 1981
LL.M. University of Cambridge, U.K., 1984
M.T.S. Regent College (affiliated with UBC), Canada, 1992
M.P.A. University of Victoria, 1994

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF EDUCATION

In

THE FACULTY OF GRADUATE STUDIES
(Educational Leadership and Policy)

THE UNIVERSITY OF BRITISH COLUMBIA

December, 2005

@ Jacy Lee, 2005

ABSTRACT

The purpose of this study was to better understand government policies concerning access to postsecondary education in Ontario and British Columbia. The five questions guiding this study are: 1) What are the key postsecondary education access policies? 2) How does the policy environment influence postsecondary education policies? 3) What policy trends are associated with the government priorities or seat expansion, affordability and research and development? 4) What is the relationship between government's postsecondary funding policies and the economic environment? and 5) How do policies affect provincial postsecondary funding, enrolment, participation, tuition fees, and investment in research and development?

The study provides a policy narrative of key postsecondary education access policies and analyses the key forces affecting these policies in the two provinces. The three key postsecondary education access policy areas include increasing capacity through seat and institutional expansion; enhancing affordability of postsecondary education to students through tuition fee regulation and student financial assistance; and expanding research and development. Policies in the two provinces have tended to be similar. Key factors that have affected policies include the historical development of postsecondary education, the socio-cultural values and expectations of the population; policy discussions among dominant stakeholders; the political ideology of the government party; and federal-provincial relations.

This study also compares the policy trends and postsecondary education outcomes in both provinces for each of the above three policy areas. Major policy trends in capacity expansion include faster seat growth in the college sector than in the university sector; growing emphasis on meeting economic and labour demands, evolution of hybrid public institutions offering new applied degree programs, and emergence of private degree granting institutions. Key factors

contributing to these policy trends include the belief that economic prosperity is linked with postsecondary education, severe limitations on public spending for postsecondary education especially during difficult economic times, and the historical binary structure of postsecondary education that contributed to shaping the emerging postsecondary landscape.

There is apparently no consistent relationship between postsecondary funding trends and the economic environment in either province. As well, there are significant differences in funding trends between Ontario and BC.

The study concludes with recommendations for policy makers and for future researchers.

TABLE OF CONTENTS

ABSTRACT.....	ii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	vi
LIST OF FIGURES.....	ix
ACKNOWLEDGEMENTS.....	xii
CHAPTER ONE: INTRODUCTION TO THE RESEARCH STUDY.....	1
Background.....	1
Purpose and Objective.....	8
Research Questions.....	9
Scope and Definitions.....	10
Research Design.....	13
Chapter Preview.....	15
CHAPTER TWO: LITERATURE REVIEW.....	17
Value of Education.....	17
Postsecondary Financing.....	26
Cost-Sharing and Accessibility.....	37
CHAPTER THREE: FEDERAL CONTRIBUTIONS TO POSTSECONDARY EDUCATION.....	46
Historical Background.....	49
Research and Development.....	66
Financial Assistance and Tax Credits to Individuals.....	71
Conclusion.....	75
CHAPTER FOUR: ONTARIO.....	79
Access Policies and the Political Environment.....	83
Fiscal Policy Related to Access.....	111
Impacts on Postsecondary Education Access.....	130
Summary of Key Findings.....	153
CHAPTER FIVE: BRITISH COLUMBIA.....	159
Access Policies and the Political Environment.....	166
Fiscal Policy Related to Access.....	198

Impacts on Postsecondary Education Access.....	219
Summary of Key Findings.....	246
CHAPTER SIX: COMPARISON OF ONTARIO AND BRITISH COLUMBIA.....	253
Key Access Policies and the Policy Environment.....	253
Funding Policies and the Economic Environment.....	267
Impacts on Postsecondary Education and Trends.....	276
Concluding Remarks.....	298
CHAPTER SEVEN: SUMMARY, LIMITATIONS AND RECOMMENDATIONS..	304
Summary of Key Findings.....	305
Limitations.....	313
Recommendations.....	315
Concluding Remarks.....	319
REFERENCES.....	321

LIST OF TABLES

Table 3.1:	Federal Funding for Postsecondary Education Sector Research (NSERC and SSHRC) in Constant Dollars (1971 – 2004)	68
Table 3.2:	Federal Contributions to Sponsored Research (1971/72 to 2001/02).....	69
Table 3.3:	Need-Based Assistance to Students by Funding Source in Constant Dollars (1990/91 – 2002/02).....	73
Table 3.4:	Net Loans, Remissions and Grants in Constant Dollars (1990/91 – 2002/03).....	73
Table 3.5:	Federal Government Tax Expenditures Related to Postsecondary Education (1994 – 2004).....	75
Table 4.1:	Some Key Economic Indicators (1985/86 – 1990/91).....	114
Table 4.2:	Expenditure – Budget Plan 1985/86 to 1990/91.....	115
Table 4.3:	Some Key Economic Indicators (1991/92 – 1995/96).....	119
Table 4.4:	Expenditure – Budget Plan 1991/92 to 1995/96.....	121
Table 4.5:	Some Key Economic Indicators (1996/97 – 2003/04).....	125
Table 4.6:	Expenditure – Budget Plan 1996/97 – 2003/04.....	128
Table 4.7:	College and University FTE Enrolment Increases.....	132
Table 4.8:	First Year University Applicants and Registrants (1989/90 – 2003/04).....	133
Table 4.9:	First Year College Applicants and Registrants (1998/99 – 2002/03).....	134
Table 4.10:	Average Tuition and Average Income in Ontario in Current Dollars (1988/89 – 2003/04).....	139
Table 4.11:	Per Cent Tuition Fees to Operating and Total Expenditures of Colleges and Universities (1985/86 – 2001/02).....	141
Table 4.12:	Ontario Student Assistance, Scholarships and Bursaries (1987/88 – 2002/03).....	144
Table 4.13:	Natural Science and Engineering R&D Expenditures Spent on the Higher Education Sector by Funders (1985 – 2002).....	146

Table 4.14:	Provincial and Federal Grants as Percentage of Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).....	150
Table 4.15:	Other Sources as Per Cent of Operating Expenditures (1985/86 – 2001/02).....	151
Table 5.1:	Some Key Economic Indicators (1986/87 – 1991/92).....	200
Table 5.2:	Expenditure – Budget Plan 1986/87 to 1991/92.....	202
Table 5.3:	Some Key Economic Indicators (1992/93 – 2001/02).....	207
Table 5.4:	Expenditure – Budget Plan 1992/93 – 1996/97 (1 st NDP Mandate).....	208
Table 5.5:	Expenditure – Budget Plan 1997/98 – 2001/02 (2 nd NDP Mandate).....	209
Table 5.6:	Some Key Economic Indicators (2002/03 – 2004/05).....	215
Table 5.7:	Expenditure – Budget Plan 2002/03 – 2007/08.....	216
Table 5.8:	College and University FTE Enrolment Increases.....	222
Table 5.9:	Funded versus Actual FTEs for Universities and Colleges (1988/89 – 2001/02).....	224
Table 5.10:	BC High School Applicants (Fall 1995 – Fall 2004).....	225
Table 5.11:	Admission Targets and Cut-off Points for New Entry Students (Fall 2004).....	226
Table 5.12:	Average Tuition Fees for Universities, Colleges and Institutes (1992/93 -1996/97).....	230
Table 5.13:	Per Cent Tuition Fees to Operating and Total Expenditures of Colleges and Universities (1985/86 – 2001/02).....	232
Table 5.14:	Average Total Aid and Average Annual Loan Awards.....	234
Table 5.15:	Natural Science and Engineering R&D Expenditures Spent on the Higher Education Sector by Funders (1985 – 2002).....	237
Table 5.16:	Provincial and Federal Grants as Percentage of Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).....	242
Table 5.17:	Other Sources as Per Cent of Operating Expenditures (1985/86 – 2001/02).....	243

Table 6.1:	FTE Growth in BC and Ontario (1988/89 – 2002/03).....	254
Table 6.2:	Per Cent Change in College and University Provincial Grants and Economic Growth in Ontario (1987/88 – 2002/03).....	271
Table 6.3:	Federal Transfer Payments for Postsecondary Education (1993/94 – 2001/02).....	273
Table 6.4:	Per Cent Change in College and University Provincial Grants and Economic Growth in BC (1987/88 – 2002/03).....	274
Table 6.5:	Per Cent Spending of Postsecondary, K – 12, Health and other Social Services Programs to Total Provincial Spending at the CRF level in BC and Ontario (1986/87 – 2003/04).....	275
Table 6.6:	Year-to-Year Per Cent Change in University and College FTE Enrolment (1989/90 – 2002/03).....	286
Table 6.7:	High School Applicants and Registrants in BC and Ontario (1994/95 – 2003/04).....	288
Table 6.8:	Per Cent Tuition to Average Income in BC and Ontario (1989/90 – 2002/03).....	296
Table 6.9:	Ratio of Ontario to BC Gross Domestic Expenditures on Research (1985/86 – 2002/03).....	297

LIST OF FIGURES

Figure 3.1:	Federal Cash Transfers and PSE Total Expenditures in Current Dollars (1967/68 – 1976/77).....	58
Figure 3.2:	Federal Cash Transfers and PSE Total Expenditures in Current Dollars (1977/78 = 1995/96).....	64
Figure 4.1:	Operating Grants from the Province in Constant Dollars (1987/88 – 1990/91).....	117
Figure 4.2:	Operating Grants from Province per Full-Time Equivalent Student (1986/87 – 1990/91).....	118
Figure 4.3:	Operating Grants from the Province in Constant Dollars (1991/92 – 1995/96).....	123
Figure 4.4:	Operating Grants from Province per Full-Time Equivalent Student (1991/92 – 1995/96).....	124
Figure 4.5:	Operating Grants from the Province in Constant Dollars (1996/97- 2002/03).....	129
Figure 4.6:	Operating Grants from Province per Full-Time Equivalent Student (1996/97 – 2002/03).....	130
Figure 4.7:	Full-Time Equivalent University and College Enrolments (1985/86 – 2002/03).....	131
Figure 4.8:	Average Mark of Registered Secondary School Applicants (1985/86 – 2003/04).....	135
Figure 4.9:	Participation Rate in Ontario (1985/86 – 2002/03).....	137
Figure 4.10:	Operating Expenditures of Colleges and Universities in Constant Dollars (1985/86 – 2001/02).....	147
Figure 4.11:	University and College Operating Expenditures per FTE in Constant Dollars (1985/86 – 2001/02).....	148
Figure 4.12:	Postsecondary Operating Expenditures in Constant Dollars (1985/86 – 2001/02).....	149
Figure 5.1:	Provincial Grants in Constant Dollars (1995/96 – 2001/02).....	188

Figure 5.2:	Operating Grants from the Province in Constant Dollars (1986/87 – 1991/92).....	204
Figure 5.3:	Operating Grants from the Province per Full-Time Equivalent Student (1986/87 – 1991/92).....	205
Figure 5.4:	Operating Grants from the Province in Constant Dollars (1992/93 – 2001/02).....	210
Figure 5.5:	Provincial Grants per Funded FTEs (1992/93 – 2001/02).....	212
Figure 5.6:	Operating Grants from the Province in Constant Dollars (2002/03 – 2004/05).....	218
Figure 5.7:	Operating Grants from the Province per Full-Time Equivalent Student (2002/03 – 2004/05).....	219
Figure 5.8:	Full-Time Equivalent University and College Enrolments (1988/89 – 2003/04).....	220
Figure 5.9:	Funded and Actual FTEs (1989/90 – 2003/04).....	223
Figure 5.10:	Participation Rate in British Columbia (1988/89 – 2004/05).....	227
Figure 5.11:	Average Undergraduate Tuition Fees by Province (2004/05).....	231
Figure 5.12:	Operating Expenditures of Colleges and Universities in Constant Dollars (1985/86 – 2001/02).....	239
Figure 5.13:	University and College Operating Expenditures per FTE in Constant Dollars (1988/89- 2001/02).....	240
Figure 5.14:	Postsecondary Operating Expenditures in Constant Dollars (1988/89 – 2001/02).....	241
Figure 6.1:	Provincial Operating Grants of Colleges and Universities (1990/91 – 2002/03).....	269
Figure 6.2:	Provincial Operating Grant per FTE by College and University (1990/91 – 2002/03).....	270
Figure 6.3:	Per Cent Provincial Grant to Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).....	277
Figure 6.4:	Per Cent Tuition Fee Revenue to Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).....	278

Figure 6.5:	Per Cent Other Source Revenues to Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).....	279
Figure 6.6:	Per Cent Federal Grant to Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).....	280
Figure 6.7:	Operating Expenditures of Postsecondary Education in BC and Ontario (1988/89 – 2001/02).....	281
Figure 6.8:	Postsecondary Operating Expenditures per FTE in BC and Ontario (1988/89 – 2001/02).....	283
Figure 6.9:	University and College FTE Enrolments (1988/89 – 2002/03).....	285
Figure 6.10:	Number of High School Applicants and Registrants (1994/95 – 2003/04).....	289
Figure 6.11:	Number of Graduates and Full-time Enrolment at Universities in BC and Ontario (1992/93 – 2001/02).....	290
Figure 6.12:	Participation Rates – Total Population (1988/89 – 2002/03).....	292
Figure 6.13:	Participation Rate – Population 15 – 24 years (1989/90 – 2003/04).....	294
Figure 6.14:	University Tuition Rates in BC and Ontario in Constant Dollars (1989/90 – 2003/04).....	295

ACKNOWLEDGEMENTS

I thank my committee members, Dr. Kjell Rubenson (Chair), Dr. Donald Fisher, and Dr. Tom Sork for their guidance, insightful feedback and helpful suggestions as I muddled through this study. I am grateful to Dr. Fisher and Dr. Rubenson for the opportunity to work on the AIHEP project which helped to clarify my thinking concerning this study. I especially thank Dr. Rubenson for his pedagogy, clarity of mind, encouragement and support.

My appreciation is extended to my family, especially my father and mother, who always encouraged me to be a learner, the 1997 EdD cohort, and my friends, especially Randy and Chris.

CHAPTER ONE: INTRODUCTION TO THE RESEARCH STUDY

The aim of this study is to develop an understanding of government policies for postsecondary education access in Ontario and British Columbia between 1985 and 2004. This study will provide a policy narrative of key postsecondary education access policies through a documentary review and will explore the key forces driving these policies in the two provinces. It is assumed that the choice of policy direction in both provinces tends to reflect the perspective of the government in power as it seeks to fulfill its goal of governing well. However, what a government deems good public policy is value laden (Cripps, 2002). This study seeks to unravel the story about how decisions are made in terms of the key factors that influenced them. Emphasis is placed on the role of the federal government as well as fiscal, economic, political and historical-social factors. This study also compares the emerging policy trends in both provinces and analyzes the similarities and differences between them in terms of factors within the policy environment that contribute to these trends. Finally, this study compares the trends and outcomes in both provinces with regard to postsecondary education.

Background

Access to postsecondary education has been a consistent priority for governments in Canada. Today there are approximately 75 universities and 300 colleges and institutes that are publicly funded in Canada. Together they provide over 600,000 full-time university seats and over 400,000 college seats annually. They also provide over 600,000 part-time university spaces and over 85,000 part-time college spaces. The history of Canadian postsecondary education is marked by growth—sometimes slow and sometimes rapid. The first period of significant growth in postsecondary education occurred after the Second World War with the return of war veterans. Between 1940/41 and 1947/48 enrolment grew from 65,000 full-time students to 84,000. By

1954/55 there were 68,000 students enrolled in 159 institutions offering university level programs, including 92 classical colleges in Quebec. Most of these institutions were small with fewer than 100 students.

The most significant growth occurred between 1956/57 and 1970/71 owing to the doctrine of economic nationalism, which posits that a university education provides an almost certain path to national economic growth and individual prosperity.¹ Full-time enrolment rose from approximately 106,000 to 476,000 students—an increase of 349 per cent. When the world was hit by recession in the early 1970s,² the doctrine was seriously questioned. After this recession, from the mid-1970s to the mid-1980s, postsecondary education began to move toward training as it became more relevant to the requirements of modern trades and professions (Brown et al., 1997). Enrolment in colleges during this period exceeded that of universities by a wider margin than during the previous period. University-industry linkages also emerged for the first time. Between 1971/72 and 1985/86, postsecondary full-time enrolment increased by 59 per cent.

By the mid-1980s there was once again a new consensus that identified postsecondary education as the key to future economic prosperity. The consensus was on both the left and the right of the political spectrum (Drucker, 1993). This idea characterized "post-Fordism" (or left modernizers, a model of national economic development in contrast to neo-Fordism or New Right) as associated with a move away from mass production to specialized "niche" products, which resulted in massive corporate or workplace restructuring. Postsecondary enrolment

¹ The Royal Commission on Canada's Economic Prospects (Canada, 1956, p.112) endorsed the value of universities as follows: "What is being suggested in essence is that a deliberate and sustained effort be made to raise the quality and standards of Canadian universities to among the highest prevailing anywhere in the world. It is perhaps not going too far to suggest that no other single course of action would be so likely to have such an important fundamental effect upon the long-term economic prospect for Canada".

² The breakup of Bretton Woods in 1971 – 1973 was followed by international currency instability, OPEC price increases (and the resulting emergence of petro and Eurodollar markets), satiated markets for Fordist production in North America, falling productivity in Fordist industries, rising wages, and increased international competition.

continued to grow in Canada throughout the mid-1980s and 1990s. During this period, the major increase in enrolments was in the college or “non-university” sector. One factor behind this increase was the decision by governments to shift funds to institutions that had lower per student costs (Green & Hayward, 1997, p. 8). The non-university or college sector refers to technical, vocational or community colleges that offer a variety of certificate, diploma and associate degree programs, and, more recently in some provinces, applied degree programs.

Under-funding of postsecondary education became a “pre-occupation” (Commission of Inquiry on Canadian University Education, 1991, p.19) on Canadian campuses in the 1990s as governments decided to reduce funding to postsecondary education when faced with growing deficits and a saturation of public tolerance levels for high taxation, as well as increasing competition from health care, the environment and other areas for a greater share of public spending (West, 1993). One consequence of the squeeze on postsecondary education funding was the action by institutions to diversify their funding sources. These actions have included entrepreneurial ventures, private sector partnerships, making students pay a greater share of the costs through higher tuition fees, and soliciting gifts from individuals, foundations and corporations (Green & Hayward, 1997). A World Bank report in 1994 suggested that 30 per cent of institutional revenues should come from non-governmental sources.

Jamieson and Pedersen (1997) indicate that the primary dependence on government funding rendered the institutions particularly vulnerable when governments focused on accountability and effectiveness. By building their mechanisms for funding support around measurable short-term objectives, universities in Canada were constrained by governments-of-the-day. Many of the difficulties are the result of the fact that in Canada “the federal role in

higher education is somewhat veiled” (Jamieson & Pedersen, 1997, p. 155). The federal role is summarized as follows:

. . . the provinces have primary jurisdiction over postsecondary education, with little direct involvement at the national level. Direct participation by the federal government in the funding of universities is largely limited to project-based awards through national granting councils, which sponsor research in the arts and humanities, social sciences, science and engineering, and medicine. The government of Canada also underwrites federal student loan programs and, through various agencies, oversees international agreements and academic exchanges. On the whole, however, the federal government presence is that of a “silent partner” in Canadian higher education, with the bulk of its support coming through transfer payments to the provinces for funding of colleges and universities as well as programs in extended health care and other medical services. The provincial governments receiving these funds hold discretionary power as to their apportionment among the designated recipients, and it is quite clear where postsecondary education will rank in competition for public attention with the immediately perceptible needs in health and medical services. (Jamieson & Pedersen, 1997, pp. 155-156)

Nevertheless, the federal government's role in steering the direction in which postsecondary education evolves should not be underestimated. The significant decrease in Canada Health and Social Transfer payments announced in the 1995 federal budget had significant implications for provinces. The dramatic reduction in funding to provinces at a time when they were coping with large provincial deficits meant that funding reductions had to be passed on to postsecondary institutions. The federal government is also continuously searching for new ways of controlling expenditures on higher education. In recent years, the federal government has increased its support for research and development including new funding to cover the overhead costs of research through payment of indirect costs, to attract knowledge workers from other countries through the Canada Research Chairs and to support research infrastructure through the Canada Fund for Innovation. The federal government also increased funding to the national granting councils for research and infrastructure (Jones, in press).

Another challenge for governments throughout the 1990s and into the 2000s has been regulating tuition fee levels. Some provinces set the maximum tuition fees allowable and allow

institutions flexibility in setting fees for individual programs so long as they do not exceed the maximum fee levels. Through this policy, governments ensure accessibility and affordability. Institutions have continued to lobby for fee differentiation by program and in recent years have been permitted free reign according to market conditions including supply and demand and earning potential of graduates, to set tuition fees for selected professional programs such as law, medicine and dentistry. A 2004 National Physician Survey shows fees for medicine increased from an annual provincial average of \$4,977 in 1997/98 to \$14,544 in 2003/04. Some evidence suggests that fee increases are driving away low-income candidates and could intensify the existing doctor shortage (Schmidt, 2005). In recent years, substantive tuition fee increases have occurred in provinces under New Right government policies. Examples of these provinces include Nova Scotia, New Brunswick and Alberta. Jones (in press) suggests that these large increases raise the question of how much longer postsecondary education can continue to be viewed as a public entity.

To be accessible, postsecondary education should be affordable. Given the recent hikes in tuition fees at the undergraduate, graduate and professional levels, the affordability of postsecondary education in Canada is questionable. Generally speaking, student loan thresholds have not been adjusted to address rising tuition fees and living expenses. Rather than increasing federal transfer payments for postsecondary education to provinces, the federal government elected to respond to the fee increases by creating the Canada Millennium Scholarship Foundation to provide students with modest awards that supplement student loans. The Foundation provides both need-based and merit-based awards that are non-repayable.

Perhaps at the root of much of the problem is the strained relationship between the federal and provincial governments. Canada's decentralized federation and division of powers

does not encourage systematic and coordinated planning and spending arrangements between the two levels of government. The ultimate losers are the students, as they become the ultimate payers of any unfunded costs.

According to Jones (in press, p. 11):

there were no wholesale moves to restructure or substantively reform higher education in any Canadian province [over the last two decades and] . . . in many respects the approach of all governments was to simply stabilize or reduce the level of per-capita student grants in order to create greater efficiency, encourage increased levels of accessibility, and provide new targeted funds to encourage institutions to address particular priorities.

The mass-ification of higher education in Canada was largely accomplished through the establishment of a network of relatively homogenous, secular universities and new non-university, government-regulated institutions that varied by province in terms of their form and mandate (Skolnik, 1986). Many colleges became actively involved in specialized training programs sponsored either by the Government of Canada or by private industry (Jones, in press).

In more recent years, this homogeneity has broken down. While government involvement in the past has been justified on the grounds of social economy, today the rationale for supporting postsecondary education has shifted to economic growth.³ In an effort to ensure that postsecondary education creates economic growth, that programs are relevant to the needs of the labour market, and that research can be commercialized, provincial governments have created or contributed to the emergence of new special purpose universities and other educational institutions that challenge the traditional binary (i.e., university versus non-

³ Education has long been viewed by social scientists as the solution to many social challenges including productivity, inequality, economic growth, health status, overpopulation, political participation, criminal behaviour and welfare dependence (Haveman & Wolfe, 1984). In essence, education was seen as a means to promote economic growth and social justice. As Johnstone (1993, p. 3) puts it: "Higher education is considered throughout the world to be the key to both individual and societal aspirations. For individuals, education beyond the secondary level is assumed to be the way to social esteem, better paying jobs, expanded life options, intellectual stimulation--and frequently a good time in the pursuit of any or all of the above. For societies, higher education is assumed to be the key to technology, productivity, and the other ingredients of international competitiveness and economic growth. Higher education also shapes and preserves the values that define a culture. And it is believed to be a major engine of social justice, equal opportunity, and democracy".

university) postsecondary education system and also provided research matching funding which may increasingly be targeted.

Beginning in the mid-1990s, there were mixed sentiments regarding the value of vocational/college and general university education. Concerning vocationalism, the Financial Post Daily (Francis, 1998) reports that a poll commissioned by the Ontario government found Ontario residents overwhelmingly valued skills and apprenticeships at a college or vocational school more than they valued a university degree. On the other hand, an emphasis on broader skills was being advocated by the Conference Board of Canada (1996) including creativity, problem solving, the ability to innovate, the ability to communicate, a knowledge of diverse cultures and languages, the ability to work in shifting teams, and leadership. These skills were apparently shifting the demand for labour toward university graduates, including Arts students. What emerged from this confusion was an acceptance that a mix of both vocational and academic skills was required in the workplace.

In Ontario and British Columbia, new hybrid institutions have emerged that offer applied degree programs. Pressure to meet labour market requirements has led to a convergence of traditional university and college programs. The convergence is first evidenced by the offering of programs in the same discipline at both colleges and universities at different competency levels. Secondly, no longer do students have to attend a university to be awarded a degree. It was not uncommon for students, after completing a university degree and failing to find employment, to attend a college to learn a skill that matched a labour demand.

The election of governments with New Right ideologies in a number of provinces in recent years has contributed to further changes in the postsecondary education arena. The removal of public universities' monopoly over degree-granting by simplifying regulatory

processes for out-of-province and private institutions, combined with industry linkages, have facilitated the operation of market principles not only outside but within the walls of public postsecondary institutions. Also, pressure to innovate and commercialize research has resulted in market driven academic entrepreneurialism.

There have been a number of major works on understanding education policy-making (Kogan, 1975, 1978; Cameron, 1991; Bowe, Ball & Gold, 1992; Cripps, 2002) that will not be revisited here. Instead of being concerned with whose values are being validated in policy, this investigation is concerned with the policy context or policy environment, in particular the key factors that contributed to the various access policies and policy trends between 1985 and 2004. Naturally, to do this for the whole of Canada would be a mammoth task for this thesis. Accordingly, this study covers two provinces only.

Purpose and Objective

The purpose of this thesis is to better understand the relationship between policy environments and key access policies, including funding policies and policy trends, as well as the effect of these policies on postsecondary education in Ontario and British Columbia. Postsecondary education in these two provinces has undergone changes including: system designs, in particular the balance between traditional and new hybrid institutions and between taxpayer funded and non-taxpayer funded postsecondary institutions; programming, in particular a shift to meet labour market requirements or to an applied, natural science, technology and engineering focus; the perception of postsecondary education as a private good and a push toward cost-sharing, particularly evidenced by skyrocketing tuition fees and greater emphasis on market mechanisms; an emphasis on market driven research and development at postsecondary institutions with research capacity; and declining provincial funding patterns as evidenced by the

declining percentage of provincial grants to operating expenditures of postsecondary institutions and the emergence of private degree-granting institutions.

The main objective of this study is to understand what factors are driving the changes and how they influence access policies and observed policy trends. Brief narratives of key access policies of Ontario and British Columbia and an examination of the effects of these policies on postsecondary performance in terms of outcomes and trends are included in this study. However, there is no assertion of a causal relationship between these policies and the outcomes. The study also includes a comparison of the postsecondary education outcomes in Ontario and British Columbia.

Research Questions

The research questions guiding this study are:

1. What are the key postsecondary education access policies?
2. How does the policy environment influence postsecondary education access policies?
3. What policy trends are associated with the government priorities of seat expansion, affordability, and research and development?
4. What is the relationship between government's postsecondary funding policies and the economic environment?
5. How do the key policies affect postsecondary education including provincial postsecondary funding, enrolment, participation, tuition fee and investment in research and development?

During the investigation, attention was also given to the following policy issues: vocationalism, system planning and managerial accountability, cost trends in postsecondary education, and alternative sources of funding for postsecondary institutions.

Scope and Definitions

Access has been defined in a number of different ways. As summarized by Rounce (2004, pp. 1-2):

The term access, narrowly defined, is used to refer to participation in any type of postsecondary education. Most of the earlier Canadian research has been focused on the narrow definition of access, examining university undergraduate degree programmes and college diploma programmes together to gain a picture of who attended postsecondary institutions and who did not. Others, such as Doherty-Delorme and Shaker (2002), have used a much broader definition of accessibility, understanding it as “...(including affordability and opportunity)...the freedom to obtain and make use of a postsecondary education”. More recent research has begun to acknowledge and explore gradation in access, including differentiating between college and university attendance, university undergraduate, professional, and graduate degrees, institutional choices, and affordability (especially Statistics Canada research reports written by Butlin, 1999; Zhao & de Broucker, 2002; Corak et al, 2003; and Finnie & Laporte, 2003, among others). There are gaps in the access literature however...

Rounce (2004) goes on to list research that has a specific focus such as university (as opposed to college) attendance, the attendance of younger people as opposed to adults interested in lifelong learning, and the different backgrounds of people who choose postsecondary participation.

For purposes of this study, access to postsecondary education is broadly defined to include seat availability and affordability. Assuming that students are of the view that the benefits of postsecondary education outweigh the costs, they are only actually attending if 1) there are postsecondary seats to accommodate them; 2) they possess the marks and meet other criteria for admission; and 3) they have the means of paying for the associated costs (Finnie, 2004). Participation rates and enrolment levels demonstrate seat availability. Average marks of entrants and the number of turnaways (persons who wish to participate in postsecondary education but were not admitted) are also indicators of access. Indicators of affordability include tuition fee rates and student financial assistance.

Policy has been defined as the operational statements of values – "statements of prescriptive intent", "the authoritative allocation of values", "programmatic utterances" (Kogan, 1975, p. 55). For this investigation, policy is reflected in policy texts including legislation, regulation, service plans, Throne Speeches, government brochures, documents, directives, statements and correspondence. Policies include funding decisions at the central policy-making level as reflected in Budget Speeches and Budget documents. In this investigation, the concern is to explore these policies in terms of their relationship to the policy environment. Where possible, this investigation includes the identification of policy clashes and mismatches between contending policy discourses. For this study, a policy trend is a term loosely used to characterize a trend or direction in which policy areas have moved or shifted or a prevailing policy preference taken by recent governments.

Government is defined broadly to include policy decision makers at the cabinet and ministry levels (no differentiation will be drawn between decisions made by cabinet, by a minister, or by a senior bureaucrat with delegated authority from the minister). Postsecondary education is defined as the sum of all publicly funded institutions providing programs beyond the secondary level. This investigation does not include an analysis of the involvement of different parties and implementation processes. How public institutions and potential postsecondary students interpret, implement, conform or contradict these policies is outside the scope of this investigation.

The term "impacts on postsecondary education" is used loosely to characterize the state of postsecondary education. After identifying and discussing postsecondary education policies, it would be logical to assess the impact of these policies on postsecondary education in terms of whether accessibility has been achieved. However, a change in a postsecondary education

system is complicated and also difficult to attribute to a change in government policies.

Accordingly, there is no assertion that the observed trends and outcomes of postsecondary education are a result of identified government policies. For the purposes of this study, postsecondary education outcomes include provincial postsecondary funding, enrolment, participation, tuition fees, and investment in research and development.

The rationale for choosing British Columbia as one of the two jurisdictions is obvious, given the investigator's familiarity with postsecondary education policy and funding through work at the Ministry of Advanced Education and Ministry of Finance. More importantly, BC's policy context includes: regimes under three political parties, economic conditions that ranged from poor to good, government transparency and accountability that includes the publication of service plans with resource allocation and performance indicators by ministry, and a growing public postsecondary education system.

Ontario is selected because it is the largest province with the largest configuration of postsecondary institutions and the highest number of students enrolled. Ontario's policy context, like British Columbia's, includes regimes under three different political parties during the selected timeframe. Also, information on Ontario is relatively readily available. Finally, Ontario has similarities and differences that make for interesting comparison. For example, unlike BC, Ontario has a different college system that does not offer university transfer programs.

The timeframe covered by this study is the years 1985 to 2004. The mid-1980s saw the start of a new era of fiscal conservatism and is an appropriate place to begin the study. As well, the length of the period allows for trend analysis and is manageable for the purposes of this thesis. Owing to issues of data availability, the discussion is limited to 2002 in some areas.

Research Design

The research design aims at constructing profiles of Ontario and British Columbia that highlight the relationships between policy environments, access and funding policies, and the impacts on postsecondary education (including trends and outcomes). To this end, the research employs a comparative, multiple, nested case study design (Merriam, 1998). In constructing the profiles, reliance is placed on documentary and policy analysis. The documentary database includes government and commission reports, Hansard, legislation, policy statements, periodicals, news releases, pamphlets, speeches, annual budget documents, and fiscal and economic reports.

The first level of analysis involves the identification of relevant documents that explicate access policies. As Merriam (1998, p. 69) indicates, "data is nothing more than ordinary bits and pieces of information found in the environment [and] whether or not a bit of information becomes data in a research study depends solely on the interest and perspective of the investigator".

The next step in the analysis is organizing the selected data chronologically in order to reconstruct the policy context and examine the relationships by each key policy. This step also makes possible the examination of policy trends and the combination of factors within the policy environment that may facilitate the policy trends. Similarly, postsecondary education outcomes are organized by the time period examined for plausible connections to a policy or by factors within the policy environment.

To ensure finding relevant materials, the search began with examining available writings on similar subject areas, contacting experts working in the area for leads and using bibliographies of their works to trace other works. Other approaches included general searches

of websites of various government ministries/departments and agencies in the postsecondary education sector⁴, as well as searches in various libraries.⁵ Finally, the opportunity to be part of a network of scholars, including my thesis supervisor, who does similar work under the sponsorship of the Alliance for International Higher Education Policy Studies (AIHEP), made additional resources available.

A main systematic difficulty occurred when trying to locate relevant historical material from the mid-1980s to the early 1990s, as most websites only hold documents dating back approximately five years at the most. Even when these materials were located, another difficulty was determining if any relationship existed between a policy and the activities of interest groups. With respect to quantitative data, one difficulty was the unavailability and the lack of continuity of data. This in turn created difficulties in the comparability of data over the selected time period. The unavailability of financial and enrolment data relate more to the most current data as opposed to historical data, which were readily available. Also, data from different sources sometimes were not comparable because of differences in methodologies and hence could not be used to fill in data gaps for certain years for the purposes of trend analysis. There has been a deliberate attempt to use the same source wherever possible.

Having worked in the BC Ministry of Advanced Education between 1994/95 and 1998/99 and then in the Ministry of Finance between 1998/99 and 2005/06, the investigator has had the

⁴ These include: the Canadian Association of University Business Officers (CAUBO), the Association of Universities and Colleges of Canada (AUCC), the University Presidents Council (TUPC), the British Columbia Council of Admissions and Transfer (BCCAT), the Council of Ontario Universities (COU), the Association of Colleges of Applied Arts and Technology of Ontario (ACAATO), the Council of Ministers of Education Canada (CMEC) and Statistics Canada.

⁵ Libraries include: University of British Columbia, University of Victoria, BC Stats Library and the Legislative Library in Victoria. The Legislative Library is a depository of all government publications and holds many historical government publications that are not available on the internet. BC Stats in Victoria also holds a large number of statistical resources and reduced the incidence of purchasing data that was not available for free from Statistics Canada.

opportunity to not only participate in government policy processes but also to informally hear about other peoples' perspectives and experiences and apply them to this investigation.

Chapter Preview

This thesis is divided into seven chapters.

The second chapter contains a literature review concerning the value of education, postsecondary financing, and issues related to decreasing government funding such as marketisation, entrepreneurial managerialism, rising costs of postsecondary education, the relationship between postsecondary education and the state, and alternative funding sources. It also contains a literature review concerning cost-sharing, in particular, shifting the responsibility for the cost of postsecondary education from government to students and parents and the implications for financial aid and participation in postsecondary education.

The third chapter describes federal contributions to postsecondary education in Canada. While postsecondary education is under provincial jurisdiction, the federal government has played a significant role in the development of postsecondary education in all provinces and continues to influence provincial policies indirectly in various ways. This chapter forms part of the background to the research study and sets the context for a discussion in the latter chapters of how federal policies affect provincial access policies, policy trends, and postsecondary education outcomes.

Chapters 4 and 5 contain analyses of several aspects of postsecondary education policy in Ontario and British Columbia. These aspects include the relationship between access policies and the policy environment; the policy trends associated with the key access policies; the relationship between funding policies and the economic environment; and the impact access policies have on postsecondary education. Each chapter presents a chronological narrative of

key policies, which facilitates an examination of policy trends over the period under investigation, as well as policy impacts including enrolment and participation.

The sixth chapter contains a comparison between Ontario and BC based on the analysis conducted in Chapters 4 and 5. It briefly summarizes the key access policies and policy trends, and discusses key factors within the policy environment that contribute to policy decisions. It also provides a comparison of postsecondary education outcomes in Ontario and British Columbia including postsecondary funding, enrolment, participation, tuition fees, and investment in research and development. Finally, it concludes with observations about issues yet to be resolved.

The final chapter summarizes key findings, briefly discusses the limitations of this investigation, and offers recommendations for government action and future research.

CHAPTER TWO: LITERATURE REVIEW

This chapter contains a literature review on topics concerning the value of education, postsecondary financing, and topics related to decreasing government funding (such as marketization, entrepreneurial managerialism, rising costs of postsecondary education, the relationship between postsecondary education and the state, and alternative funding sources). Also included is a literature review on cost-sharing in postsecondary education, specifically shifting the burden from government to students and parents, and impacts on financial aid schemes and student participation.

Value of Education

The recognition of education as the key to national economic growth and social justice is premised on a number of theories—the earliest postwar theory being the doctrine of economic nationalism. Economic nationalism is premised on the belief that the social progress of workers and their families is advanced through the pursuit of national economic growth. It posits that the state has both the power and responsibility to deliver prosperity, security and opportunity, and that it can deliver economic security through full employment, educational opportunity, social welfare and occupational mobility.

The doctrine's first key assumption is that having talented people, regardless of their socio-economic circumstances, allocated to the most important and technically demanding jobs will advance economic efficiency. The second is that as these talented people come from all social classes and move up the social ladder, traditional social class barriers will break down. Formal education therefore acts like a sieve to select a pool of intelligent people who will bring about technological innovation and industrial growth. The doctrine further assumes that as the majority of jobs will require more skills, eventually everyone will become middle class as

machines take over unskilled and semi-skilled jobs. Accordingly, education should be extended to everyone (Clark, 1962; Kerr et al., 1973).

The defects in the doctrine were exposed during the global recession of the early 1970s. The expectation that all jobs will eventually become middle-class jobs did not materialize. While middle-class jobs had expanded as predicted, working class jobs did not disappear. Wages rose in the West and multinational corporations brought mass production of goods across national borders in search of the cheap labour and tax incentives that were available in developing countries. The belief that national governments could deliver prosperity, opportunity and security was called into question. Furthermore, on the social justice front, social class barriers remained in place because social background remained a significant factor in determining one's opportunities. The reproduction of privilege continued (Brown et al., 1997).

The breakdown of economic nationalism, however, had no negative impact on the belief in the value of education. While the education system was being blamed for social and economic problems, consensus emerged in the late 1980s and early 1990s on both the left and right of the political spectrum that education was the key to future economic prosperity. This consensus was based on the idea that in a global economy, the competitive advantage of a nation is determined by the quality of its education and training systems, as judged by international standards (Carnevale & Porro, 1994). Given that economic growth and employment can be affected by forces beyond the control of national governments in a global economy, national governments may be powerless at preventing unemployment or declining living standards. However, governments are able to upgrade the quality of their human resources or reform their industrial relations policies to create a competitive advantage through production of new technology. This, in turn, may attract new foreign investments leading to new employment

(Thurow, 1993; ILO, 1995). Economic prosperity now depends on nations and enterprises being able to use their human resources to provide “value added” goods and services by finding new sources of productivity and investment. Opportunities to do this are most likely to be found in companies that offer “customized” goods and services in microelectronics, telecommunications, biotechnology, financial services, consulting, advertising, markets and the media.

Brown and Lauder (1992, 1997) characterize this as the global knowledge war. They also demonstrate that while there is a consensus on both sides of the political spectrum, there are fundamental differences in the way governments are responding to the global knowledge war, and these responses have profoundly different implications. They distinguish between two typical models of national economic development: neo-Fordist (New Right) and post-Fordist (left modernizers). Given that the right and the left have different interpretations of the causes of problems within education and training, they prescribe different solutions. For example, the New Right perceives that the cause of slow economic growth is extensive and unwarranted interference by the state. A solution therefore lies in re-imposing the disciplines of the market, including the creation of a mixed economy of public and private educational institutions that will compete and provide choice.

Critics of the New Right argue that the marketization of education will reproduce privilege because not all social groups enter the educational market on an equal footing (Collins, 1979; Brown, 1990, 1995). A covert system of educational selection, characterized by ethnic segregation and the polarization of social classes and resources, would be an outcome. Wasting the talents of working class citizens would result in a lower overall level of talent and skill and would therefore reduce the quality of the workforce (Brown & Lauder, 1997).

The New Right also argues that because individuals now have to pay substantially for their education, they will choose programs and courses that will meet labour market demands and greater efficiency in the allocation of skilled labour will be the end result. Moreover, employers should help bear some training costs and should have a role in determining the types of training offered. However, Streeck (1989, 1992) argues that under the free labour contract environment of liberal capitalist societies, skills become a collective good in the eyes of employers. For fear of losing their investment, employers are unlikely to invest heavily in training existing or potential employees. A chronic skill shortage would result unless the state intervenes to ensure that adequate training occurs.

For left modernizers, the route to prosperity is through the creation of a magnet economy capable of attracting high-skill, high-wage employment within the global economy. In contrast to market capitalism, the modernizers' account of how to stimulate economic development focuses on producer capitalism in which low-cost, long-term investment is linked to the development of human capital (Brown & Lauder, 1997). Providing a floor of protective rights, entitlements and conditions for workers in the context of the global auction is both socially and economically desirable. A high-skill, high-wage economy can only be built by fostering a new high-trust partnership between government, employers and workers. The state's role then becomes a strategic trader (Krugman, 1993) to guide industrial development and provide the infrastructure for economic development (which includes a highly educated workforce, transportation, telecommunications, and research and development). In a just society then, all individuals would have access to an education that will qualify them for employment.

Brown and Lauder (1997) agree with left modernizers that the education system required for a high wage, high technology economy must produce:

...an overall high level of educational achievement...[to] promote equality of opportunity in its strongest form i.e., equality of results, for not only would skilled occupations expand in a sophisticated economy, but a wider range of talents and abilities than was the case in bureaucratically organized forms of work would be required (Brown & Lauder, 1997, p. 390).

However, Brown and Lauder (1997) also argue that the modernizers' assumption that social inequalities will somehow be removed by a high-wage magnet economy is flawed. State intervention is required to create social justice and economic efficiency, and specifically to ensure that genuinely equal opportunities are available to all (Brown & Lauder, 1997).

Occupational projections for a number of countries throughout the 1990s suggest that a strong demand for highly-skilled professional, technical, administrative and managerial occupations was present along with a weakening demand for relatively low-skilled agricultural and manufacturing labour. The demand for such skills is a result of globalization and, not surprisingly, pouring more funds into education by governments was seen as a necessity if economies and societies were to benefit from globalization's effects (OECD, 1996, 1997). The increased demand for educated labour has been confirmed in several studies including Gallie and White (1993) and Lidley and Wilson (1995) in the United Kingdom, and Block (1990) in the United States. Yet no generally accepted empirical study confirms that human capital accumulation results in high returns on economic growth in developed countries (Islam, 1995; Barro, 2001). A recent study demonstrates that human capital indicators based on literacy scores have a positive and significant effect on the transitory path, and in the long run, on levels of GDP per capita and on labour productivity (Coulombe et al., 2004). Nonetheless, there is a large body of literature questioning the new consensus.

According to Brown et al. (1997), it is very difficult to demonstrate a causal relationship between education and economic productivity for at least two reasons. The first is that the link

between education and productivity is imbued with issues of power, most evident in the phenomenon of credential inflation. Credential inflation has been described as a mechanism that works alongside the screening process to cope with excess educational credentials when awarding a job (Collins, 1979). Contrary to popular belief that an employee's rate of productivity increases proportionately with his or her credential, credential inflation is used by the higher social economic groups to preserve and reproduce privilege (Brown et al., 1997). Taking this argument further, the demand for education or credentials may be a function of pressure from the middle class seeking to secure their children's future. In order to win the votes from the middle class, even right wing governments whose ideology would reject expansion of public postsecondary education have promoted expansion. Brown et al. (1997) postulates that the excess supply of credentialed workers for a limited number of jobs could eventually result in a fall-out between governments and a growing group of highly educated workers who are unable to realize their occupational ambitions.

The second reason is that changes in demand for skills are as much a social as a technical issue, subject to vested interests and social conflict. The demise of the doctrine of economic nationalism was accompanied by a shift from a bureaucratic paradigm as the model of organizational efficiency to flexible paradigms, which emphasize the need for employees to have good personal and social skills, together with any required technical skills (Atkinson, 1985). The definition of skills is subject to vested interests, as evidenced by calls from employers for greater involvement in determining postsecondary curricula so that students will be equipped with skills in business awareness, communication and self-management.

These demands are subjected to growing conflict between the education system and employer organizations as a result of the meeting between these two different spheres (Bowles &

Gintis, 1976). For example, group work emphasized by employers is foreign to the education system, which emphasizes individual ability and awards grades on an individual basis. Assuming that the middle class child already has the necessary personal and social skills required by employers, any formal teaching of personal and social skills has been represented as “compensatory” education (Brown, 1995). The definition of skills has also changed significantly in the context of gender as more women pursue postsecondary education and enter the labour market. While the changing definition of skills is an apparent advantage for women, Blackmore (1997) notes that it can also be a double-edged sword because their skills could be co-opted for corporate profit-making rather than as a means of furthering the qualities associated with caring and human development.⁶

Assuming that education is the key to future economic prosperity, is vocational or general education more appropriate? While a strong trend toward vocationalism has accompanied the development of secondary and higher education over the past twenty-five years (Otterwill & Wall, 2000), there is much widespread agreement that a high quality general education is more appropriate to conditions of rapid technological changes. On the other hand, Ashton and Sung (1997) argue that a necessary condition for economic prosperity in the 21st century is a relationship between education and work that is so tight that the education system is almost totally subordinate to economic utility. Many may dismiss this as a path on which traditional universities might choose to travel for the sake of their survival. However, much will depend on factors at play in the future. Also, private universities may partially fulfill this condition, particularly if these institutions are fully funded by private industrial corporations.

⁶ The two are not mutually exclusive and it is not intended to imply that caring and human development are solely women's roles.

Accepting that there is a relationship between education and productivity, whether education can spur economic prosperity alone is the question posed and answered by Levin and Kelley (1997), using the United States as a case study. Their conclusion is that education is potentially effective in accomplishing much of what is claimed for it. Yet, that effectiveness crucially depends on the existence of complementary inputs. In the absence of complementary inputs, education is not likely to be as potent as the promises of its advocates. Unfortunately, both policy makers and economists who focus on education are largely ignoring the complementary inputs that determine the effectiveness of education. One complementary input required for education to improve productivity is the existence of employment opportunities for more productive workers.

On the other hand, Aronowitz and De Fazio (1997) argue that technological changes today will lead to deskilling and an even higher level of unemployment than witnessed in the past. They argue that knowledge rather than traditional skill is the main productive force in the economy as a result of technological complexity. While deskilling may be occurring in the areas observed by Aronowitz and De Fazio (1997), upskilling and reskilling are also occurring at the same time around the globe. Further research on changes in the structure of work would be important not only because of its potential impact on class structures in post-industrial societies (Esping-Andersen, 1994) but also for the purpose of informing public policy on education.

Education has other societal benefits apart from economic benefits. Education is also seen as essential for democracy to work. The link between education and democracy is based on Dewey's theory that a democracy is primarily a mode of associated living, a conjoint communicated experience (Dewey, 1916). Hence the common comprehensive school where students from all social backgrounds, ethnicities, and abilities interact and develop tolerance and

mutual respect for differing points of view is essential to democracy. Lauder (1997) states that the requirements of an education within a democracy include a higher overall level of student achievement in order to participate in a democratic society and an open, non-selective system of education that promotes equality of results. On the other hand, a market system of education is characterized by low wages and low technology because choice within a market system will increase the advantage of the privileged and, as a result, will reduce the overall standard of education. Thus, a market system cannot meet the educational needs of good citizenry in a democratic society. On societal benefits Baum and Payea (2005, p. 7) summarize their findings as follows:

Higher levels of education also correspond to lower levels of unemployment and poverty, so in addition to contributing more tax revenues than others do, adults with higher levels of education are less likely to depend on social safety-net programs, generating decreased demand on public budgets. College graduates have lower smoking rates, more positive perceptions of personal health, and lower incarceration rates than individuals who have not graduated from college. Higher levels of education are correlated with higher levels of civic participation, including volunteer work, voting and blood donation.

Education also has private benefits. Numerous studies demonstrate that an individual with higher education will have a higher future income stream equivalent to an average annual return of more than 12 per cent (Boothby, 2002; Vaillancourt, 1997; Vaillancourt & Bordeau-Primeau, 2002). Studies have also found that individuals with postsecondary education are less likely to experience periods of unemployment (Allen, 1998), and more likely to read and attend cultural events and other leisure activities (Bowen, 1977).

Recognition of education's benefits at the individual level drives public demand for higher education in Canada. This demand is not falling on deaf ears at the national level, even though education is a provincial responsibility. During the 2004 federal election campaign, the platforms of the major political parties included some attention to investment in research and

access to higher education. On the other hand, there has been a lack of evidence on the magnitude of education's social effects. Early empirical studies focused on the correlation, rather than the causal impact, of education. Generally speaking, the measured social returns of education have not been as high as the private returns.

At the provincial level, most governments consider health to be their number one priority, with education in second place. In British Columbia funding for health care now consumes more than 40 per cent of total government spending and continues to increase annually. Many worry that this situation is unsustainable and that ways must be found to manage these costs. The situation with postsecondary education is similar but on a much smaller scale. Although postsecondary education costs are increasing as a result of increasing demand like health costs, the student volume and per student cost are much lower than the patient volume and per patient cost in the health sector.

Postsecondary Financing

Throughout the world, postsecondary education has been increasingly troubled by rapidly rising costs that appear to be outrunning available resources. Until the 1960s, only a small fraction of the population attended postsecondary education, which was mainly supported by public funds. North American trends indicate that postsecondary education funding have not increased proportionately to enrolment and that its share of the state's budget has waned because of increased competition for state funds from priority areas such as health care and K – 12 education (McKeown-Park, 2001). Nussbaum (2003) found that the level of university funding per full-time student in California declined during periods of recession and budget deficits. As for colleges, the level of funding per student has declined over time. The State Council of Higher Education for Virginia White Paper also indicates that the vulnerability of postsecondary

education funding is heightened when the government's priority has been to balance the budget and/or to reduce taxes (SCHEV, 2003).

Altbach and Davies (1999) state that current approaches to higher education funding emphasize the need for "users" to pay for the cost of instruction because policy makers increasingly view higher education as something that benefits the individual rather than as a public good. This new thinking, combined with constrictions on public expenditures in many countries led to severe financial problems for postsecondary education. Academic institutions have tried to deal with these financial constraints through financial aid programs, privatization and higher tuition. They observe that in many parts of the world, including most of the major industrialized nations, conditions of study have deteriorated as a consequence of financial constraints. Enrolments have risen, but resources, including faculty, have not kept up with needs. As a result, academic infrastructures, including libraries and laboratories, are starved of funds and less is spent on basic research.

The view that education is capable of raising revenues from other sources is one reason that has been cited for the decline in the real value of government support for public postsecondary education (Breneman, 1997). Another reason for the decline is that the human capital concept in the public domain has resulted in a shift from the education sector being viewed as a public good toward it being seen as a mixed good with both private and public elements. Williams (1990) points to a dissonance in the way the role of postsecondary education is regarded. One view is that universities are "service institutions" that serve the wider interests of society and the economy. This view underlies heavy government subsidization that resulted in the expansion of postsecondary education in recent decades. The second view, that universities are commercial enterprises servicing the benefits of individuals, underlies the

rationale towards cost recovery and higher tuition fees. Nonetheless, the turn to alternative funding sources is a logical and practical attempt to diversify the financial base of institutions.

According to Albrecht and Zideman (1992), other reasons for the mismatch of resources with expansion are the policy constraints on postsecondary institutions—namely access policies. Access policies have prevented institutions from responding to financial issues in an effective manner, as they bar institutions from seeking alternative sources of income and place limitations on how institutions may allocate funds. Access policies can take several forms: “automatic” admission for students who pass their secondary school examinations to targets, enrolment targets set by government, and government specification of desired enrolment in certain fields (e.g. in nursing and engineering programs in response to manpower planning policy). Policies of financial restriction include limiting or freezing student fees on economic and/or political grounds. Restrictions on internal fund allocation include requiring approvals for change in staffing patterns and can prevent an institution from redeploying resources to achieve efficiency gains. Policy restrictions on institutions may not be the same in all countries but institutions across countries are currently making similar moves toward seeking alternative funding sources.

There are probably many more factors that explain the reduction in government funding for postsecondary education. Easton’s (1965) political systems framework is useful for considering the variety of forces, factors and decisions leading up to the budgetary outcome. The framework is composed of environmental factors (external factors such as demographics, socio-economic variables that shape inputs), inputs (e.g. societal needs and demands shaped by environmental factors), the political system (e.g. legislative, executive and judicial branches of government), outputs (e.g. the policy outputs resulting from the political system when responding to the inputs) and feedback (e.g. public opinion on certain policy decisions). The

environmental factors shape inputs that flow into the political system, which in turn produces outputs. Feedback on these outputs then loops back into the political system as a form of inputs. Lyddon, Fonte and Miller (1986) modify Easton's framework to include historical, political and economic factors as part of the environmental factors. In addition, the political system is the "state organizational filter" and comprises the state's socio-economic context (e.g. key players in the state budget process, postsecondary education governance structures, and state regulatory patterns such as statutes and administrative rules). Wildavsky (1986) observes that if politics is regarded as the conflict over whose preferences prevail in the determination of policy, the budget is the evidence of the outcomes of this struggle.

Hansen's (1983) has been accurate in his prognosis two decades ago that further declines in funding are more likely than a restoration to 1960s and 1970s levels, and that postsecondary institutions will have to adapt to this new reality. Zideman and Albrecht (1995) also argue that while it is necessary to mobilize non-government sources, there are limited possibilities for funding and the state will continue to be the major funding source. They suggest that public institutions should generate approximately 30 per cent of total recurrent expenditures from non-government sources. Reduced dependence on public financing, reduced vulnerability to budget fluctuations and heightened responses to market signals would result. In response to changes in government funding policies, some universities in Europe and the United States have become more self-reliant and been called "entrepreneurial universities" (Clark 1998, 2000, 2001). In Canada, there has been a greater reliance on tuition fee revenues. For example, in Ontario, tuition fees cover approximately 45 per cent of the actual university cost (EKOS, 2005).

Zideman and Albrecht (1995) note that apart from diversifying revenues, institutions must become more productive and efficient. In Europe, Neave and Van Vught (1991) observe

that the drive towards efficiency in postsecondary education started as early as the 1970s and 1980s. They suggest that:

Increasing pressure upon higher education to become more efficient is evident in many countries. Establishments are expected to turn out more graduates but at less cost. The number of drop-outs and the average length of time required to graduate are supposedly to decrease while at the same time, institutions are urged to absorb more students in order to expand yet further the higher education system. (Neave & Van Vught, 1991, p. 242)

Sharma (2004) indicates that the Australian higher education's interest in performance dates back to the 1960s but, as recently as 2002, there has been a focus away from input controls to monitoring outputs and outcomes. This development was fuelled by interest in quality assurance mechanisms. He notes that Australians are moving towards performance-based funding just as Americans appear to be dismantling it. In North America, performance-based funding was introduced at a system-wide level but targeted at specific areas such as access to graduate studies in the 1990s. Today, most of these systems are either defunct or being wound down, partially because of the negative economic conditions facing the region in the beginning of 2002.

Ziderman and Albrecht (1995) also note that emphasis should be placed on ensuring that government's funding mechanisms provide incentives for institutions to operate efficiently and to make the most effective use of scarce resources. They warn that such a reform will require a fundamental shift in the relationship between the government and institutions of higher education. Taking the perspective that government planning creates inefficiencies, they argue that institutions should be left free to manage themselves without much government intervention. Today, the use of financial incentives has proliferated. Ehrenberg (2003 p.22) indicates that the evolution of public higher education institutions will be determined by the financial incentives that their state budget allocation process provides. Using the example of the SUNY schools in New York State, where they get financial rewards for generating external research funding and

for enrolling upper class and graduate students among others, he laments that the model does not encourage the development of high quality lower-level undergraduate education. He concludes that developing funding allocation models that do not provide incentives for participants to try to “game the system: is very difficult (p.22).

One explanation for declining government intervention and a return to market disciplines is related to Public Choice Theory combined with New Right ideology (Brown et al., 1997). Public Choice Theory was an attempt to explain the Western economic crisis of the past twenty years and how it might be solved.⁷ Its premise is that the democratic process has enabled pressure groups to assert their interests over the economic interests of the state in exchange for middle class votes. The result is increased government expenditure and debt. In the 1950s and 1960s, Liberals viewed the state as the neutral funder and regulator of education that would allocate resources fairly and ensure equality of opportunity for all. By the early 1970s, it became clear that state educational policies designed to ensure equality of opportunity had failed. The neo-Marxist educators (Althusser, 1972; Bowles & Gintis, 1976) argue that the state was not neutral but a promoter of class inequalities in society and an instrument of oppression. Shortly after, a group of scholars argued that the capitalist state was constrained by the democratic process, which imposes limits to inequalities that would be tolerated in a democratic society (Dale, 1982; Carnoy and Levin, 1985). Feminist and anti-racist groups were soon arguing that the processes of socialization and selection, similar to those operating against the working class, were operating against female students and students of colour (Troyna, 1992; Arnot & Weiler,

⁷ Brown et al.'s (1997) criticisms of this theory include that it wrongly assumes that the economic crisis has been caused by a set of conditions peculiar to the postwar period of economic nationalism; it fails to see the exercise of power as intrinsic to the state, education, and the economy, and defines it in terms of insulation from the market place; it does not take into account that social classes do not come to the market as equals and therefore market systems are likely to exacerbate educational inequalities; it has an impoverished view of democracy and hence the role of education in promoting democracy; and its underlying assumption that individuals are self-seeking and lured by wealth and status ignores the possibility that teachers are motivated by professional ideals.

1993). These criticisms eventually led to the formulation of the Public Choice Theory. Its view on education is that expenditures have by-passed market sanctions to accommodate higher salaries for middle-class teachers. Accordingly, educational expenditures can be contained by deregulation or the imposition of market discipline. Public Choice Theory's support for introducing market mechanisms into the education system has appeal among New Right governments.

Giddens (1998) offers another explanation for governments moving away from direct regulation as the adoption of the Third Way reforms to the welfare state, particularly by the Blair government in the United Kingdom. Giddens's idea of a risk society is one where the transition away from direct regulation and transfer occurs,

...not because of an ideological or pre-emptive fondness for the market. Rather the transition occurs because more of our social and individual fates, and therefore, more of our capacity to manage risk, deal with open-ended and indeterminate processes which are by their very nature harder to regulate ex ante or harder to cover by direct social provision. We live in an age of personalization and individualization which is, in large part, premised on the growing importance of knowledge for most life-contexts. This growing reflexivity means that the state cannot fully control whether higher education becomes a public or a private good for either its users or its beneficiaries; but the state can take steps to ensure that opportunities to pursue knowledge and learning are as socially inclusive as possible (Wellen, 2004, p. 70).

Neave and Van Vught (1991) write about changes in the processes of institutional management by the late 1980s, including the emergence of entrepreneurial managerialism or managerial professionalism, the upsurge of conditional contracting between governments and institutions to enhance market responsiveness, the growth of evaluations to ensure quality and accountability resulting in the introduction of performance measurement, and the dominance of government master-planning. Budget squeezes occur more acutely where the autonomy of institutions is allowed. A review of several countries reveals that while there appears to be a visible withdrawal of government from detailed oversight and control over internal funding and

management decisions, there is a significant relocation of power (i.e. stepping back to steer institutions from a distance using remote control).

Still, the suspicion remains ...that behind the façade of an autonomy widely proclaimed, the traditional strategy of detailed planning and control is perhaps as active as ever it was. Indeed, in the course of analysing the trends across many of the country case studies, we are strengthened in the conviction that the renunciation by governments of established interventionist approaches is at best only partial for at the same time they are also engaged in devising procedures and instruments no less constraining upon higher education. From this we are forced to conclude that the alternative strategy – that of self-regulation – has yet to be wholeheartedly embraced by governments. For although many claim to have increased the autonomy of higher education, yet they still cleave to central steering. (Neave & Van Vught 1991, p. 250)

Dale (1997) argues that far from being weakened, state control has actually been strengthened despite shifts away from “state control” towards “privatization” and “decentralization”, which are the common responses to problems facing postsecondary education systems. The argument is however premised on the assumption that the state remains the primary funder of education and is therefore very much in the driver's seat. By decentralization and privatization, he means that the state has moved from having to carry out the work of coordination itself to determining the governance of education (i.e. where the work will be done and by whom). He argues that this devolution and detachment demonstrates a strengthening, not a weakening, of state control. The state may have limited its capacity to act but not its power to enforce. Dale (1997) also suggests that the broad pattern of state withdrawal has been motivated by a wish to reduce public expenditure, limit the extent of provider capture, encourage possessive individualism, and improve the efficiency and responsiveness of the education system. He also bemoans the fact that the state's withdrawal from the state-education relationship is detrimental to ensuring the perpetuation of education's public good qualities, which the state alone can guarantee.

Three major measures that have been suggested as potential solutions for the financing pressures of postsecondary education are: recovering costs by charging higher fees, mobilizing donations and endowments from alumni and the private sector, and selling services to business and industry. A World Bank report (1994) suggests that the resources of public postsecondary education can be increased through student fees, since students generally come from higher socio-economic backgrounds and can expect significantly greater lifetime earnings as a result of attending postsecondary education.⁸ As part of the attempt to increase cost recovery from students, differential fees are levied based on students' academic marks, places of residence and choices of program. A strategy used in China charges higher tuition fees to students with lower entrance scores than to regular students who meet entrance requirements. Poland requires students who fail a course to retake it and pay the full cost of instruction. Hungary penalizes students who do not obtain high marks by requiring them to pay fees. Tiered tuition for residents, non-residents and international students is relatively common at North American universities (Wasser & Picken, 1998).

As a result of influences from the market economy, institutions are setting fees that vary on the basis of both the value of a student's degree (reflected by income upon graduation) and the actual costs of a program to the institution (Siegfried & Round, 1997). Becker (1997), however, cautions that as long as government continues planning for the number of seats instead of freeing institutions to set their own fees and spaces, differential fees will not lead to improved instruction. There is some empirical evidence that suggests the change in tuition costs negatively

⁸ The Canadian Federation of Students (2002) maintains that the World Bank is a strong advocate of private funding for postsecondary education (and are opposed to publicly funded postsecondary institutions). They also claim that in jurisdictions that have followed the lead of the World Bank in viewing education as a private good (as opposed to a public good), the quality of postsecondary education has been adversely affected. Johnstone (2003) points out that there seems to be no escape from the conclusion that higher education in the future will need vast additional resources. The only alternative to more of the burden being shifted to parents and students is a large tax increase.

affects the enrolment rates of individuals from families of low socio-economic status (but not higher income students) and shifts their enrolment to institutions with lower status, which tend to have lower fee structures (Kane, 1995; McPherson & Schapiro, 1997). Some scholars argue that the cost of education is a key element in determining whether a state can achieve equality of educational opportunity (McPherson & Schapiro, 1997).

Miller and Pincus (1997), who are in favour of the market allocation of goods and services over a planned allocation organized by bureaucrats, also argue that if government decides to permit a greater scope for market forces in postsecondary education, it must not refrain from policy intervention. A policy-free market place, they argue, would not be equitable or efficient. Two generally accepted instruments for policy intervention are a public subsidy for those individuals who are most likely to under-invest in postsecondary education and a loan program for bright students who would otherwise be unable to obtain a loan to finance their costs (including foregone revenue while at school). According to this argument, income-contingent loans would be an effective policy tool (Chapman, 1997), but tax credits would be of limited value to those from lower-income groups (MacPherson & Schapiro, 1997).

Diversifying the financial base of postsecondary institutions by mobilizing donations and endowments is generally associated with the construction of new facilities, the endowment of professorial chairs, the provision of scholarships for needy students, and donations of scientific equipment, books and art. There is a great deal of literature concerning the diversification of revenues by increased donations from industries and the sale of services to industries. In the United Kingdom, Williams (1992) describes broad patterns of financial change that reduced government funding for universities and encouraged faculty to bring in additional revenue to fund their units. Arguably the effect of seeking alternative funding from industry and commerce

could result in fewer students in arts, humanities and social sciences and a higher degree of support for specific vocational training, science and engineering. In Europe, Clark (1993) characterizes entrepreneurship as a mark of innovative European universities whose strategies successfully diversify institutional revenues but create conflicts between faculty and administration over values and governance. In Australia, the work of Smyth (1995) and Marginson (1993, 1997) elaborates on marketization of institutions and faculty.

That marketization of education is the answer for raising standards has not been empirically proven. Part of the difficulty of researching the effects of the market is that it is hard to generalize, as identifiable educational markets have their own peculiar socio-economic and historical contexts that uniquely impact their outcomes (Bowe, Ball and Gold, 1992). Nevertheless, Albrecht and Zideman, (1992) believe that marketization will result in: 1) higher responsiveness to student demand by institutions, which presumably would reflect relative earnings and shortages in the labour market; 2) better utilization and effective use of resources by students who, because they have to pay, will make better educational decisions; and 3) higher efficiency and productivity on the part of institutions because they have to compete for students. However, a market-oriented, student demand driven system may not be practicable in states where labour markets are highly distorted. A student-responsive system may be achieved without moving toward a high cost recovery and high fee model. Albrecht and Zideman, (1992) believe that the use of vouchers or subsidized loans to students would stimulate the same kind of competition among institutions.

The shifts are happening also in Canada. The Commission of Inquiry on Canadian University Education (1991) observed then that a preoccupation with underfunding pervaded every campus and that the effect was extremely negative. West (1994) perceives the

underfunding as inevitable in times of growing deficits, high taxation and the increasing competition among the health, environment and other lobbies for a greater share of public spending. Buchbinder and Newson (1990), Buchbinder and Rajagopal (1993), and Currie and Newson (1998) all describe diminished government funding and the beginning of marketization, commercialization and corporatization.

The shift toward commercialization has many concerned about losing sight of the basic role of universities in a democratic society (Turk, 2000). Currie and Newson (1998) examine the effects of globalization on the life of faculty members including the replacement of academic freedom by corporate managerialism (which focuses on accountability and performance measures and efficiency), the replacement of knowledge for knowledge's sake with the commodification of knowledge (e.g. selling higher education to overseas students as a means to increase revenue), and a user pay model for every university service and product. Slaughter and Leslie (1997) found that Canada was relatively shielded from the effects of commercialization in 1995. Tudiver (1999) postulates various reasons for this including the resistance of Canadian professors through unionized collective bargaining, fewer opportunities in Canada for serious corporate involvement, and comparatively higher state support for institutions that insulates them from market pressures.

Cost-Sharing and Accessibility

Traditionally, postsecondary education was free for many qualified students in many European countries. Free postsecondary education was based on several rationales including: 1) high returns to society from an educated population; 2) tuition could adversely impact social equality and social benefits because it may discourage the participation of students from low-income families; 3) the costs of student maintenance are high and already beyond the capacity of

many families; and 4) the immediate beneficiaries of free higher education were mainly from the middle class strata and therefore were influential in lobbying for free education (Marcucci & Johnstone, 2003).

In more recent years, there has been a shift from free higher education to the beneficiaries of education sharing in its costs. Cost-sharing, as developed and elaborated by Johnstone (1986, 1993, 2003a, 2003b, 2004, 2005a), posits that the costs of higher education are borne by governments (or taxpayers), parents, students, and philanthropists. It was a response to rising costs of postsecondary education and the squeeze by governments on public funding that initially occurred in the 1980s and carried through to the 21st century. Many scholars, including Woodhall (2002), Vossensteyne (2002, 2004), Ziderman and Albrecht (1995), and Ziderman (2002) have provided rationales for the shift in bearing the costs of postsecondary education. Johnstone (2003b) surmises that there are three principal causes. The first cause is the sheer increase in demand for postsecondary education owing to attendance by students outside the traditional 18 – 24 age cohort and increased secondary school completion rates. As a result of increasing demand, increasing per student costs, and a decline in available public revenue resulting from the difficulty of taxation, and competition from other (sometimes more compelling) public needs, postsecondary institutions are suffering from a “severe and worsening austerity” (Johnstone, 2003b, p. 3). Taxation is difficult because privatization and globalization have “eliminated these largely visible and easy-to-collect taxes, and the alternatives – example, taxes on income, retail sales, property, and the sales of luxury goods – are visible, unpopular, expensive, relatively easy to avoid, and technically (in addition to politically) difficult to collect” (Johnstone, 2003b, p. 3).

The second cause is the need for equity. Whether postsecondary education is subsidized or not makes no difference to the enrolment behaviour of students from upper and middle class families. If tuition collected could partially fund means-tested grants and loan subsidies for students who would otherwise not attend postsecondary education owing to higher tuition, cost-sharing could enhance accessibility for lower-income students. The third rationale for cost-sharing argues that tuition would bring some of the virtues of the market into postsecondary education including efficiency, student and societal responsiveness, and discouragement of academic malingering by students.

The charging of tuition fees is a critical component in any cost-sharing strategy and increasingly salient to offset decreasing government investment in postsecondary education. The tuition fee policy issue is:

the division of the burden of higher education's instructional costs between the student and his/her family and government, or taxpayer, as well as the accompanying financial assistance policies/programs that are adopted to ensure that the implementation of tuition fees does not negatively impact access to higher education for students from lower socio-economic backgrounds. Thus, the policies by which tuition fees are established impact on higher education accessibility and the implications to equity and social justice.
(Marcucci & Johnstone, 2003, p. 1)

The authority to set tuition fees at public postsecondary institutions is vested in different entities in different countries. The Board of Governors generally have the mandate to set tuition fees in Canadian universities and colleges. However in some provinces, the provincial government set limits on the tuition fee levels or caps on the tuition fee increases.

The increasingly accepted policy stance that a portion of tuition fee revenues is appropriately borne by the student presents the need for ways to allow much of this share to be deferred to the future, when the individual has entered the workforce and is able to repay a portion of the costs. As a result, more and more countries are turning to student loan programs

as a way to allow students to bear a portion of the costs of postsecondary education (Johnstone, 2005b). In more recent years, some governments have begun to use tuition-based financing systems to respond to concerns that high tuition would reduce accessibility for students from low-income families, as well as limit student choices regarding the types and lengths of programs they select and decisions concerning graduate work. One example is the use of Income-Contingent Repayment (ICR) schemes, which basically make a loan to students that covers the costs of their postsecondary education and is repayable based on each student's level of income after graduation. This scheme has been adopted in Australia, New Zealand, Sweden, South Africa, Scotland, and will be adopted in the rest of the United Kingdom in 2006.

Apart from the deferred tuition policies that are closely linked to the ICR schemes, Marcucci and Johnstone (2003) differentiate between upfront tuition policies and dual track tuition policies. Upfront tuition is paid by students based on their parents' ability to pay and on the assumption that parents have a responsibility to cover some portion of their children's education. Dual track tuition policies allow institutions to offer tuition-free as well as fee-paying student spaces according to criteria set by government. Generally, students with high scores qualify for free places while students with lower scores pay fees. The percentage of fee-paying places can be limited by government policy.

There has been much discussion by Canadian scholars (Wellen, 2004; West, 1997; Finnie & Schwartz, 1996; Finnie, 2001) but ICR has not been fully adopted in Canada. There is a great deal of opposition from the Canadian Federation of Students (CFS, 2002). Finnie (2001) advocates an ICR system accompanied by an expanded student loans system with increased borrowing limits. He asserts that the proposal would revitalize the Canadian postsecondary education system that is inadequately funded and benefit students from middle and lower income

families. Finnie's proposal was based on the social contract notion that all principal parties should share in providing increased contributions to the postsecondary education system. The Canadian Federation of Students (2002, p. 5) argue among other things, that Finnie's model "fails to recognize that many students from middle and lower income backgrounds may simply choose to avoid the risky venture of saddling themselves with excessive debt".

As noted by Finnie (2001), many Canadian provinces eliminated grants for postsecondary students in the early 1990s and replaced them with expanded loan programs. Many commentators including Bob Rae (2005) in his review report have called for the reinstatement and expansion of grants to remove financial barriers to postsecondary education for low-income students. According to Finnie (2001), a grants system is not good public policy for several reasons. Firstly, government spending on a loan system will go much further because the money is paid back in most cases and can be recycled to provide a greater number of individuals with assistance, thus improving access to postsecondary education. Secondly, grants are awards to students who are not necessarily needy and who may move on to high-earning jobs and have the ability to repay at least a part of a loan. To address the second issue, Rae (2005) recommends grants only to students in need for the first four years of study at an Ontario university or college of applied arts and technology.

A subsequent proposal by Finnie, Usher and Vossenstyne (2004) entails a revamped architecture of the Canadian student financial assistance system. The flaws in the current system include: tax credits represent too large a share of student aid and are poorly targeted; assistance limits are inadequate; expectations of parental contributions in many cases are inaccurate leaving children of non-paying parents penalized; loan remission is inefficient; and the system does not get assistance to those who need it the most and supports many who do not need it. Their

suggested fix includes: an improved methodology to calculate students' postsecondary education costs (tuition fees, equipment, supplies and living expenses); formulae to assess a student's contribution based on employment earnings and parental support; provision of the first \$5,000 in assistance as a loan and the rest as a grant in order to concentrate grants to students that have higher costs or lower family income. The alternative is an income contingent repayment system. Any change to student financial assistance in Canada requires collaborative efforts between federal and provincial governments, which have not been initiated at this time.

The shift from free education to cost-sharing was not without resistance, especially in countries with dominant ideologies that view postsecondary education as a social entitlement. Johnstone (2003b, 2004) indicates that the resistance to cost-sharing is supported by three different bases. From a technical basis, cost-sharing does not work in less industrialized countries that do not have means-tested grant and loan systems for students. From a strategic viewpoint, the acceptance of cost-sharing would disadvantage postsecondary education relative to competing claims on public revenue. Hence, its proponents argue that the presumption that postsecondary education has the ability to supplement its public revenue is misleading. The ideological basis draws on a range of views including a distrust of market principles, private ownership of capital, and globalization. It also draws on variations of neo-Marxism and Socialism, in particular the view that postsecondary education is an instrument for the inter-generational perpetuation of status and power. Accordingly, the ideological resistance basis objects to reliance on tuition because it further opens the door to the marketization of postsecondary education and diminishes the importance of learning for socio-cultural reasons. In short, postsecondary education should be free from all market pressures and free to all students (Johnstone, 2004).

While one of the arguments against free tuition is its regressiveness, in that it benefits students from middle and upper middle socio-economic classes, there is a counter argument that increasing tuition rates also has a negative impact on enrolment rates. There is a long standing pattern that individuals from high-income families are more likely to attend university than individuals from low-income families (Zhao & de Broucker, 2001; Corak, Lipps & Zhao, 2003). Interestingly, researchers including Corak, Lipps and Zhao (2003) have found that the participation gap between students from the highest and lowest income families has in fact narrowed during the 1980s and 1990s. Studies also suggest that participation rates are higher for individuals with highly educated parents and lower for individuals from families with lower parental education (Finnie, Laporte & Lascelles, 2004; de Broucker & Lavalles, 1998).

Little is known empirically about the impact of cost-sharing (and higher tuition) on postsecondary education accessibility and the enrolment behaviour of students or about the effectiveness of programs such as means-tested grants and loans (Marcucci & Johnstone, 2003). Research in this area has been inconclusive so far. At a macro level, some research in Australia, Canada, China, New Zealand, the United States and the United Kingdom (Andrews, 1999; Li & Min, not dated; La Rocque, 2003; Junor & Usher, 2002; Heller, 1999) suggest that demand for postsecondary education does not change in the face of price increases. However, in some of these countries there may be a change in the proportion of students enrolled from different socio-economic groups (La Rocque, 2003; Chapman & Ryan, 2003; Corak, Lipps & Zhao, 2003, and Drolet, 2005). In Ontario where tuition fee increases were the largest, Frenette (2005) found that enrolment rose among Ontario students whose parents held a professional degree and among those whose parents had no postsecondary qualification. Interestingly, a decline in enrolment was found among students whose parents had postsecondary qualification below the graduate or

professional level. Kwong et al. (2002) examined the participation of Canadian medical school enrollees and found that the proportion of students from lower income families declined in Ontario between 1997 and 2000, a period of dramatic increases in tuition fees for medical programs. King et al. (2004) found an increase in the proportion of students from high income families and a decline of students from families of lower income between 2000 and 2003 in five Ontario law schools. The Irish Department of Education and Science reported in 2003 that the introduction of the free fees initiative in 1995 had little or no impact on promoting equity and broadening access for the lowest socio-economic group. More research is required in this area in order to inform postsecondary education policy-making.

According to Johnstone (2003b), the question most commonly identified with accessibility to postsecondary education is the degree to which factors that screen or select students are considered politically or ideologically acceptable or unacceptable in any given socio-cultural context. Key factors that make students acceptable include innate intelligence, talent or interest. Johnstone (2003b) indicates that in virtually every country there is a substantial underlying association between low participation and factors that lead to students being deemed to be unacceptable. These factors include low income or low social status of the parents, region, race, religion, ethnicity or gender. The true causation of low participation is complex. Accordingly, an investigation of the relationship between cost-sharing and accessibility must examine:

...the effect of greater higher education costs passed on to students and families on: the decision to apply to, and matriculate in, any institution of higher education; the decision to apply to, or matriculate in, a particular form (for example, a university or a less selective non-university) or a particular program (for example, medicine, law, engineering or humanities) in higher or postsecondary education; the likelihood of degree completion; the likelihood of going on to more advanced (and more prestigious and/or remunerative) levels of higher education. (Johnstone, 2003b, p. 20)

Johnstone (2003b) also points out factors in the United States that blunt the impact of higher tuition fees on participation rates. These factors include the great number of open-access two-year colleges close to students' homes; the transferability to 4-year college programs located close to students' homes; the peculiar degree-by-credit accumulation or modular system that makes credits transferable to less expensive colleges; an abundance of part-time employment for students; and the general availability of needs-based grants. The sharp rise in tuition or other expenses (such as cost of living) can be assumed to limit accessibility in jurisdictions where these factors are not present. To Johnstone, however, the trend toward greater cost-sharing is inevitable. He concludes:

Higher education needs to continue to claim public resources – and more of them. But it also seems incumbent on those who can influence public policy to work toward the construction both of less costly forms of higher education, and also toward the kinds of financial assistance and loan programs that can combine significant cost recovery with protection to those whose participation in higher education is most at risk from the inevitable need to share in the costs. (Johnstone, 2003b, p. 22)

The aim of this study is to develop an understanding of government policies for postsecondary education access in Ontario and British Columbia. While the literature review provides a general context for the study, a review of federal government contributions to postsecondary education will provide the context for provincial postsecondary education access policies. The next section looks at the role that the federal government has played and continues to play in postsecondary education in Canada.

CHAPTER THREE: FEDERAL CONTRIBUTIONS TO POSTSECONDARY EDUCATION

This chapter is specifically dedicated to examine federal government contributions to postsecondary education for the following reasons. First, the federal government has played such an important role in the development of postsecondary education in Canada that any discussion of postsecondary education would be incomplete without recognizing Ottawa's past and present contributions. As Jones (in press, p. 4) states:

Canada may be the only nation in the developed world that has never had a national university or higher education act, or even a government minister assigned responsibility for higher education. The federal government does play an important role in higher education policy, but it is a role that has evolved through the dance of federal-provincial relations to the frequently discordant tune of Canada's constitutional debate.

Secondly, while postsecondary education is outside of federal jurisdiction, the federal government's funding policies have occasionally been a key factor influencing postsecondary education funding at the provincial level. Last but not least, the federal government's contributions also affect access to postsecondary education as well as research and development. Therefore, a discussion of federal contributions provides the context for better understanding the impact these contributions have had on provincial policies.

This chapter provides a historical account of the federal transfer payments for postsecondary education, and current contributions through research grants and financial assistance to individuals including student loans, grants, loan remissions, scholarships and tax credits.

Given that education is under the jurisdiction of provincial governments, pleas for economic, labour, and more recently, social development have masked pleas for federal

contributions to postsecondary education.⁹ On October 19, 2004, the Association of Universities and Colleges of Canada (AUCC) (2004, p. 2) stated in a submission to the House of Commons:

In recent months, Parliamentarians of every political persuasion have taken the opportunity to address the issues they view as fundamental to our society. What does it mean to be a Canadian? What is the role of the federal government in meeting the aspirations of our citizens? The Prime Minister has chosen to focus on a number of priorities during his mandate, and it is important to note that universities make vital direct and indirect contributions to these priorities, from health care and early childhood development to the state of our cities and communities, from the needs of our aboriginal communities to Canada's place in the world. Perhaps most importantly, a highly educated population and internationally competitive university research efforts are essential to wealth creation in a knowledge economy. In turn, wealth creation is vital to improving and sustaining our health care system, our social programs, and the quality of life in our cities and communities.

Currently, the federal government's role in postsecondary education is focused on five major areas. First, it provides unconditional grants to provincial governments to help finance postsecondary education, as well as tax points for provinces within an integrated federal-provincial tax system. The tax points component was initiated in 1977 when the federal government reduced its personal and corporate income tax rates, thus allowing provincial and territorial governments to raise their tax rates by the same amount. As a result, revenue that would have flowed to the Government of Canada began to flow directly to provincial and territorial governments. In this case, the federal government does not have control over how

⁹ Given postsecondary history and the deeper pockets of the federal government, the AUCC and its predecessor have always urged greater federal involvement in postsecondary education. In a 2003 address, the AUCC (2003, p. 3) indicated that: "Canadian universities cannot continue to meet growing demands and enhance quality without new investments in capacity and a new partnership among the provincial and federal governments. It's time for governments, working together, to explore new options, such as a federal/provincial fund that could be used to expand universities' capacity. Such a fund could invest in areas including faculty growth; physical or technological infrastructure; libraries; or enhanced student support services, depending on and determined by the needs of individual provinces. This fund would allow universities to obtain the human and physical resources they will need to meet new and growing demands – including more graduate students and faculty, new classrooms, labs and libraries, and renewed technological and physical resources to bring our campuses up to modern international standards. With revitalized and expanded capacity, universities can more actively encourage access for all, not only those who enter university directly from high school, but also part-time students, adults who want to return to higher education or non-traditional students from low-income families, Aboriginal Canadians and individuals with disabilities".

governments choose to spend these transferred funds. Secondly, it provides grants directly to faculty members for research projects. Research funds are disbursed by federal granting councils on a competitive basis and awarded in accordance with federal criteria, which include individual merit and national interests. Thirdly, the federal government provides capital funding on a shared-cost basis for infrastructure projects related to research and development. One example is the Canada Foundation for Innovation, the largest capital funding initiative. Fourthly, it provides grants, loans and scholarships for students to assist them in meeting the costs of postsecondary education. Finally, in more recent years, Ottawa has provided tax credits to students and parents to encourage them to save for their education or to pay off debt accumulated during postsecondary studies.

The initial contributions of the federal government in the early 1900s can be described as small steps made gingerly to avoid overstepping its constitutional bounds. Its early intrusions into postsecondary education were limited to its constitutional responsibility for the national economy and manpower training. The earliest federal grants were provided directly to either provincial governments or individuals. Transfers to individuals include need-based funding (e.g., student loans, grants and tax measures related to loans) and universal funding (e.g., merit scholarships and saving grants).

Because of the federal government's much deeper pockets, the university community lobbied Ottawa for funding instead of the provinces. However, any federal attempt to fund universities directly was vehemently opposed by the provinces, in particular Quebec. By the early 1980s, the federal government sought to limit the growth of these transfers after the provinces had continually thwarted its attempts to inject federal influence and accountability into postsecondary education. In the early 2000s, the federal government stepped up transfers to

individuals while the level of funding to institutions through provinces did not significantly change.

Historical Background

This section describes the federal government's early involvement in postsecondary education, including events leading to the provision of per capita grants to universities starting in 1956, and the series of transfer payment programs that followed. The first of these federal transfer programs was the Federal Provincial Fiscal Arrangement (FPFA). From 1967 to 1976, the FPFA integrated all pre-1967 federal support for postsecondary education into one payment (except university research and student loans). The second was the Established Program Financing (EPF) program, which operated from 1977 to 1994. The EPF further integrated federal contributions by combining postsecondary education and health funding into one block transfer. As part of its fiscal restraint platform, the federal government established the Canada Health and Social Transfer (CHST) during 1995 to 2004 to replace the EPF and the Canada Assistance Plan. The latter had provided funding for social assistance and services.

Prior to 1967, the federal government provided specific postsecondary education funding. However, after 1967, it favoured a block funding approach as a departure from funding by identified program areas, and began cutting back its transfer payments. The cutbacks were a result of fiscal and economic restraints as well as the behaviour of provincial governments, as the provinces zealously protected their jurisdiction over postsecondary education and treated federal transfer payments as general revenue to be used as they pleased. As of 2004, the federal government appears to have gone back to a more specific funding approach, as seen by the unbundling of the CHST into the Canada Health Transfer (CHT) for health programs and the Canada Social Transfer (CST) for postsecondary education and social services. The CHT was

created as a result of rising public concern with health care issues. It remains to be seen if the CST will be further unbundled to separately fund postsecondary education and social assistance.

Until 1910, the federal government played a minimal role in postsecondary education. Beginning with the Royal Commission on Industrial Training and Technical Education in 1910, a series of federal initiatives provided direct assistance to agriculture, technical and vocational training through capital grants and student financial support (Dennison & Gallagher, 1986). In 1913, the federal government initiated the *Agricultural Aid Act* and its successor, the *Agricultural Instruction Act*, the first ever shared cost programs that made \$10 million available to the provinces to be allocated on a per capita basis for the support of instruction in agriculture. Increased federal funding for postsecondary education probably began with the *Rowell-Sirois Report* by the Royal Commission on Dominion Provincial Relations (Canada, 1940). It became apparent from the Commission's work that while postsecondary education was not under federal jurisdiction, provinces should receive some federal grants for their universities. These grants would be continued over a period of several years in order to preserve high academic standards. Prior to the release of this report, the federal government introduced the *Youth Training Act* in 1939, providing conditional grants to the provinces for student assistance such as loans and grants. By 1944, all provinces except Newfoundland (which did not join the Canadian federation until 1949) had signed onto the Dominion-Provincial Student Aid Program (Cameron, 1991).

Owing to high unemployment in the 1950s, the Diefenbaker government introduced the *Technical and Vocational Assistance Act*, 1960. This legislation focused on training for workers to meet technological and industrial changes, and provided funding under a cost-sharing agreement with provinces. In 1967, changes were introduced in the *Adult Occupational Training Act*, and the Canada Manpower Training Program. This program purchased training courses

operated by the provinces or the private sector, and paid a living allowance to trainees. The program also transferred funds to provinces to construct public institutions offering trade education. Statistics Canada data indicates that between 1961/62 and 1971/72, the federal government provided a total of \$1.5 billion dollars in transfers to the provinces for this purpose.¹⁰ The data also suggest that when federal contributions increased, provincial grants decreased and vice versa. Federal contribution as a percentage of colleges' operating expenditures was 28 per cent in 1956/57, increasing to 42 per cent in 1963/64. Provincial grants to colleges were 68 per cent in 1956/57, but by 1963/64, they had decreased to 53 per cent. Conversely, when federal contributions declined to 12 per cent in 1970/71, provincial contributions climbed back up to 70 per cent.

The federal government's direct relationship with universities began soon after the Second World War. Through its 1945 *Veterans Rehabilitation Act*, the federal government provided funding to universities in the form of tuition fees for all qualified veterans enrolling at a university and an additional grant of \$150 per veteran. The legislation was the outcome of a plan worked out with the National Conference of Canadian Universities (NCCU).¹¹

In 1951, the federal government moved to provide more direct grants to universities as a result of two key factors, the first being NCCU's lobbying. When funding for the veterans started to decrease as a result of decreasing veteran's enrolment, the NCCU created a finance

¹⁰ Furthermore, between 1972/73 and 1976/77, the federal government's annual contribution exceeded 70 per cent of all expenditures on manpower training programs and vocational and occupational training in Canada. The total expenditures in 1976/77 were \$955 million (Statistics Canada).

¹¹ The relationship between the NCCU and the federal government had been cultivated when they worked together on a policy related to exemptions from active military service. Secure in their special relationship, the universities repeatedly lobbied the federal government for funding. This lobbying probably occurred for two reasons: the federal government had unlimited taxing powers, and to fence away provincial control and maintain the autonomy of universities. This period also coincided with a period of dramatic growth in government revenues. The total revenues accrued to all government sectors in Canada rose from about \$4 billion in 1950 to \$11 billion in 1961, and to \$23 billion in 1968 (Provincial Economic Accounts).

committee comprising university presidents to meet with Prime Minister St. Laurent periodically in order to make a case for federal funding for universities. The second was the recommendation of the Royal Commission on National Development in the Arts, Letters and Sciences, established in 1949 and chaired by Vincent Massey, then the Chancellor of the University of Toronto. The Massey Commission Report (Canada, 1951) advocated federal government patronage of a wide range of cultural activities and gained recognition as a document of utmost importance in the cultural history of Canada. In addition, the Massey Commission recommended that the federal government make annual contributions to support the work of the universities (Cameron, 1991). This recommendation had the support of J.W. Pickersgill, the Prime Minister's principal secretary. Accordingly, the federal government provided \$7.1 million in federal grants to universities, allocated among provinces by population at 50 cents per capita.¹² At the same time, the Prime Minister announced \$50 million in funding for university capital construction.

In 1956, with assistance from a number of studies (the most prominent being Dr. E.F. Sheffield's projection of university enrolment and associated costs) the NCCU successfully effected the doubling of federal grants to \$1.00 per capita population. The NCCU held a conference at which the primary agenda was how to respond to the crisis of numbers and dollars. Dr. Sheffield (1955) projected that the full-time university enrolment would double between 1954/55 and 1964/65, increasing from 68,000 to 130,000. There was no capacity to absorb this increase unless more investment was made in postsecondary education. If the NCCU's plan was to send the message to government that more funding was required, it succeeded. At the conclusion of the conference, convinced that there was an impending crisis of numbers and dollars, Prime Minister St. Laurent announced the doubling of operating grants to

¹² Funding on a per capita population basis underfunds provinces that attract many out-of-province students. Therefore funding per capita student has been argued by some provinces to be more equitable.

universities. These grants were initiated in 1951/52 and were subsequently increased to \$1.50 per capita population in 1958/59 and to \$2.00 in 1962/63.¹³

Quebec, however, objected to these grants and eventually withdrew from the Dominion-Provincial Student Aid Program that it signed in 1940. Universities in Quebec were compensated by increased provincial grants that made up a major portion of foregone federal revenue. At the time of the 1956 announcements, Quebec still had an issue with the constitutional legitimacy of federal grants to universities. To circumvent Quebec's objection, these grants were paid to the NCCU for subsequent distribution to its member universities. In order to play this intermediary role, NCCU created a new body called the Canadian Universities Foundation. Nonetheless, the Government of Quebec refused to go along. Quebec's grant allocations were deposited into a special bank account (Cameron, 1991).¹⁴

The federal government also provided funding assistance for the development of facilities and equipment. During the depression years, little had been spent on capital construction. As a result, universities dealt with the surge in veteran enrolment by renting space and borrowing equipment. With the anticipated enrolment explosion in the 1960's, there was great need for new facilities and equipment. At the 1956 NCCU conference, the federal government also

¹³ The federal government was clear that these grants were for maintaining high quality staff and working conditions, and not to increase existing facilities. The federal government became a principal source of additional funds sustaining university growth and expansion. This period saw an increase in faculty numbers and faculty salaries. Between 1956/57 and 1959/60, median faculty salaries increased about four times faster than inflation over the same period (Cameron, 1991). During that same period, full-time university enrolment increased from 79,000 to 102,000, an increase of 29 per cent.

¹⁴ While the Quebec government attempted to make up the foregone revenue, it could not keep up with the increases from the federal government. In the meantime, its universities became increasingly disadvantaged. Compared to the universities in other provinces, all of which were accepting federal grants, Quebec universities were paying their faculty less money, charging higher tuition and incurring large budget deficits. The tide turned with the demise of Premier Duplessis, who championed this opposition to federal funding. In 1959, the federal and the Quebec governments worked out a scheme whereby the federal government increased its tax abatement for corporate taxpayers by 1 per cent so that Quebec could raise its tax revenue by the equivalent amount. Any shortfall to Quebec would be made good by an equalization transfer. The scheme made the foundation for future federal transfers to all provinces.

announced Canada Council grants for capital construction. By the end of 1959/60, \$84 million of the total \$100 million earmarked for this purpose had been committed. Furthermore, the federal government amended the *National Housing Act* in 1960 to enable the Central Mortgage and Housing Corporation (now Canada Mortgage and Housing Corporation) to make low interest loans to universities for the construction of student residences. Through this initiative, not only was the federal government seen to be responding to the student housing problem, but also to an unemployment problem by stimulating the construction industry. By the end of 1964, universities benefiting from subsidized interest rates developed housing for more than 22,000 students, or 12 per cent of the full-time student population (Cameron, 1991).

The fastest period of postsecondary education growth occurred between 1955/56 and 1970/71. This period coincided with rapidly growing provincial grants, ranging from 15 per cent to 50 per cent per year of annual increase, because of public demand for access to postsecondary education and demographics. During this period, federal grants as a percentage of university operating expenditures decreased from 18 per cent in 1955/56 to 12 per cent in 1970/71. Provincial grants to universities on the other hand, increased from 48 per cent to 67 per cent of operating expenditures over that same period.

Toward the end of this period, the federal government backed out of its direct involvement with universities. Regardless of various commissions¹⁵ continuing to supply a cogent rationale for stepping up federal contributions to postsecondary education, the federal

¹⁵ One such report was the *Hall Report* by the Royal Commission on Health Services (Canada, 1964). The Hall report recommended massive expansion of training for health care professionals, including physicians, and called for national financial assistance to provinces for carrying out the recommendation. Another was the Economic Council's *Second Annual Review* (1965) that argued in favour of federal government funding for postsecondary education because of the economic benefits of education. A third was the *Bladen Report* (1965) by a commission on university finance appointed by NCCU supported by a grant from the Ford Foundation and an equal contribution by Canadian businessmen. It recommended a significant increase in federal support of universities (Cameron, 1991).

government introduced the *Federal-Provincial Fiscal Arrangements Act* in 1967, probably in reaction to mounting provincial opposition.¹⁶

Federal Provincial Fiscal Arrangements (FPFA)

The 1967 Federal Provincial Fiscal Arrangements (FPFA) introduced a new era for federal funding.¹⁷ The act integrated all existing federal support, except for university research and student loans, with a new revenue sharing and equalization arrangement to fund manpower training for adults already in the labour force. It eliminated federal per capita grants to universities with contracting out provisions with Quebec, as well as other conditional and capital facilities grants. The arrangement involved a generous transfer of taxing capacity to the provinces to cover the full cost of postsecondary education. Because of the unequal taxing capacities between the two levels of government, Ottawa would make further cash transfers to provinces when necessary. These additional funds would bring the sum of each provincial transfer up to 50 per cent of the total operating expenditures of all postsecondary institutions in that province. The FPFA also provided a floor of \$15 per capita that escalated annually relative to the total national expenditure of postsecondary institutions. The provinces were elated—not only did they regain their constitutional jurisdiction over postsecondary education but they were also assured of substantial resources for their postsecondary institutions.

¹⁶ More galvanized provincial protest was seen with the Health Resources Fund created pursuant to the *Hall Commission Report*. While the design of the grants achieved the desired goal of expanded training for health professionals, it thwarted provincial plans and skewed priorities toward more expensive medical programs. Another reason for provincial protests was that after the projects were completed and federal funding was terminated, the provinces would be left to pay the continuing costs of maintenance and replacement of expensive facilities (Cameron, 1991).

¹⁷ The 1967 legislation defines postsecondary education as every course of study that requires at least junior matriculation for admission, lasts at least 24 weeks, and is certified as a postsecondary course. Between 1967/68 and 1976/77, other federal cash transfer payments included: Old Age and Blind Pensions, Disabled Persons Allowance, taxation agreements, the Canada Assistance Plan, the Trans-Canada Highway, health grants, contributions under the *Hospital Insurance and Diagnostic Services Act*, the Health Resources Fund, Medicare, the *Official Languages Act* and the *Crop Insurance Act*.

The FPFA epitomized Quebec's victory in its struggle with the federal government for constitutional jurisdiction over postsecondary education. It also embodied freedom for all provinces to guide the development of postsecondary education within their boundaries without interference from the federal government. Further, the act provided provincial governments with the opportunity to control university policy and establish integrated postsecondary education systems.

The universities, however, were not elated, as there was no question that they were now provincially funded public institutions having to conform to provincial policies and were also parts of a coordinated provincial system. In the area of research, the federal government continued to provide funding through grants and contracts directly to individual scholars, not to institutions. The interest in research was part of the "Sputnik effect", whereby North American and European countries poured funds into research and development because they felt that they were lagging behind the Soviet Union in technological development (Psacharopoulos, 1993).

The fiscal arrangement put in place in 1967 was intended to expire in 1972. The goal of the arrangement was for the federal government transfer to pay for all university expenditures. As it turned out, actual university expenditures exceeded revenues from the equalized transfer of tax points. Instead of federal transfers paying the full costs, the arrangement was turning out to be a cost-sharing scheme (almost 50/50) from the point of view of provincial governments. For the federal government, the scheme was turning out to be very expensive, as university expenditures soared and the relative amount of transferred tax points diminished.

Both levels of government began looking for alternatives to the existing arrangement. The provinces, under the auspices of the Council of Ministers of Education, commissioned the *Study of Postsecondary Finance* in 1970. The study was headed by Peitchinis, and aimed to find

a common provincial position for the purpose of negotiating a revised scheme with the federal government. In July 1971, Hon. E.J. Benson, then the federal Minister of Finance, announced that the 1967 to 1972 fiscal arrangement would be extended for two more years to 1974, with federal transfers limited to a maximum annual increase of 15 per cent.¹⁸

During the interim two-year period, an inter-federal-provincial task force would work on finding a more satisfactory alternative. The establishment of this task force was probably a response to Peitchinis' (1971) criticism of the two levels of government. He states:

There is no evidence in the historical record of any consistency in government policy relating to universities. Both the federal government and the governments of the provinces appear to have responded to events and pressures as they arose, and at such times usually responded with hostility formulated programmes, without any apparent consideration of the implications for the institutions and for federal-provincial relations (1971, p. 415-416, quoted in Cameron, 1991, p. 209).

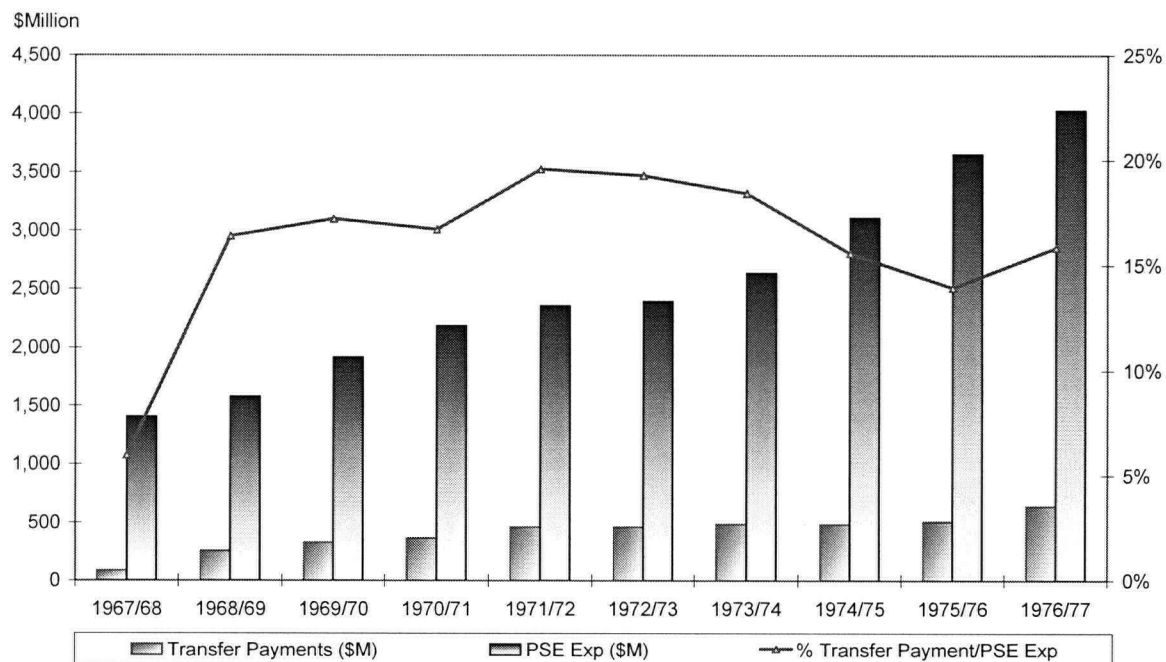
Nonetheless, the federal-provincial task force failed to find an acceptable alternative. As a result, the 15 per cent cap was extended for another three years to 1977. This inability to agree is symptomatic of the widely divergent views of the federal government and its provincial counterparts. While the federal government wanted to adhere to the constitutional division of powers, it wanted some authority to dictate conditions for the funds it provided. The provincial governments, on the other hand, wanted the federal government to award a large amount of tax dollars proportional to the recognized importance of postsecondary education to the national agenda, but without interference on how the funding should be used.

¹⁸ The revised fiscal arrangement appears to have been a compromise. The 15 per cent is in line with Peitchinis' conclusion that universities would require increases in operating funds at the rate of about 17 per cent annually in the next five years (1970/71 to 1975/76), and at the rate of 14 per cent annually in the following five years (1976/77 to 1980/81). The threshold enabled the federal government to cap its expenditures. In view of the soaring costs of postsecondary education it was inevitable that Peitchinis would contemplate ways to cap or reduce the projected cost increases. It would take another ten years before the federal government used restraint measures, but provincial governments were already starting to chip away at the university operating expenditures by reducing their funding levels..

According to the legislation, cash and tax transfers during that period would be approximately 50 per cent of total operating expenditures for postsecondary education.

Figure 3.1 indicates the federal cash transfer, the postsecondary total expenditures and the percentage of federal cash transfer to the postsecondary total expenditures between 1967/68 and 1976/77. During this period, the cash portion of the federal transfers ranged from 6 to 20 per cent of total postsecondary education expenditures.

Figure 3.1: Federal Cash Transfers and PSE Total Expenditures in Current Dollars and Percentage of Federal Cash Transfers to PSE Total Expenditures (1967/68 – 1976/77).



Sources: Statistics Canada. CANSIM Tables 478-0004 and 478-0007 and Provincial Economic Accounts Catalogue 13-213.

For the duration of the FPFA legislation, the full-time student population grew by 74 per cent from 346,000 in 1967/68 to 604,000 in 1976/77. Statistics Canada data also indicates that over this period, federal grants decreased from 15 per cent of total postsecondary expenditures in 1967/68 to 10 per cent in 1976/77. Over this period, provincial grants increased from 62 per cent of total postsecondary expenditures in 1967/68 to 74 per cent in 1976/77.

Established Program Financing (EPF)

In June 1976, the federal government introduced the new 1977 *Federal Provincial Fiscal Arrangements and Established Programs Financing Act*. This Act authorized the federal government to make fiscal equalization payments and establish programs financing transfers. The federal government adopted a block transfer approach because the previous FPFA was becoming very expensive. As before, the federal government would make fiscal equalization payments to any province whose revenues, after equalization, suffered a year-over-year decline because of poor economic conditions. The new Established Programs Financing (EPF), an unconditional block transfer, covered not only postsecondary education but also two other established programs: Medicare and hospital insurance. To calculate the annual block transfer entitlement of each province, the average level of federal transfers to all provinces for 1975/76, or \$212.65 per capita, would be indexed to the Gross National Product's annual increase and then multiplied by the current population of each province.

The provincial block would be paid half in cash and half in a transfer of tax room. For this purpose, the federal government reduced the rate of its personal income tax by 8.143 per cent, which, when added to the 4.357 per cent transferred in 1967, brought the accumulated total to 12.5 per cent. The one per cent corporate tax room transferred to Quebec in 1960, and other provinces in 1967, continued as well. The FPFA also provided protection against a decline in personal income tax revenues directly caused by the 1972 federal income tax reform, for which provinces could not adjust in the same taxation year by compensating provinces for any revenue loss as a result of the reform (Cameron, 1991).

The block transfer approach makes accountability for postsecondary funding less attainable by the federal government. The federal government's decision to move to a block

transfer approach was based on two erroneous assumptions. The first was that provinces would not reallocate provincial spending away from these established programs. For administrative purposes, the federal government arbitrarily assigned 67.9 per cent of the cash payments for health and the remaining 32.1 per cent for postsecondary education without requiring that provinces allocate funding in that proportion.¹⁹ As it turned out, provinces reduced provincial spending by an amount corresponding to any increase in the value of federal transfers. Gunther and Van Loon (1981, p. 162) indicate that "it appears the provinces saw the new program as being more of a format for making federal contributions directly to their Consolidated Revenue Funds".

The second assumption, made without provincial commitment, was that the federal government, as suggested by the OECD report, would participate along with provinces in the consideration and development of postsecondary policies of national significance via a transformed Council of Ministers of Education, Canada (CMEC) forum.²⁰ CMEC denied any intent to reform itself. While federal ministers and officials were invited to meetings, their attendance was limited to specific items and discussions.

Faced with the realization that the large EPF transfers did not serve any explicit federal purpose, the federal government started to look for ways to inject some federal influence or to otherwise reduce the transfers. Owing to a commitment that allowed the scheme to remain

¹⁹ The federal government assumed that as the EPF transfer grew, provincial spending on postsecondary education would grow proportionately.

²⁰ The external examiners from OECD (1976, p. 98) recommended that CMEC be transformed "into a national forum for the working out of educational policies so that the federal government may be involved in a systematic and open manner in discussions of educational policy that transcend provincial boundaries". The OECD's (1976, p. 102) review also commented: "The further development of Canadian educational policy is therefore clearly approaching a danger zone, in which more is at risk than simply the quantity of finance available. The virtues of an essentially pragmatic educational policy will be tested in the extreme. If those responsible for educational policy are not promptly able to base the development of school and education on a firm goal-oriented footing, then they risk being pushed to the side in the general political competition for resources".

unchanged for at least five years and a requirement to give three years' notice of any proposed changes, the federal government did not introduce any changes until 1982.

In 1982/83 Canada was in economic depression and, as part of its restraint plan, announced its decision to limit the growth of transfer payments by making certain changes.²¹ These included making equal contributions to all provinces beginning April 1, 1982 and discontinuing the 1972 revenue guarantee program. The federal government also announced that new federal-provincial arrangements for the financing of postsecondary education and human resources development would be devised in consultation with the provinces for incorporation in new legislation by March 31, 1983. The reasons for discontinuing the 1972 revenue guarantee included: the original purpose of the program had disappeared; provinces treated this compensation as part of their general revenue and not as transfers to be used specifically for health care or postsecondary education; and economic circumstances that called for fiscal restraint (Canada, 1981a).

Several reports provided the arguments to make the changes the federal government had wanted to make for some time. The first report, by the Parliamentary Task Force on Federal-Provincial Fiscal Arrangements chaired by Hon. Herb Breau, was released in 1981. It provided the argument for making EPF payments equal on a per capita basis for all provinces. The explicit reason for this was to eliminate the existing advantage held by the wealthiest provinces. The report also supported the need for "some form of indirect accountability for intergovernmental transfers" (Canada, 1981b, p. 5), given that federal ministers must be accountable to Parliament for the use of transferred funds. However, in recognition of education as falling under provincial jurisdiction, the report rejected any federal legislation for national

²¹ The unemployment rate rose in that year to 11 per cent from 7.3 per cent in the previous year. It would hover around the 11 per cent mark for the next three years.

postsecondary education standards. The report also recommended that the two components of EPF be separated and earmarked in order to prohibit their use for other purposes. This earmarking would also enable the Secretary of State to report annually to Parliament on the effectiveness of transfer funds in meeting the country's economic objectives as well as other goals.

The second major report was from the Task Force on Labour Market Development chaired by Dr. David Dodge, who was in the Faculty of Economics at Queen's University at the time. Based on projections of economic conditions and labour market requirements, the Task Force (Canada, 1981c) concluded that public spending on postsecondary education was adequate, and might even be reduced to free up resources for other purposes. This view seems to confirm that the provinces were reallocating transfer payments for other purposes—one of the contested issues between the two levels of government. If a province recorded federal transfer payments as part of general revenues without earmarking it for any specified spending, it was not possible to trace what those federal dollars were used for.

The third report was by the Parliamentary Task Force on Employment Opportunities for the 1980s, which was chaired by the Honourable Warren Allmand. The report (Canada, 1981d) took the position that the federal government should attempt to reallocate resources toward programs offering the greatest employment opportunities in the 1980s. The Task Force on Labour Market Development report (Canada, 1981c) had recommended that, within the postsecondary education sector, resources should be reallocated from universities to other skill training programs offered by colleges. Also within the university sector, resources should be allocated away from general arts, education and public administration programs toward science, engineering and business administration programs.

Should the federal government be involved in the details of postsecondary education programs? Since the disposition of the workforce and its relationship with the economy is a federal concern, the types of programs provided to the workforce are arguably federal concerns. Some parliamentarians took the view that the federal government should use funding as a means to dictate the types of postsecondary education programs that are offered. The NCCU's position was that postsecondary education generates economic growth, and is thus a national concern. This position appears to be at the centre of the disagreement between the federal and provincial governments.

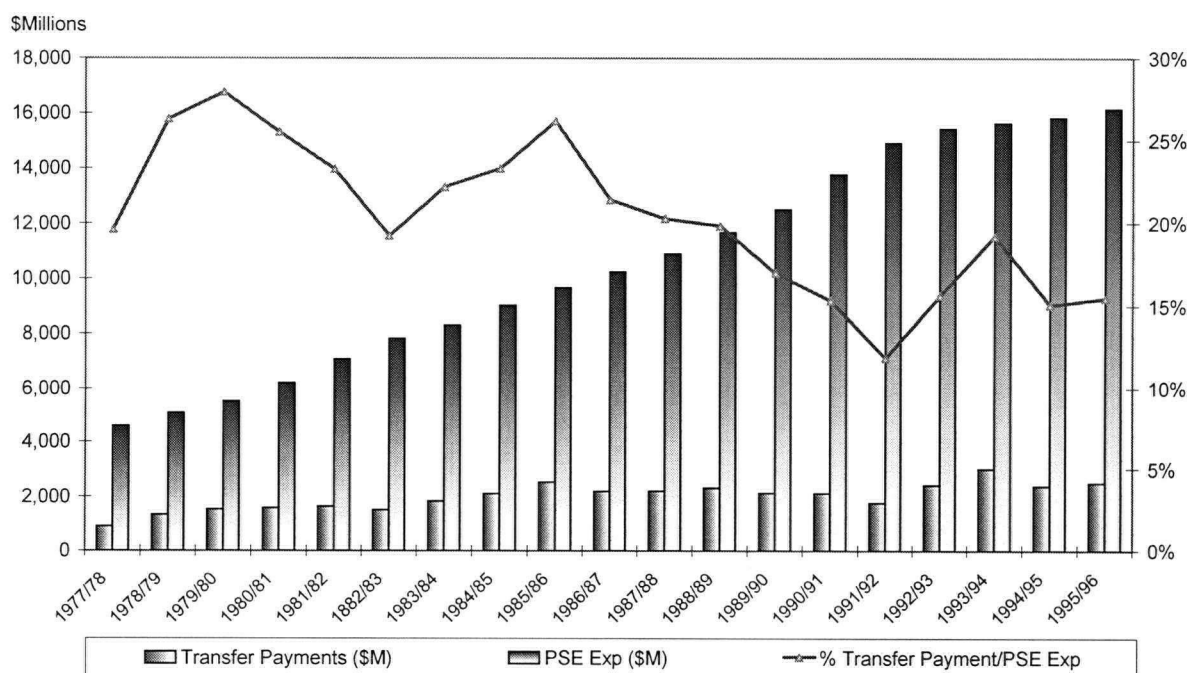
The federal government chose to steer away from stipulations for funding, and revised the block transfer arrangements instead. Its stated objectives for the revisions were to maintain an adequate level of federal support for public health and postsecondary education programs and to achieve a degree of restraint in the growth of transfers to provinces that applies broadly to federal expenditures and is essential to a successful economic strategy (Canada, 1981a). From the discontinuation of revenue guarantees, estimated federal savings ranged from \$818 million in 1982/83 to \$1,336 million in 1986/87. From making equal per capital payments to provinces, estimated federal savings averaged \$75 million per year. What the federal government saved, the provincial governments lost.

The EPF scheme was not replaced until 1996/97. Between 1982/83 and 1995/96, however, the federal government made modifications to the EPF to change the value of transfers. In 1983/84, the postsecondary education portion of the EPF was limited to 6 per cent and 5 per cent growth respectively for the 1983/84 and 1984/85 fiscal years, under the 6 and 5 anti-inflation program. When the *Canada Health Act* (CHA) was passed in 1984 amalgamating the *Hospital Insurance and Diagnostic Services Act* and the *Medical Care Act*, the EPF act was

renamed the *Federal-Provincial Fiscal Arrangements and Federal Postsecondary Education and Health Contributions Act*.²²

Figure 3.2 shows that EPF transfers initially increased until the federal government began to cap EPF transfer growth in 1982/83. As these caps were imposed, the cash transfer payments covered a decreasing share of total postsecondary education costs. Towards the end of the EPF era, the EPF constituted less than 10 per cent of total federal cash transfers to provinces. This appears consistent with the federal government's view that investment in postsecondary education was adequate and could be diverted to other areas, as suggested by the Task Force on Labour Market Development report (Canada, 1981c). The lowest point was 1991/92, when GDP growth was under 1 per cent and unemployment was approximately 11 per cent.

Figure 3.2: Federal Cash Transfers and PSE Total Expenditures in Current Dollars (1977/78 = 1995/96).



Sources: Statistics Canada. CANSIM Tables 478-0004 and 478-0007 and Provincial Economic Accounts Catalogue 13-213.

²² With the new CHA, provinces were required to meet certain health provision criteria in order to qualify for full funding under the EPF. In 1986/87, EPF growth was reduced to 2 per cent annually. The 1989, 1990, 1991 and 1994 Federal Budgets announced more and more restrictions on the EPF.

During the EPF era, the full-time postsecondary student population grew by 54 per cent from 615,000 in 1977/78 to 964,000 in 1995/96. While the growth rate appears slower than in the previous period (of the FPFA, from 1967/68 to 1976/77), the actual increase in the number of postsecondary spaces was 349,000 over 19 years. Statistics Canada data also indicates that federal grants constituted 9 per cent of total postsecondary operating expenditures in 1977/78 and 12 per cent in 1995/96. During this period, provincial grants decreased from 75 per cent of total postsecondary expenditures in 1977/78 to 61 per cent in 1995/96. At the same time, tuition fee revenue grew from 9 per cent of operating expenditures in 1977/78 to 15 per cent in 1995/96.

Canada Health and Social Transfer (CHST)

In 1993, the Liberals replaced the Progressive Conservatives in Ottawa. Upon taking office, the Liberal government set out to cut the deficit, which was one of the highest among major industrialized countries. The 1995 Budget announced measures that would gradually reduce the deficit to 3 per cent of GDP in 1996/97, down from 6 per cent in 1993/94. A major part of the savings came from drastic reductions in financial transfers to provinces for income assistance, health and postsecondary education. The Budget also announced that EPF entitlements would be paid entirely in the form of forgone taxes. This shift constituted a loss of \$14 billion to the provinces.

Further, the Canada Assistance Plan (CAP) and the EPF would be replaced by the Canada Health and Social Transfer block fund. The CHST was set at \$26.9 billion for 1996/97 and \$25.1 billion for 1997/98. Based on CHST cash transfers, in 1997/98, federal funding for all provinces' social programs would be reduced by \$6.2 billion compared to 1995/96 funding levels (British Columbia, 1996). The new scheme came into effect on April 1, 1996, and continued the restraint that began in the mid 1990s by providing provinces with the same share of the CHST

that they had received under the Canada Assistance Plan and EPF health and postsecondary education funding combined. However the distribution of grants was now based on the distribution of population. Like the EPF, the CHST is a single block of both cash and tax transfers in support of an even larger group of programs than those that were under EPF. Added to the original EPF programs were social assistance and social services. Given that it is difficult to tease out the education portion of the CHST, an analysis of the ratio of CHST transfer payments to postsecondary education total expenditures becomes somewhat meaningless.

The cash floor transfer to provinces and territories announced in 1995/96 was \$11 billion per year, including large reductions to transfer payments which took effect in 1996/97 and 1997/98. This cash floor was eventually increased to \$12.5 billion after 1997/98, \$15.5 billion in 2000/01, \$16.2 billion in 2001/02, \$15.9 billion in 2002/03 and \$16.7 billion in 2003/04. With recent health pressures resulting from changing population demographics, the federal government increased the health portion of the CHST by \$21 billion in September 2000. Effective April 1, 2004, the CHST was split into the Canada Health Transfer (CHT), which received 62 per cent of the block funding, and the Canada Social Transfer (CST), which got the remaining 38 per cent. In September 2004, the federal government increased the CHT base by \$41.3 billion over ten years, starting in 2004/05. No increase to the CST base has been negotiated.

Research and Development

In his 1999 Budget Speech, then federal Finance Minister Paul Martin stated:

Much of our economic challenge can be summarized in two words: knowledge and innovation. These are the new raw materials of the 21st century economy. They are the key to a country that can race forward when the global seas are calm, and ride out the rough weather safely when they are not. Innovation and knowledge are two sides of the same coin—the true hard currency of the future, the sources of our sustained growth (Canada, 1999, p. 19).

Universities are important venues for research, performing more than one-third of all research done in Canada (AUCC, 2004). Bok (1990, p. 3) indicates that “all advanced nations depend increasingly on three critical elements: new discoveries, highly trained personnel, and expert knowledge...universities are primarily responsible for supplying two of these ingredients and are a major source of the third”.

The federal government has been funding research performed by the postsecondary sector through its research or granting councils. Table 3.1 indicates the federal funding for research by postsecondary education sector and its year-by-year change. Federal funding is focused more on natural sciences, engineering and health/medicare than on social sciences and humanities. In constant dollar terms, federal government support for research has increased from \$641 million in 1971/72 to \$2.2 billion in 2004/05.

The *MacDonald Report* (1969), commissioned by the Science Council, laid down three key principles: all university research should be covered by research granting councils to support research in all disciplines, institutional autonomy of universities should be respected, and federal grants should cover the full costs (i.e. direct and indirect costs) of university research. However, the Science Council rejected the report and opted in favour of supporting mission-oriented research and increasing cooperation between university and industry. The federal government only began funding indirect costs of research in 2003.²³

²³ The 2003 Federal Budget announced the Indirect Cost of Research Program and allocated \$225 million for its first three years.

Table 3.1: Federal Funding for Postsecondary Education Sector Research (NSERC and SSHRC) in Constant Dollars (1971 – 2004)

Year	Natural Sciences and Engineering (NS&E) (\$M constant dollars)	Social Sciences and Humanities (SS&H) (\$M constant dollars)	Total (\$M constant dollars)	NS&E/SS&H
1971	583	57	640	10
1972	556	55	611	10
1973	546	51	597	11
1974	506	53	559	10
1975	483	55	538	9
1976	481	55	536	9
1977	509	62	571	8
1978	505	68	573	7
1979	513	73	585	7
1980	579	75	654	8
1981	636	79	715	8
1982	632	84	716	8
1983	699	88	787	8
1984	761	92	853	8
1985	731	86	817	9
1986	707	90	797	8
1987	726	93	819	8
1988	773	104	877	7
1989	788	107	895	7
1990	876	122	999	7
1991	861	121	982	7
1992	870	140	1,010	6
1993	892	129	1,021	7
1994	891	124	1,015	7
1995	854	122	976	7
1996	796	113	909	7
1997	765	112	877	7
1998	823	123	946	7
1999	1,016	153	1,168	7
2000	1,160	196	1,356	6
2001	1,386	236	1,622	6
2002	1,588	229	1,817	7
2003	1,731	249	1,980	7
2004	1,902	274	2,177	7

Source: Statistics Canada. CANSIM Tables 358-0001 (Gross Expenditures) and 326-0002 (CPI).

Table 3.2 indicates federal sources of income toward sponsored research total expenditures of universities for selected years, at ten-year intervals. In 1971, 70 per cent of universities' total sponsored research income (\$168 million) came from federal sources. In the 1970s, the federal research funding agencies included Canada Council, the Department of Natural Health and Welfare, Environment Canada, the National Research Council, the Atomic

Energy Conference Board and the Medical Research Council. These agencies changed periodically as a result of government restructuring.

Table 3.2: Federal Contributions to Sponsored Research (1971/72 to 2001/02).

Current dollars			
Year	Federal Funding (\$M)	Sponsored Research Total (\$M)	Per cent
1971/72	118	168	70%
1981/82	358	570	63%
1991/92	833	1,622	51%
2001/02	1,686	3,771	45%
Constant 2002/03 dollars			
Year	Federal Funding (\$M)	Sponsored Research Total (\$M)	Per cent
1971/72	566	803	70%
1981/82	722	1,151	63%
1991/92	1,006	1,960	51%
2001/02	1,724	3,855	45%

Source: CAUBO. Income by Fund and by Type. All Universities. Various Years

In 1981/82, federal sources totalled \$358 million and constituted 63 per cent of universities sponsored research expenditures. By the 1980s, the federal government had scaled back research funding and was encouraging more partnerships between business and universities.²⁴ Federal research funding agencies included the Social Sciences and Humanities Research Council (SSHRC), Health and Welfare Canada and the Medical Research Council. The Science Council promoted the concept of a service university (i.e., one that would provide direct benefits to industry and government through entrepreneurial, technical, research, training and management services). While businesses embraced the concept, university scientists were concerned that it would diminish the focus on primary academic research. Nonetheless, contracts emerged that dealt with technology and knowledge transfer from universities to businesses.²⁵

²⁴ Despite government efforts, industrial research and development in Canada was just 1 per cent of Gross National Product, compared to an average 2.5 per cent for other OECD countries because of Canadian industry's poor research record (Tudiver, 1999, p. 145).

²⁵ Apart from these contracts, there were a variety of other university-industry linkage programs. Between 1970 and 1982, Centres of Advanced Technology sponsored 15 centres (mostly on university campuses) to apply

Towards the mid-to-late 1990s, debates were raging around the role played by Canadian universities in innovation. As one of its restraint measures, the Liberal government in 1995 cut its funding for major federal research councils, namely SSHRCC and the Natural Sciences and Engineering Research Council of Canada (NSERCC), by 14 per cent over three years. Consequently, during a 2000 Conference called "Creating Canada's Advantage in an Information Age", Dr. Paul Davenport (2000) pointed out that council grants in Canada are less than one-third of those of their American counterparts, restricting innovation and adding to the brain drain.²⁶

In recent years, the federal government made it a priority to increase university research funding through a variety of mechanisms. These included providing the direct costs of research through research granting agencies, offering research infrastructure matching funding through the Canada Foundation for Innovation (CFI), and attracting, retaining and developing a corps of the very best researchers from within Canada and abroad through the Canada Research Chairs (CRC) and Canada Graduate Scholarships programs. These recent programs were implemented unilaterally and without consultation with provinces. As Quebec's Parliamentary Committee (Quebec, 2004) observed, these programs obliged provinces like Quebec to modify their priorities in university funding.

In 2002/03, based on Statistics Canada data reported in the CAUT Almanac (CAUT, 2005), the federal government provided a total of \$1.333 billion for research funding through its granting councils, with \$115 million through SSHRC, \$510 million through NSERC and \$507

university teaching and research to high-risk industrial technologies. Another program was the Industrial Research Institutes, set up on university campuses between 1967 and 1980, to market university research to industrial firms. Industrial Research Associations was another multi-year, multifunction dollar program for industry contracts with universities with research expertise.

²⁶ Paul Davenport is President and Vice-Chancellor of the University of Western Ontario. His research in economics has centered on the theory of economic growth, analysis of the productivity slow-down in Canada over the past two decades, and federal-provincial fiscal arrangements. He is also an advocate for the values of higher education, with a particular commitment to maintaining excellence in university teaching and research.

million through CIHR. It also provided \$372 million through CFI and \$109 million through CRC.

Financial Assistance and Tax Credits to Individuals

The Canada Student Loan Program (CSLP) was created in 1964.²⁷ Since its inception, the program has supplemented financial resources available to eligible students from other sources to assist in their pursuit of postsecondary education. Between 1964 and 1995, financial institutions provided loans to postsecondary students who were approved to receive financial assistance. Financial institutions also administered the loan repayment process. In return, the federal government guaranteed each Canada Student Loan that was issued, by reimbursing the financial institution any portion of the loan repayment that went into default and by paying interest charges until six months after the student's graduation. The program also provided each participating province with fiscal compensation equal to its share of expenditures if it had its own student loan program in place. For a non-participating province, its fiscal compensation would be its per capita share of the actual expenditures in the participating provinces.

In 1995, several important alterations were made to the CSLP, reflecting the changing needs of parties involved in the loan process. The federal government developed a formalized "risk-shared" agreement with several financial institutions, whereby the institution would assume responsibility for the possible risk of defaulted loans in return for a fixed payment from the federal government. During this period, the weekly federal loan amount was increased to a

²⁷ To whom do governments provide students loans? To this question, Finnie (2004, p. 1) answers: "The fundamental reason is that many students need money to pay for their postsecondary education and loans are an obvious source for that money, but private financial institutions are generally reticent to loan to students because they (or their families) may not be able to provide the necessary collateral, while their capacity to repay their loans in the post-schooling period is uncertain. Without a government-run loans system, lending to students would be limited, there would be a general under-investment in postsecondary education, and access would be restricted particularly for individuals from lower income families. To serve both economic efficiency and equity goals, therefore, governments around the world operate loan systems".

maximum of \$165.²⁸ On July 31, 2000, the risk-shared arrangement between the federal government and participating financial institutions came to an end. The federal government now directly finances all new loans issued on or after August 1, 2000. The administration of Canada Student Loans has become the responsibility of the National Student Loans Service Centre (NSLSC). There are two divisions of the NSLSC, one to manage loans for students attending public institutions and one to administer loans for students attending private institutions.²⁹

In 2003 dollars, the average loan in 1990/91 was approximately \$4,100 per student per year, which was increased to \$5,400 per student per year in 2002/03. With respect to remissions and loans, the average loan per student was \$1,900 in 1990/91 and \$2,100 in 2002/03. For comparison, the average Canadian tuition fee for an undergraduate Arts degree increased from \$1,800 in 1990/91 to \$3,800 in 2002/03.³⁰ Cost of living estimated in 2001/02 varied from \$500 a year, if living with parents, to \$8,000 a year, if living away with dependants (Junor and Usher, 2004). Table 3.3 indicates the total need-based assistance (TNBA) funded by federal and provincial governments and grants, as well as the percentage of TNBA provided by the federal government. The percentage of TNBA funded by the federal government increased from 42 per cent in 1990/91 to 56 per cent in 2002/03.

²⁸ Further improvements have been called for, including increasing the transparency of the program through further harmonization and integration between the federal and participating provinces, reviewing the needs assessment criteria with the immediate objective of increasing the \$600 threshold on scholarship, and increasing the loan limit of \$165 a week set in 1994 (AUCC, 2002).

²⁹ A student's borrowing limit was \$50 a week in the early 1980s, \$100 per week in 1983, \$105 per week in 1984 and \$165 per week in 1995 (Finnie et al, 1996). Among other issues, the limits have been criticized for being too low. Another change eliminated the grant component altogether but increased the loan threshold to \$275 per week.

³⁰ The average college tuition fee was \$646 in 1990/91, \$1,316 in 2002/03 and \$1,443 in 2003/04 (Junor & Usher, 2004).

Table 3.3: Need-Based Assistance to Students by Funding Source in Constant Dollars (1990/91 – 2002/02).

Year	Total Need-Based Assistance (\$)	Provinces (\$)	CSLP (\$)	Foundation (\$)	CSLP+Found/Total
1990-91	2,060,666,324	1,199,166,799	861,499,525	0	42%
1991-92	2,401,037,483	1,412,716,391	988,321,092	0	41%
1992-93	2,673,468,547	1,640,578,796	1,032,889,751	0	39%
1993-94	3,090,310,319	1,904,285,313	1,186,025,006	0	38%
1994-95	3,456,576,871	2,002,379,427	1,454,197,444	0	42%
1995-96	3,705,481,525	2,060,199,294	1,645,282,231	0	44%
1996-97	4,169,511,318	2,334,083,311	1,835,428,008	0	44%
1997-98	4,022,299,883	2,227,097,101	1,795,202,782	0	45%
1998-99	3,825,474,915	1,988,333,344	1,837,141,571	0	48%
1999/00	3,500,990,181	1,401,698,213	1,799,186,456	300,105,512	60%
2000-01	3,406,195,215	1,350,183,402	1,745,876,912	310,134,902	60%
2001-02	3,349,967,494	1,353,229,712	1,693,212,495	303,525,288	60%
2002-03	3,221,422,356	1,419,518,396	1,507,164,931	294,739,029	56%

Source: Canada Student Loans Programs Annual Reports; Provincial Student Assistance Programs; Canada Millennium Scholarship Foundation Annual Reports

The total need-based assistance includes net loans, remissions and grants provided to students. The breakdown is shown in Table 3.4. Net loans have increased by 61 per cent between 1990/91 and 2002/03. Non-repayable remissions and grants increased by 46 per cent over this period. Therefore the percentage of net loans to total need-based assistance has increased.

Table 3.4: Net Loans, Remissions and Grants in Constant Dollars (1990/91 – 2002/03).

Year	Net Loans (\$)	Remission (\$)	Grants (\$)	Total Non-Repayable (\$)	Non-Repayable/Net Loans	Net Loans/Total
1990-91	1,397,413,955	55,370,531	607,881,838	663,252,368	47%	68%
1991-92	1,631,062,176	50,890,473	719,084,834	769,975,307	47%	68%
1992-93	1,813,049,558	33,808,514	826,610,475	860,418,989	47%	68%
1993-94	2,584,440,807	45,938,136	459,931,376	505,869,512	20%	84%
1994-95	2,928,041,690	93,516,966	435,018,214	528,535,181	18%	85%
1995-96	3,170,033,483	121,577,754	413,870,288	535,448,042	17%	86%
1996-97	3,512,349,905	238,300,971	418,860,442	657,161,413	19%	84%
1997-98	3,247,861,885	383,643,447	390,794,550	774,437,997	24%	81%
1998-99	3,051,988,583	371,676,516	401,809,816	773,486,332	25%	80%
1999/00	2,237,174,281	789,649,603	474,166,296	1,263,815,900	56%	64%
2000-01	2,337,151,572	436,489,975	632,553,668	1,069,043,644	46%	69%
2001-02	2,416,918,520	247,799,530	685,249,443	933,048,973	39%	72%
2002-03	2,253,608,772	244,075,979	723,737,605	967,813,584	43%	70%

Source: Canada Student Loans Programs Annual Reports; Provincial Student Assistance Programs; Canada Millennium Scholarship Foundation Annual Reports

The Canada Millennium Scholarship Foundation was created in 1998 to increase access to postsecondary education by granting scholarships to students who are in financial need and who demonstrate merit. The Foundation was created with a \$2.5 billion endowment to administer these scholarships for a period of ten years, starting in 2000. The Foundation provides the following awards: bursaries averaging \$3,000 to postsecondary education students based on financial need; annual millennium entrance excellence awards valued at \$4,000 or \$5,000 depending on the type of award, to students beginning postsecondary studies for the first time and who demonstrate exceptional merit; and annual in-course excellence awards valued at \$4,000 or \$5,000 depending on the type of award, to upper year postsecondary students.³¹

Since the mid-1990s, the trend in federal financing policies has been to shift from funding institutions directly to funding individuals through various programs. Apart from CSLP and the Canada Millennium Scholarship Program, the federal government has initiated a number of tax measures directed at individuals. These include tuition tax credits, education tax credits, tax credit for student loan interest, RESPs, and tax-free RRSP withdrawals to upgrade skills. Table 3.5 indicates total federal government tax expenditures to postsecondary education by type of expenditure. Between 1990 and 2003, there was a significant increase in the use of tax credit incentives to encourage participation in postsecondary education.

³¹ The Foundation also undertook a research program into the determinants of access to higher education and the effects of current student financial assistance programs on students' behaviour.

Table 3.5: Federal Government Tax Expenditures Related to Postsecondary Education (1994 – 2004).

\$Millions	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Education Credit	43	42	54	52	51	52	63	88	135	143	134	231	239	255	265
Tuition Fee Credit	188	186	189	210	222	229	242	273	293	325	316	268	265	275	295
Transfer of Education/Tuition Credits	149	161	201	228	245	252	300	341	377	364	359	467	469	485	505
Student Loan Interest Credit	0	0	0	0	0	0	0	0	52	65	64	64	63	62	62
Exemption of Scholarship Income	12	10	12	8	7	7	7	6	7	7	30	25	25	25	25
Carry-Forward	0	0	0	0	0	0	0	0	11	82	156	278	346	405	420
Tax-free RESP status	0	0	0	0	0	0	40	36	34	44	86	82	107	130	165
Total	391	399	456	499	526	539	652	744	909	1,029	1,145	1,414	1,515	1,637	1,737

Source: Government of Canada's Department of Finance Tax Expenditures & Evaluations 2002 (extracted from Junor & Usher, 2004)

Conclusion

Throughout the development of postsecondary education in Canada, the federal government instituted a variety of financing policies aimed at preparing a highly trained workforce in the interest of national economic growth. While it is difficult to isolate the role these policies played in increasing access to postsecondary education, it is evident that individuals and institutions have benefited from funds provided by the federal government.

The federal government's role in postsecondary education has changed over time. From confederation days up to the early 1960s, the federal government was actively involved in postsecondary education through its manpower training initiatives including student loans, capital development, vocational and apprenticeship training, and educating war veterans. However, as provincial governments matured, they increasingly saw federal initiatives as intrusions into their jurisdictional responsibility over postsecondary education. The success of provincial governments at resisting federal influence has resulted in the following trends or consequences.

The first is increasing acceptance that responsibility over postsecondary education belongs to provinces. This acceptance is accompanied by reductions in transfer payments for postsecondary education during particularly difficult economic times. The second trend is the adoption of unconditional block funding by the federal government and non-specificity regarding

the use of these funds. However, with the new Canada Health Transfer, the federal government targeted funding for priorities such as reducing wait times for medical treatment and encouraging provinces to be accountable in reporting health outcomes. The third trend is a shift in federal initiatives from funding institutions directly to funding individuals through federal loans, scholarships, research, and capital and tax incentives, where the federal government could more effectively influence programs to achieve federally desired outcomes. It may not have been an intended outcome of this policy, but tax incentives and direct funding assistance to individuals have made both public and private education more accessible. The fourth trend is the use of matching funds, such as requirements for provinces, institutions, or the private sector to match funding of research or capital infrastructure costs. This mechanism has obliged provinces to modify their funding priorities in order to leverage federal funds, thus succumbing to federal influence.

However, ironically, while there is resistance to federal influence, there is a desire of universities and more recently, of provinces, for more federal funding. With respect to universities, as the NCCU did in the past, the Association of Universities and Colleges of Canada urged the federal government to play a major role in funding postsecondary institutions, such as making contributions to aid in faculty growth as well as to capital and technological infrastructure (AUCC, 2003). Similarly, the *Rae Report* (2005) called on the Ontario government to negotiate with Ottawa for an increase in postsecondary funding. The report stated:

Federal Social Transfer funding for postsecondary education and other social programs stands at a lower level today, in nominal terms, than it did ten years ago. The end of Established Programs Financing and its replacement by the less generous Canada Social Transfer has meant that the federal government has been avoiding its responsibilities towards higher education. There is no dedicated federal transfer to the provinces for universities and colleges. There should be (Rae, 2005, p. 18-19).

In response to the *Rae Report*, Ontario's Budget 2005 announced that Ontario would work with the federal government to restore funding to postsecondary education. There is no doubt that provinces will continue to argue in favour of unconditional federal transfer payments, however they may compromise on accountability for federal investment by renewing institutions to maximize returns on that investment. The consultation paper by Quebec's Parliamentary Committee on Education for the Quality, Accessibility and Funding of Universities indicates:

One way to assert the importance of higher education in the development of a knowledge based society might be to re-examine the federal government's involvement in funding university teaching and research, an issue that Quebec universities share with their counterparts in the rest of Canada. The federal government's involvement in the field of education as a whole could also be reviewed in light of the proposals of the Commission on Fiscal Imbalance.

To optimize the return of the resources invested in universities, one might think that federal transfer payments should be unconditional, or at least be aligned with the Quebec government's orientation on university funding. Without reiterating all the technical analyses of the evolution, sharing and use of federal transfers, one has to question the means of renewing higher education, particularly when federal funding is involved (Quebec, 2004, p. 32).

Alternatively, the federal government, if it should decide to increase funding for postsecondary education, can choose to deal directly with individuals rather than provinces, thus bypassing the traditional federal transfer payment vehicle. As Junor and Usher (2004, p. 272) observe:

In the year up to 1994, institutions received about 87 per cent of all transfers in respect of postsecondary education. Following the introduction of the Canada Health and Social Transfer (CHST) and – later in the 1990s – the large increase in tax expenditure for postsecondary education, the balance began to shift so that transfers to institutions now account for only 78 per cent of total expenditures. This is not a paradigmatic shift by any means, but it does represent a general trend toward a form of fiscal federalism where the Government of Canada deals directly with individuals on issues such as education rather than deal with provinces.

The next chapter provides a narrative of key postsecondary education access policies of Ontario, discussion of the policy environment associated with key policies and policy trends, and the impact of these policies on postsecondary education in Ontario.

CHAPTER FOUR: ONTARIO

Ontario, like many jurisdictions today, recognizes that postsecondary education has a central role to play within the modern knowledge economy by fostering prosperity, growth, development, modernization and renewal in society. The 2004 Ontario Budget indicates that building a high-skill, high-wage economy in Ontario will require higher education programs that are second to none.

Ontario currently has 18 publicly funded universities and 24 public colleges (including two French language colleges). Each university has degree-granting authority under the *Degree Granting Act*, 1983, and operates independently of other institutions.³² Unlike British Columbia, where community colleges offer university transfer programs, Ontario's 24 Colleges of Applied Arts and Technology (CAATs), created during the mid- to late-1960s, do not have university transfer functions.³³ Colleges were explicitly designed to be occupational in orientation, with an emphasis on upgrades and general adult education, and primarily serving the needs of Canada's labour market. CAATs generally offer career-oriented programs leading to diplomas or certificates, or to official certifications in skilled trades, which are regulated by professional associations.

In recent years, however, the traditional distinction between Ontario's universities and colleges—degree-granting versus non-degree-granting institutions—has blurred. The *Postsecondary Education Choice and Excellence Act*, 2000 enabled Ontario's CAATs for the

³² In addition to public universities, there are approximately 17 private institutions (all of which are bible colleges or small religious-affiliated institutions) that have been granted restricted degree-granting authority by the Legislative Assembly of Ontario.

³³ The *Private Career Colleges Act* sets out minimum requirements for private non-degree colleges. Private colleges offering vocational programs must be registered under the Act. Those colleges offering non-vocational (e.g. driving instruction for non-commercial vehicles, speed reading, and tax preparation) programs are not required to register and are outside the scrutiny of the Ministry of Training, Colleges and Universities. There are over 450 registered private career colleges, the majority of them focus on courses that prepare students for clearly defined occupations.

first time to apply for ministerial consent to offer applied baccalaureate degree programs to students. As of July 2005, 44 applied degree programs in colleges across the province have been approved. Furthermore, the Ontario government has made arrangements with universities to offer parallel programs which may grant an individual student both college and university credentials. The once homogenous CAAT sector is also moving towards differentiation as some colleges are now designated as Institutes of Technology and Advanced Learning.³⁴ In February 2003, the Ontario government announced this new designation for colleges provided they meet specified criteria such as having the capacity to bring degree level programs to their local communities.

Ontario's postsecondary education system has evolved significantly since 1945, when there were only three publicly supported universities, a variety of denominational private colleges and a small number of specialized institutes associated with technical, professional or occupational training.³⁵ During that time, the Progressive Conservative government (in power 1945 – 1985) carried the old tradition of John A. MacDonald's Canadian conservatism, adopting the view that active government participation in the economic development of the country was appropriate as long as it is consistent with fostering business enterprise and general economic expansion (Rea, 1987).

The emergence of the "new service state" under the Progressive Conservatives can be traced to the beginning of large-scale state support for mass education in the 1940s and 1950s (White, 1985). The PC government invested in the rapid expansion of postsecondary education in response to demographic and social forces at play after the Second World War, which included economic resurgence and a significant rise in birth rates. As the industrial base

³⁴ Sheridan, Humber and Conestoga Colleges have been designated as Institutes of Technology and Advanced Learning.

³⁵ University of Toronto, Queen's University and University of Western Ontario.

continued to diversify, the government established Lakehead Technical Institute in 1946 and Ryerson Institute of Technology in 1948 (Jones, 1997). By the 1950s, McMaster, Ottawa and Carleton Universities were added.

The rapid expansion of Ontario's postsecondary education system during the 1950s and 1960s was a result of several factors.³⁶ The first factor was the boom in demand for participation in postsecondary education by young high school graduates. By 1955, baby boom children were flooding elementary schools at such a rate that the expansion of the primary and secondary school system spilled over into the postsecondary sector during the 1960s. The ideology of the Progressive Conservative during that time reflected Dewey's (1897) belief that the school provides the form of community life most effective in assisting the child to share in the inherited resources of the race, and to use his/her own powers for social ends.

The second factor was a buoyant economy that generated a growing demand for trained and skilled labour, and stirred public support for more postsecondary institutions. The end of the Second World War brought an economic boom to Ontario and a period of sustained growth that lasted until the mid-1970s with the manufacturing sector peaking in the early 1950s. A shift to the service sector followed, and by the late 1970s Ontario had moved from a blue-collar labour force to a majority of the workforce being white-collar office workers and clerks. During the postwar period, Ontario's population doubled from approximately 4.1 million people in 1946 to more than 8.2 million in 1976 (White, 1985).

³⁶ By the mid to late 1970s, the expansion of postsecondary education had slowed down. Reasons for this contraction include: a marked reduction in federal government support provided under Established Programs Financing (EPF) for health and education expenditures starting in 1977; an economic recession in the 1970s that questioned the notion that economic investment promotes economic growth resulting in a drop in demand for postsecondary spaces; and a concern for continued large budget deficits leading to government's focus on system rationalization of the postsecondary education.

The third factor is the federal government initiatives that made financial support available for capital development in vocational-technical areas. The federal *Technical and Vocational Training Assistance Act*, 1960 permitted the federal government to enter into an agreement not exceeding six years with any province to contribute 75 per cent of the cost of new buildings and equipment (to a limit based on provincial population and thereafter 50 per cent of the cost). It was during this period that 20 CAATs were created as part of the government's plan to expand postsecondary education, establishing two distinct postsecondary sectors in Ontario.

The decision to create distinct student spaces in technological institutes was strongly influenced by the Committee of Presidents. Bertram (1986) summarized the influence of this group as follows:

Above all, it was the presidents of Ontario's universities who seem to have most influenced the shape of the colleges. The recurrent themes in their reports were that colleges should not interfere with the unique position of universities in that only they should do degree-level work, and that new colleges should be created in such a way as to preserve the perceived superiority of Ontario's educational system as compared with the United States, and by implication, other Canadian provinces (quoted in Dennison & Gallagher, 1986, p. 34).

Intermediary governing bodies in Ontario played an important advisory role in both the college and university sectors. The initial intermediary body for universities was the Committee on University Affairs. This committee was succeeded by the Ontario Council on University Affairs (OCUA), which served from 1974 to 1996, when it was dismantled by the Progressive Conservative government. Today, university presidents in Ontario belong to the Council of Ontario Universities, a body advocating university interests. In the college sector, the intermediary role was performed by the Ontario Council of Regents for Colleges of Applied Arts and Technology, which was established in 1965. This body has since been transformed into the College Compensation and Appointments Council, whose mandate includes: advice and strategic

planning; college boards appointments and other governance issues; collective bargaining and human resource management; and other roles and responsibilities assigned by the Minister responsible for postsecondary education. The Association of Colleges and Applied Arts and Technology of Ontario (ACAATO) is the advocacy, communication and marketing arm of CAATs.³⁷

The uninterrupted 43-year rule of the Progressive Conservatives in Ontario provided the political environment for a smooth and accelerated expansion of universities and CAATs. Since 1985, however, public administration in Ontario has changed stripes frequently, starting with the Liberals under David Peterson (1985 – 1990),³⁸ followed by the New Democratic Party (NDP) under Bob Rae (1990 – 1995), the Progressive Conservatives under Mike Harris (1995 – 2002) and again under Ernie Eves (April 2002 – October 2003), and then the Liberals again under Dalton McGuinty (October 2003 – present).

Access Policies and the Political Environment

From the mid-1980s through to the present, postsecondary access policies in Ontario have been underpinned by a perceived link between education and economic development. Therefore, regardless of the government's political stripe, access to postsecondary education has been its continuing priority. Government's postsecondary access policies have consistently included several elements: the number and type of institutions, number of seats, types of programs, level of operating grants to postsecondary education, categories of special purpose funds, research and development, tuition fee rates, student financial assistance, participation of

³⁷ The *Rae Report* (2005) advocated the establishment of a new Council on Higher Education with responsibility for both colleges and universities and the following mandate: advice on performance measures; collection of critical benchmark data; monitoring, evaluating and reporting on quality and system performance; leading a renewed focus on teaching and excellence; developing strategic research agency; and providing advice as requested.

³⁸ During William Davis' leadership, Ontario had weathered the economic recessions of the later 1970s and early 1980s intact, and Ontarians were comfortable with Davis. When he resigned in 1984, Frank Miller, perceived as a "right-wing populist", became the leader of the PCs, and for various reasons, the PC Dynasty ended soon after Miller called an election on May 2, 1985 (White, 1985).

under-represented groups, and alternative sources of funding including partnerships with private businesses and industries.

While the policies of different Ontario governments have contained most of the above elements, their policy directions have differed depending on their respective political ideologies. At least three key points should be emphasized. First, while both the Left (NDP) and Right (Tory and, to some extent, Liberal) view education as key to economic prosperity, the Left views human capital as the engine that drives economic development, and the Right views talent as a “condition” that supports economic prosperity. Second, while the Left sees the role of the state as a strategic guide to economic development, the Right views the role of government as a purveyor of market conditions that foster economic growth. Third, while Leftist policies focus on removing barriers for disadvantaged groups to reduce talent wastage, the Right would provide assistance to the disadvantaged only because it would be the right thing to do. Hence, the policy directions and approaches of the Left and Right differ. For example, Tory and Liberal governments would make use of market principles like choice and competition, or supply and demand, more frequently than the NDP.

Regarding policy discussions, the Liberal and NDP governments are more likely than the Tories to consult broadly with the postsecondary and other sectors through commissions, committees or task forces. The Tory government commissioned the Advisory Panel on Future Directions for Postsecondary Education and the Investing in Students Task Force, but did not always consult the postsecondary sector. For example, the *Postsecondary Choice and Excellence Act*, 2000 was introduced and passed without broad consultation. On the other hand, the McGuinty administration commissioned the Postsecondary Education Review shortly after it took office in late 2003. Finally, while all governments share common objectives to increase

access, policy directions have not always been consistent (not only between administrations but also within the same administration).

The following section presents a chronological narrative of major postsecondary education access policies from 1985 to the present, including the political and policy context of each policy. The description and analysis illustrates the relationship between postsecondary education access policies and the political environment, including political economy, government priorities and policy discussions.

Access and Funding Policies Under the Liberals

In 1985, David Peterson, leader of the Liberal Party, ran an aggressive election campaign and won only 48 seats, four less than the Progressive Conservatives. However, the Liberals and New Democrats formed an alliance with the Liberal-NDP Accord, and on 18 June 1985, defeated Frank Miller's new Tory government by a vote of 72 to 52. Peterson was asked to form a government the following day. Under the Accord, the NDP did not get any representation in Peterson's cabinet and merely agreed to support Peterson's government in return for two key commitments. These were to implement certain common campaign proposals (e.g. rent review, environmental regulation, extra billing in health care and public accessibility to government--within a framework of fiscal responsibility), and not to call an election for two years (White, 1998). After the Accord lapsed in 1987, Peterson called an election and this time received an overwhelming majority of 95 out of 130 seats. The NDP won 19 seats and the PCs, under the new leadership of Larry Gross, won 16.

Courchene and Telmer (1998) say that the Liberal government brought in a new socioeconomic era referred to as Ontario's "quiet revolution", which was triggered by the Liberal-NDP Accord. White (1998) explains that the growth in social services spending from

8.75 per cent of total spending in 1982/83 to 9.74 per cent in 1986/87 was a result, in part, of an economic boom during the regime and an oversized bureaucracy inherited by the Liberals, which would have made any attempts to curb spending increases difficult. The inability of the Liberal party to conceptualize and implement its vision for the future of Ontario after the 1987 election is a further reason for this growth.

Peterson had two passions: national unity and international economic competitiveness. The Peterson administration was committed to increasing access to postsecondary education because of education's strong connection with economic development. Its economic policy agenda was aimed at achieving competitiveness internationally by focusing on human capital and high technology. During this time, students of economic development were agreeing that the education and training of the labour force for the high technology "new economy" (and the retraining of old economy workers) was one of government's key roles for the future. The Peterson regime established the new Ministry of Skills Development to consolidate federal-provincial programs and other skills related initiatives launched by the PC government. The ministry was created as a result of a concern that the federal government was becoming too influential in the institutional matters of the CAATs.

Ken Dryden, a former Youth Commissioner, sums up the rationale for the Liberal government's interest in education as follows:

The rapidly accelerating pace of change will require people to have more adaptable skills and attitudes, to be better able to deal with change. Increased use of technology will mean less physical labour but the need for greater conceptual and numeracy, analytical and problem-solving skills (quoted in Ontario, 1987, p. 4).

In line with this rationale, Peterson's key postsecondary access policies included a funding formula change to achieve accessibility to postsecondary education, strengthening science and technology within the province, and transferability. Throughout its mandate, the

Peterson government chose not to implement any major structural changes or initiatives, but intervened directly only when required.³⁹ As stated in Budget 1986 (Ontario, 1986), it preferred to offer incentives to organizations to encourage innovation and entrepreneurship.

Funding Formula

The funding formula policy was a means for government to offer incentives to increase accessibility to postsecondary education while maintaining quality (Ontario, 1987). The Bovey Commission Report (Commission on the Future Development of the Universities of Ontario, 1984) advocated use of the funding formula as a tool for government to achieve its public policy objectives, and pointed out the disincentives that the existing funding formula was creating for Ontario universities to increase their student intake.⁴⁰

Universities that increased enrolment at higher rates than others received a larger share of available resources and could potentially cause their fellow institutions to lose some of their shares. This created a situation of funding instability for institutions not only for those who lost their market share of students, but also for those who successfully increased their market share.

The Bovey report (Commission on the Future Development of the Universities of Ontario, 1984)

³⁹ E.g. CAATs labour relations were contentious; provincial strikes occurred in 1984 and again in 1989. Two commissions were established: The Report of the Advisor to the Minister of Colleges and Universities on the Governance of the Colleges of Applied Arts and Technology (1985); and The Report of the Colleges Collective Bargaining Commission (1988). The former, also called the Pitman Report, recommended making changes to the structural arrangement of the CAATs and establishing an advisory council on the colleges. In response, the Liberal government redefined the role of the existing Council of Regents (Cameron & Royce, 1996).

⁴⁰ In the 1960s, the funding formula for universities was tied to what were known as basic income units (BIUs). These units were weighted for each student based on a course's level of difficulty and subject category. These were then compiled for all students across each university to arrive at the total number of BIUs for the entire university. The government then announced a dollar value for each BIU and also determined what tuition fees might be charged, and then subtracted that total amount from the grant income for that university. In the 1970s, there was a change in the BIU allocation mechanism. Instead of announcing the dollar value of a BIU, the government announced the total amount of dollars granted to the university system as a whole. The Ontario Council on University Affairs, acting as a buffer between the government and universities, was responsible for distributing these funds. However, more students at a university did not necessarily mean more money for that institution. There was a fixed amount of dollars, and more students in the system meant a lowered BIU value (Buchbinder & Rajagopal, 1993).

recommended substantial changes to the funding formula to enhance the quality, stability and adaptability of universities, as well as increased support for research and providing incentives or disincentives for enrolment in specific program areas. While the Liberal government did not openly accept the report, Royce (1997) argues, the funding formula policy changes can be traced back to several of the Bovey Commission's recommendations.

One change included the introduction of new corridor funding and targeted funding envelopes. Corridor funding has two main features. The first is that institutions would be allowed a corridor of insensitivity of plus or minus 4 per cent to enrolment changes. The second is that research intensive institutions receiving federal research grants of greater than 10 per cent of operating income on a rolling three-year average would be allowed an additional plus or minus 2 per cent corridor, and those with grants greater than 15 per cent would receive an additional plus or minus 2 per cent, for a total of plus or minus 8 per cent.

Consistent with the government's desire to provide accessibility to postsecondary education, Budget 1985 increased the basic operating grant for Universities and CAATS by 4 per cent for 1986/87 and allocated a total of \$80 million in an Excellence Fund for the purchase of state of the art teaching equipment and capital repairs. Probably influenced by the NDP, Budget 1985 also focused on financial barriers to students, holding tuition fee increases to 4 per cent and increasing funding for the Ontario Student Assistance Program (OSAP) by 8 per cent to \$145 million in 1986/87. Budget 1987 provided another \$25 million increase to OSAP and introduced a new interest relief plan for those who have difficulty repaying student loans. In 1987/88, another base funding increase of 11.5 per cent was announced for universities, along with a special allocation of \$60 million for CAATs. In Budget 1988, the overall colleges and universities budget increased by only 7.5 per cent and the government announced the

establishment of a supplementary Accessibility Fund to accommodate the demand for greater access and higher enrolment. This increase totaled \$38 million in 1988/89 and \$88 million in 1989/90.

Innovation, Research and Development

Traditionally, Ontario's strategy under the PCs was to provide tax-based incentives for research and development. Probably influenced by the NDP as well, the Liberals' 1986 Budget announced a Technology Fund of \$1 billion for the next decade and set aside \$100 million in that year's budget as an initial contribution. The fund was to be used to support a wide variety of initiatives and joint ventures in an attempt to outperform major competitors in new technology, and was to be directed by a council not yet then established. Eventually the Premier's Council on Technology was given that responsibility.

The Liberal government commissioned the Premier's Council on Technology to make recommendations on how to steer Ontario toward the forefront of economic leadership and technological innovation. Its *Report of the Premier's Council, Competing in the New Global Economy* (Premier's Council on Technology, 1988) contained many recommendations that were eventually implemented.⁴¹ Key recommendations included in the report were: establishing Centres of Excellence; providing a stimulus to investment in industrial research and development; assisting smaller manufacturing firms to hire staff who could commercialize advanced technology and put it to work in factories; and using Ontario's own buying power to strengthen high-technology companies by awarding research contracts to those with potential to become competitive suppliers of selected goods purchased by the province and its agencies. In

⁴¹ Some key findings of the report included: Ontario was uncompetitive in a number of high growth and emerging industries such as biotechnology; its education and training systems were not up to the level of competitors; the science and technology infrastructure of universities and government laboratories were not focused on industrial priorities; and more resources were required to build the human capital infrastructure.

essence, the report emphasized meeting labour market needs and increasing market-oriented research and development, using public resources where possible, to achieve these goals.

In the same year that the report was released, Budget 1988 announced a national strategy on research and development and established seven Centres of Excellence to conduct advanced research and to stimulate industrial research and development.⁴² By that time, \$275 million of the Technology Fund had been committed to programs and specific projects to be undertaken by business, universities, colleges and labour. Programs under the Technology Fund included a \$25 million Technology Personnel Program to help smaller firms hire up to 1,000 new engineering and technical staff to put advanced technology to work in Ontario industries. There were no specified funds offered to universities for graduating more researchers or graduate students in the science or engineering fields. Instead, there was an emphasis on vocational and skills training evidenced in part by a provision of \$4 million to the Ministry of Skills Development for a new Technicians and Technologists Skills Updating Program.

Lifelong Learning and Transferability of Credits

Given that the Liberal government had an interest in retraining, it was only a matter of time before attention was drawn again to the fact that university and college systems in Ontario were distinct, discreet, not integrated and hindered accessibility. By the late 1980s, lifelong learning was an accepted reality, and the report, *People and Skills in the New Global Economy* (Premier's Council, 1990), recommended that postsecondary education in Ontario should be viewed as a continuum that allows for lifelong learning opportunities. The report called for a

⁴² The Centres of Excellence are affiliated with universities and have complex contractual relationships with government and the affiliated university. The Mulroney Government used a similar model on a national basis. The NDP and Tory governments that followed renewed funding for these Centres of Excellence (CE). However, the Tories reduced the number of CE from seven to four. To stimulate industrial research on the recommendation of the Premier's Council on Technology, a new Research and Development Super Allowance was introduced to provide an extra 25 per cent deduction for large firms and 35 per cent for small businesses for R&D expenditures.

coordinating council to deal with credit transfer arrangements to facilitate transferability and continuity across the system, including admission requirements, program standards, and degree requirements. During this time, CAAT leaders were calling on universities to accept transfers of CAAT students, but universities were not very receptive to this idea. There were also students wanting to transfer from universities to CAATs. As a result, CAATs began offering post-degree programs that supplemented undergraduate programs with career-oriented training.

However, the CAAT system was not without its challenges, including: similarly titled programs across the system that did not yield the same skills; a decline in emphasis on generic and transferable skills such as problem solving, critical thinking, basic literacy and numeracy, and computer literacy; a lack of preparatory programs for functionally illiterate students and high school dropouts; a lack of flexibility for adult part-time learners; and high drop out rates. In 1988, the Ministry of Colleges and Universities asked the Council of Regents to review and develop a vision for CAATs for 2000. Its report, *Vision 2000*, was released in 1990 and implemented by the next administration.

Access and Funding Policy Under the New Democrats

In 1990, Bob Rae's New Democratic Party won 56.9 per cent of the legislature's 130 seats but a mere 37.6 per cent of the popular vote. This win came as a surprise to everyone, including Bob Rae and the NDP, who were used to being backbenchers. The NDP's election platform was *Agenda for People*, which was eleven pages long and included various forms of tax relief, a government surplus and the public "driver-owned" automobile insurance that the Rae government abandoned after one year in office.⁴³

⁴³ White (1998) postulates that voters elected the NDP for its promise to listen to Ontarians, and not for what is its *Agenda for People* election platform. As David Reville puts it, the essence of the NDP campaign message was, "Peterson listens to the fat cats, he doesn't listen to you, we will listen to you" (quoted in White, 1998, p. 217).

As with the Liberal government before it, the NDP also saw education as a means to achieve sustainable prosperity. While it has been difficult for researchers to demonstrate a causal link between education and economic productivity, the Rae administration saw that link in *Investing in Tomorrow's Jobs* (Ontario, 1992b, p. 13) as follows:

Technological innovation allows increases in the quality and productivity of capital, labour, energy and materials inputs. This, in turn, creates a demand for further investment in research and development. Advanced technical skills are thus central to creating an economy characterized by continuous innovation and upgrading. The interaction between technical knowledge and other factors may permit increasing returns to scale and allow innovation to raise, not just the level of output, but also its growth rate, permitting improved living standards.

According to Brown and Lauder (1997), the Left focused on human capital development, rather than using market capitalism, as a means to economic prosperity. The NDP government declared "from the shop floor to the boardroom, learning is the key to success in finding new technological and organizational solutions. Innovation, made possible through education, will generate greater productivity. Our standard of living depends on it" (Ontario, 1991, p.6). The policy direction taken by the Rae administration was typical of "left modernizers" who assume that the state can actively lead the growth of a broader, more democratic economy (Brown & Lauder, 1997). Krugman (1993) sees the role of the state as a strategic trader, to guide industrial development and provide the infrastructure for economic growth, which includes a highly educated workforce, transportation, telecommunications, research and development.⁴⁴ NDP budgets for consecutive years emphasized investments in training, technology and infrastructure.⁴⁵

⁴⁴ Premier Rae himself tried to work in partnership with the business community and became actively involved in a few government-business-labour partnerships designed to save troubled economic enterprises (e.g. Spruce Falls pulp mill, the Algoma Steel in Northern Ontario and the DeHavilland aircraft plant in Toronto). The Rae government also tried to implement an industrial policy framework (White, 1998).

⁴⁵ Budget 1992 launched two funds related to the above undertaking. The first is the Jobs Ontario Capital Fund, providing \$2.3 billion over five years to strengthen Ontario's infrastructure including telecommunications, the environment, public transit, and child care spaces for Jobs Ontario Training Fund participants who required child

The NDP assumed office at a time when Ontario was undergoing structural changes in its economy. This restructuring involved the downsizing or closure of existing companies, and the growth of new firms as new competitive advantages emerged. This structural change resulted in a demand for skill sets that included abilities to develop and apply advanced technologies. The NDP's *Investing In Tomorrow's Jobs*, (Ontario, 1992b) released with Budget 1992, attributed Ontario's comparatively low productivity rate at the time to lagging investment in equipment, people and technology. The NDP's 1993 Ontario Economic Outlook indicated the following:

The majority of the jobs lost in recent years were in traditional clerical and processing and assembly occupations. In contrast, job growth over the medium term will shift further towards higher skill positions that require more extensive educational preparation. Employer-based training and retraining will become more important as a broader set of skills is needed to support the diffusion of complex technologies in the workplace. Also, organizations will move away from traditional hierarchies to adopt new co-operative labour/management structures that will enable employers and workers to share responsibility for restructuring and continuous improvements in productivity. For example, workplaces are focusing on teamwork, expanding the scope of employee's jobs, and broadening the decision-making process to include employees (Ontario, 1993b, p. 2).

As with left modernizers, the Rae government committed to build a strong relationship of trust between government, labour and businesses.⁴⁶ It acknowledged that the building of a high-skill, high-wage economy requires working with employers to implement positive economic change at the firm and sector levels,⁴⁷ and to invest in appropriate training of the workforce.⁴⁸

care. These projects would also create jobs indirectly. This Fund is in addition to Ontario's regular investments in roads, hospitals, schools, and homes for seniors and other projects. The total spent on capital renewal in 1992 is estimated at \$3.9 billion and would support 75,000 jobs (Ontario, 1992a). Since 1990, the number of publicly supported childcare spaces grew by 6,500 to 53,000 in 1993. Through this fund, another 14,000 subsidized spaces would be made available by 1994 so that women could participate in the new economy. Finally, the Jobs Ontario Homes Fund provided \$2.1 billion to build 20,000 new non-profit housing units over three years. One year later, Budget 1993 added Jobs Ontario Youth, investing \$180 million in jobs, training, counselling and educational upgrading for youth. The following year, Budget 1994 added Jobs Ontario Summer Employment for summer training and employment for young people.

⁴⁶ The Rae government concedes "private investment is key to the creation of secure jobs in Ontario" (Ontario, 1992a, p. 9).

⁴⁷ For example, the Rae government proposed reforms to the *Ontario Labour Relations Act* which includes a suggestion for a new Organization and Adjustment Service to adapt the labour relations system to enable increased cooperation between labour and management. Left modernizers typically believe that the provision of a floor of protective entitlements and conditions for workers is desirable.

Consistent with the belief that a necessary condition for economic prosperity is a tight relationship between education and work (Ashton & Sung, 1997), the Rae government established the Ontario Training and Adjustment Board (OTAB) as an agency independent of government. Led by representatives from business, labour, aboriginal peoples, equity groups, educators and trainers, one of OTAB's priorities was to implement improvements in workplace and sectoral training by building bridges between postsecondary institutions and employers. Emphasized skills included literacy, numeracy, problem-solving, technology and portable or generic skills such as organization, decision-making, listening and communicating, leadership skills, and the ability to adapt to lifelong learning and change as part of one's daily routine. Budget 1992 committed \$930 million for training and adjustment programs for workers.

The government also encouraged employers, through incentives such as the Jobs Ontario Training Fund, to invest more resources in the training of their employees to ensure the competitiveness of their firms. One difficulty with this approach is that the business community had never envisioned itself as a partner of government and did not share its conception of the economic role of a social democratic service state (White, 1998).

With respect to educational access, the government's role was to ensure that all individuals, regardless of socioeconomic status and ethnic origin, had the opportunity to gain access to an education that would prepare them for a job. Its framework for investment, *Investment in Tomorrow's Jobs* (Ontario, 1992b), reflects the broader concern of left modernizers regarding talent wastage of individuals from less privileged groups. It states that fairness and equity in society and the economy are not only critical goals, but are keys to

⁴⁸ For example, the Rae government established the Ontario Training and Adjustment Board.

developing the full economic contributions of all Ontarians.⁴⁹ To this end, the Rae administration implemented policies to enable individuals on social assistance to access training and work experience,⁵⁰ and maintained employment and pay equity programs while many government services were subjected to policies of restraint.

Innovation, Research and Development

The NDP government believed that increasing investment in the development and application of new technologies is integral to achieving sustainable prosperity. While providing for work-based skills training, the NDP government, like the Liberal government before it, took an active role in encouraging innovation, research, and development through university and industry linkages. Budget 1991 announced \$131 million for the Technology Fund initiated by the previous government, including \$81 million for programs to support leading edge research such as robotics, telecommunications and biotechnology. That budget also provided \$50 million for the R&D Super Allowance to provide tax incentives for private sector research and development. In addition, to address the shortage of investment capital for new high-technology firms, Budget 1991 increased the annual funding for Innovation Ontario Corporation to approximately \$21 million, and increased the annual ceiling for individual investments in high technology firms from \$35,000 to \$1 million. The Rae administration also renewed the Centres of Excellence, originally created under the Liberals, for a second five-year term in 1992. There

⁴⁹ To this end, the Rae administration introduced programs such as employment and pay equity. Pay equity was one of the programs maintained while many government services were subjected to budget restraint measures.

⁵⁰ Jobs Ontario Training Fund, a \$1.1 billion program over three years, was launched in 1992. Its goal was to assist the long-term unemployed who are on social assistance by providing a one-year training credit of up to \$10,000 to an employer, half of which must be used to train the new employee. The fund would create jobs for up to 100,000 individuals over three years. The Rae government reported that this fund created over 24,500 new jobs in year 1 and another 21,500 jobs in year 3. The first 10,000 workers were working as vehicle assemblers at Chrysler and Navistar, as machinists at Linamar, as tailors at John Forsyth, as research technicians and chemists at Apotex and scores of firms across Ontario (Ontario, 1993b, 1994).

were seven centres, which brought together university researchers and private firms to undertake joint research in emerging sectors such as telecommunications, lasers, and space research.

Life Long Learning, Transferability of Credits and University Restructuring

The Council of Regents' report, *Vision 2000* (Ontario, 1990), reaffirmed the mandate and role of CAATs.⁵¹ Skolnik (1995) opines that this result was hardly surprising given the sector mandate of the review and the broad participation of sectoral interests. Nonetheless, the report recommended increasing levels of co-operation between the universities and CAATs, increasing student mobility between sectors (which would require the development of a government transfer guide), and increasing the number of articulation agreements between universities and colleges. However, university/college relations were not really resolved, and Royce (1997) suggests that the issues will remain until there is a single locus of responsibility for system-wide coordination and planning with necessary resources to carry out the role effectively. As part of Budget 1991, the Rae government announced the implementation of three key recommendations in *Vision 2000*. These included the establishment of a College Standards and Accreditation Council to ensure quality of programs across all CAATs, prior learning assessment to evaluate prior learning and experience as credits toward postsecondary credentials, and a feasibility study to examine innovative ways for colleges and universities to offer new credentials for advanced training.⁵²

Even though a major theme of government commissions and reports throughout the 1990s was the need for greater coordination and planning, this need was not satisfied during the Rae administration. As a result of financial constraints both within the ministry and those that

⁵¹ Charles Pascal, then Chair of the Council of Regents and subsequent Deputy Minister of Education for the NDP, organized the process and established a Steering Commission composed of 33 individuals including educators from colleges, schools and universities, students, employers, labour and government representatives.

⁵² Subsequent studies include *College to University Transfer Study* (1992) and *No Dead Ends* (1993).

were imposed on the system, opportunities were missed for improvements in planning, coordination and accountability within the university sector. For example, after establishing a University Restructuring Steering Committee in 1992 to develop long-term strategies to make the university sector more responsive to life-long learning, the Rae government shelved the report because of fiscal constraints and government reorganization.⁵³ As well, recommendations contained in two reports by the Ontario Council on University Affairs were not implemented because of financial constraints. The first OCUA report⁵⁴ recommended the establishment of an independent external agency to monitor accountability and the second, a discussion paper, recommended establishing a province-wide quality review process of undergraduate programs.⁵⁵

Some improvements occurred in the area of credit transferability between universities in Ontario, but credit recognition issues continued with respect to transferability between universities and CAATs. As a result of the *Baker Report* in 1992, Ontario universities agreed to a general policy for credit transfer.⁵⁶ Since the Ontario Council on University Affairs approved the Council of Ministers of Education (CMEC)'s Protocol on the Transferability of University Credits in 1995, Ontario universities have complied with the protocol (Royce, 1997). However, the protocol pertains specifically to the national transferability of credits among Canadian universities for first and second year courses.

⁵³ The University Restructuring Steering Committee was co-chaired by Dr. Bernard Shapiro, Deputy Minister of Education, and Colin Graham, then Chair of OCUA.

⁵⁴ The Taskforce on University Accountability chaired by William Broadhurst was created after audits of three universities proved inadequate. Its report, *University Accountability: A Strengthened Framework* released in 1993, recommended an institutionally based accountability framework and an independent agency should be established to monitor accountability. In 1995, the NDP government approved the establishment of the Education Quality and Accountability Office, but it did not fulfil its role.

⁵⁵ This discussion paper, *Sustaining Quality in Changing Times: Funding Ontario Universities, A Discussion Paper* (Ontario Council of University Affairs, 1994), was prepared in response to Minister Richard Allen's (then Minister of Colleges and Universities) request for advice on how to establish a system of program review of academic quality for universities.

⁵⁶ Also known as the *Transfer of Undergraduate Course Credits Among Ontario Universities: Report and Recommendations* (Ontario Council of University Affairs, 1992), chaired by Donald Baker, then Vice-President Academic of Wilfred Laurier University.

During the NDP regime, a number of major changes occurred. First, there were significant increases to the budgets of colleges and universities—Budget 1991 increased the overall budgets of colleges and universities by \$190 million. Secondly, changes to the Ontario Student Assistance Program (OSAP) took place, as it received a funding increase of approximately \$11 million. However, a year later, Budget 1992 implemented a savings measure, estimated at \$10 million, by increasing the expected weekly contribution from students who had summer employment. Budget 1993 subsequently announced reforms to OSAP to assist 177,000 students, a 76 per cent increase from 1989/90, but involved the withdrawal of grants. Thirdly, changes to system landscape occurred. In 1992, Nipissing College was accorded degree-granting status and renamed Nipissing University. A year later, Ryerson Polytechnic Institute became a polytechnic university with specific powers to grant degrees only in areas of applied knowledge and research.

Access and Funding Policy Under the Progressive Conservatives

White (1998) opines that if the Rae government had introduced the Social Contract in Budget 1991 instead of in Budget 1993, the 1995 election might have brought a different result. Against conventional wisdom, the Progressive Conservatives, under the leadership of Mike Harris, rose to win the 1995 election with their platform, the Common Sense Revolution (CSR).⁵⁷ According to Courchene and Telmer (1998), it was the 1991 NDP budget that set the stage for the CSR's great appeal to the electorate. The Harris Tories won 82 of 130 seats in the legislature with about 45 per cent of the popular vote. The 21-page platform embraced neo-conservatism and Adam Smith's theory that government that governs least governs best.

⁵⁷ The Common Sense Revolution was written by a group of young neo-conservatives such as Alister Campbell, Tony Clement, Tom Long, Leslie Noble and Mitch Patten who also ran the 1995 election campaign (White, 1998, p. 255). The key elements included: a 30 per cent provincial personal income tax reduction over three years, eliminating the deficit, balancing the budget, creating 750,000 new jobs and a reduction in government spending.

The CSR emphasized smaller government, lower taxes and a small-business perspective. More jobs was the element that appealed most to the electorate, and the Tories proposed to fulfill that promise by paving the way for further private sector job creation. This would be accomplished by restoring consumer and business confidence through cutting taxes, balancing the budget, and making government more efficient and effective (Ontario, 1996a). Like other conservative governments all over the world, the Harris Tories favoured a free market economy over government involvement, with government involved only to establish optimal conditions for the operation of free markets. To that end, it acted to repeal anti-business labour law, deregulate, remove red tape, and simplify government for businesses and employers.⁵⁸ Consistent with this ideology, the Harris Tories made privatization an option for improving service delivery and established a special Cabinet Committee on Privatization during the first year of its first mandate (Ontario, 1996a).⁵⁹

In the second year of its second term in office (the last year before Premier Harris resigned), the Harris Tories made it a priority to help the most vulnerable, as it was deemed a responsible thing to do and a duty of government (Ontario, 2001a). In the spirit of the Tory welfare state, Budget 2001 funded a number of new initiatives for people with developmental disabilities, abused women and their children, children and youth in institutions, hospitals, mental health centers and correctional facilities, as well as youth involved in prostitution.

The postsecondary agenda for the Tories can be found in two key policy reports. The first, *New Direction II – A Blueprint for Learning in Ontario* (PC Caucus, 1992), advocates a

⁵⁸ Upon taking office, the Harris administration cancelled or reduced the Liberal-NDP Accord initiatives such as welfare benefits and employment equity.

⁵⁹ While in office, the Harris administration went beyond the CSR to restructure institutions including reorganizing the delivery of health care, restructuring the provincial and municipal financial arrangements, school board financing and amalgamation, municipal amalgamation, and creating of the Toronto megacity.

smaller role for government in university affairs and financing, increased partnership funding, and increased student contributions. Overall, the Harris and Eves administrations appeared to put less emphasis than the two previous governments on the link between education and economic growth. Early in their mandate, the Tories appeared to focus more on private sector companies, in particular knowledge-based and R&D firms, as the engine for economic growth. At the same time, they recognized that in order to attract these companies to Ontario, there must be competitive advantages as well as human and physical capital present. The 1997 Budget Papers state that “the ability to generate and apply new knowledge is a scarce resource. Those jurisdictions that are able to provide the highly skilled people needed to compete in knowledge- and technology-based industries will attract new investments” (Ontario, 1997, p. 172).

Similarly, the 2002 Budget Speech indicated,

...because we [Ontarians] live and compete today in a global, knowledge-based economy, postsecondary education is central to our future prosperity. It plays a critical role in improving Ontario’s natural advantage – our highly skilled workforce and the diversity of our population with its contacts all over the world (Ontario, 2002b, p. 21).

In 1997, a policy change in the secondary school sector created an urgent need to increase postsecondary spaces to accommodate the double cohort.⁶⁰ Therefore government policies focused not only on R&D but also on innovatively expanding the postsecondary education system and assisting students in overcoming financial barriers without losing sight of private industry partnerships and market principles.

The second key report was *Excellence, Accessibility and Responsibility*, released in December 1996 by the Advisory Panel on Future Directions for Postsecondary Education and chaired by David Smith, Principal Emeritus of Queens University. The mandate of the panel

⁶⁰ In 1997, the province announced a new four-year high school program. By 2003, the first set of graduates of the new four-year program will graduate from high school at the same time as the last cohort of graduates from the old five-year program. The Ministry of Training, Colleges and Universities estimated that 78,000 additional students would be enrolled at colleges and universities by 2005/06 as a result of the double cohort.

was to review government policy pertaining to postsecondary education, specifically restructuring, rationalizing, eliminating and making cuts to the system. Prior to the release of the report, the government had cut \$280 million from university operating grants in 1996/97. The report recommended restoring public funding, use of envelope funding, greater accountability from governing boards of institutions, differentiation among institutions, enhanced student financial aid, tuition deregulation, stronger support for research and innovation, focused incentives for the private sector, partnerships with universities and colleges, and affirmation of a parallel system of differentiated colleges and universities. The recommendations were generally well received by the postsecondary education community and formed the basis for subsequent initiatives by the Tory government, which were targeted at achieving its desired outcomes. In response, the Tory administration provided new funding, some of it in funding envelopes, and established new types of colleges and universities.⁶¹

Targeting Innovation, Research and Development

The Harris and Eves administrations firmly believed that R&D and innovation were the keys to job creation and economic growth.⁶² They acknowledged that the province had a strong R&D foundation on which to build and, pursuant to the *Blueprint for Learning*, sought out greater private support for research and development in an attempt to increase the competitiveness and productivity of universities and research institutions. Rather than continue the previous Technology Fund, the Harris administration instituted a new \$3 billion ten-year, competitive-based R&D Challenge Fund to support R&D. The intent of this fund was that

⁶¹ The first funding envelope was linked to enrolment growth of first-year undergraduate and second-entry professional and graduate programs. The second was based on graduation and employment rates.

⁶² Budget Papers 1997 (Ontario, 1997) linked R&D to economic success as follows: successful countries generally invest more in research and development than others. The United States, Japan, Germany, France and the United Kingdom, the high-income G5 countries, invest an average of more than five times as much of their economic resources in R&D as Turkey, Mexico, Greece, Portugal and Spain, the five lowest per capita income countries in the OECD.

government (together with federal funds), the private sector, and universities and research institutions would each provide one-third of research funding. This design ensured that proposed research would meet a market test, evidenced by the willingness of the private sector to contribute to it. By contributing \$500 million over ten years (\$50 million a year), these funds would leverage federal funding from the Canada Foundation for Innovation and other granting councils, and enable Ontario universities to compete effectively for federal grants as well. In 2000/01 the government's contribution was doubled to \$100 million.

In addition, the Tories also instituted seven new tax changes in 1997 to make Ontario's tax system more competitive for R&D. These measures included: the Ontario Business-Research Institute Tax Credit that provided a 20 per cent refundable tax credit for qualifying business sponsored R&D performed by eligible Ontario universities, research hospitals and other non-profit research centers⁶³; changes to the capital and the retail sales taxes associated with research and development; changes to allow firms to deduct the costs of acquiring new technology; and eliminating Ontario's tax on royalty payments for foreign technology, such as software, to foster the commercialization of new technology (Ontario, 1997).⁶⁴

Starting in 2000/01, colleges, universities and research institutes received over \$30 million annually for overhead costs of provincially funded research under a new Ontario Research Performance Fund. Starting in 2001/02, two Premier's Platinum Awards for research

⁶³ Other tax credits include: Sound Recording Tax Credit (1999), Ontario Computer Animation and Special Effects Tax Credit (1997), Book Publishing Tax Credit (1999), Ontario Interactive Digital Media Tax Credit (1998), Ontario Research Employee Stock Option Credit (1999), Educational Technology Tax Incentive (2000) and Cooperative Education Tax Credit (1996).

⁶⁴ To ensure that postsecondary education graduates benefit, the Ontario Co-operative Education Tax Credit was instituted in 1996 as an incentive for businesses to hire postsecondary students enrolled in leading-edge technology programs. While the R&D Challenge Fund and other tax breaks would attract world-class researchers and R&D investment, and improve the quality of teaching and research at participating postsecondary institutions in Ontario, this tax credit would provide eligible businesses with a 10 per cent tax credit for providing on-the-job training for unemployed graduates from an Ontario postsecondary institution. The Harris Tories also took measures to ensure that knowledge-based industries have access to capital through private sector financial institutions and venture capital investments via tax incentives provided to financing institutions.

excellence would be provided by the province each year over the next six years to help Ontario universities attract and keep world-class senior researchers.

Targeting Access to Learning

In response to a forecast shortage of 42,000 computer science and engineering graduates, the Tory government provided \$228 million in funding over three years to establish the Access To Opportunities Program (ATOP), and create 23,000 new spaces in 1998/99. Funding of \$150 million over three years for 17,000 spaces was announced in Budget 1998, and another \$78 million for an additional 6,000 spaces in Budget 1999. The perceived shortage was supported by the observation that in the last ten years, one out of every three jobs in Ontario was created in the knowledge and technology-based industries.

To address shortages in other areas, Budget 2001 provided \$12 million over three years to help foreign trained professionals, including engineering technicians, nurses and other health care workers and teachers, find employment in Ontario. Budget 2002 provided \$50 million over three years to support collaborative degree programs in nursing education and \$14 million over three years for the expansion of undergraduate medical school enrolment by 160 first year spaces. In Budget 1998, the government also announced the Premier's Excellence Awards program, offering \$75 million over ten years to reward excellence in graduate studies in science and technology.⁶⁵ The government's commitment rose to \$85 million by 2001/02 for this program.

To build research infrastructure, the Tories established the Ontario Innovation Trust (\$250 million) and the SuperBuild Growth Fund (\$742 million) in 1999/00. Budget 2000 announced a tripling of the Ontario Innovation Fund by adding another \$500 million for research

⁶⁵ The Ontario Graduate Scholarship was also enhanced and included 500 graduate scholarships in sciences and technology. Budget 2000 also doubled funding for the Work Study Program to fund free tuition for medical students who agree to practice in rural and northern Ontario, helping to alleviate physician shortages in those areas.

infrastructure, including cancer research facilities. The SuperBuild Growth Fund would not only provide investments to modernize the universities and colleges but also promote cooperation between colleges and universities through collaborative programming, partnerships and transfers between them. Budget 2000 added another \$286 million (for a total of \$1 billion) to the SuperBuild Fund (\$1.8 billion including partner contributions) to support an additional 24 capital projects at universities and colleges, and create a total of 73,000 new student spaces.⁶⁶ By 2003, the SuperBuild funding had created a total of 135,000 new spaces.

Targeting Quality Learning

The government also increased operating grants to colleges and universities, albeit not in direct proportion to the number of increased spaces. In 1998/99, in recognition of the increased number of students, universities received an additional \$29 million over three years in annual grants. Northern and rural colleges received an operating funding enhancement totaling \$16 million in 2002/03. Two Quality Assurance Funds were created in Budget 2003, one for universities and the other for colleges. Universities received \$75 million in 2003/04, rising to \$200 million by 2006/07, and colleges received \$60 million in 2003/04, rising to \$100 million in 2006/07. Much of any additional funding was designated for specific purposes and some of it was delivered in specific envelopes. Between 1999/00 and 2003/04, the annual operating grant to colleges and universities grew from \$2.3 billion to \$2.8 billion, increasing as follows:⁶⁷

1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
\$2.3 billion	\$2.4 billion	\$2.4 billion	\$2.5 billion	\$2.6 billion	\$2.8 billion

⁶⁶ Budget 2001 provided maintenance costs for the upkeep of colleges and universities estimated at \$100 million was provided.

⁶⁷ Budget 2003 projected annual operating grants to colleges and universities as follows: \$3.0 billion in 2004/05 and \$3.1 billion in 2005/06. The specific increase was: \$23 million in Budget 1999, \$293 million over three years in Budget 2001 and an additional \$75 million in Budget 2002 to address higher enrolment.

In response to the double cohort and rising concerns about increasing tuition and the overall cost of postsecondary education undermining access and quality, the Investing in Students Task Force was established in September 2000 to advise the Minister of Training, Colleges and Universities on ways to ensure that public funds supporting postsecondary education were directed at providing the highest quality of education for students while ensuring access, affordability and accountability.⁶⁸ Its stated mandate was to study college and university administrative operations across the province, examine options for shared services and identify best practices for administrative functions such as information technology, procurement and data collection (Ontario Investing in Students Task Force, 2002). Through operating improvements, universities and colleges committed to make another 36,000 spaces available (Ontario, 2002b).

Targeting Trades and Skills Learning

Like previous governments, the Tory government also emphasized skill development. However, it went one step further to create a polytechnic university that would link college and university curricula. Recognizing that the apprenticeship system was in need of revitalization to attract more students, Budget 2000 announced a new Apprenticeship Innovation Fund to provide \$15 million over three years to modernize classroom training for existing and new programs. The fund was inspired by Durham College partnership with seven private sector organizations to create the new Manufacturing and Information Technology Centre, which would be a state-of-the-art facility with 3,000 additional student spaces. In 2001, the next year, the government announced the establishment of a new university on the campus of Durham College—the University of Ontario Institute of Technology (UOIT)—as well as \$60 million in capital funding

⁶⁸ Recommendations included a seamless system for transferability, differentiation of institutions' missions, a new Figureer for colleges to permit generation of new revenue and partnership, and a clearer accountability framework for public institutions and annual reporting of strategies, accomplishments, performance indicators and student benefits.

for it. The new UOIT would focus on preparing students for careers in fields such as applied health sciences, business and information technology, and advanced manufacturing, allowing students flexibility to move seamlessly between college and university programs. Also, in July 2001, the Ontario College of Art and Design was given degree-granting status.

The Tory government also established new institutes offering degrees in trades. The beginnings of these institutes can be traced to government-industry projects to enhance strategic skills. Budget 1997 announced a commitment of up to \$12 million for the creation of the Animation, Communications Design and Technology Centre to build on the success of the computer animation program at Sheridan College. Budget 1998 announced four more projects totalling \$115 million including: Georgian College and the Industrial Research and Development Institute to provide advanced training in automotive parts design and manufacturing technology; partnership with the Canadian Film Centre to enhance new media skills training; the Telecommunications Learning Institute at Humber College to provide skills training for the telecommunications industry; and metal machining, engineering and information technology training at Conestoga College. In Budget 1999, the Tories provided another \$100 million over five years to this program to reach a total of \$500 million for strategic skills training. Probably as a means to get around the transferability of credits hurdle between colleges and universities, the government created three new Institutes of Technology and Advanced Learning at Humber, Conestoga and Sheridan colleges and a new Institute of University Partnerships and Advanced Studies at Georgian College to expand degree-level learning in 2003.

Furthermore, the Tory government has invested approximately \$120 million since Budget 2000 in the apprenticeship system, including: \$33 million by 2004/05 to double the number of entrants to apprenticeship programs in skilled trades from 11,000 to 22,000 (Ontario, 2001a);

another \$25 million by 2005/06 (Ontario, 2002a); \$50 million over five years in capital funding for the College Equipment and Renewal Fund for up-to-date equipment and facilities in colleges for apprenticeship programs starting 2001/02 (Ontario, 2001a). In addition, Budget 2003 announced: \$5 million to renew the Lifelong Learning Challenge Fund at TVOntario to develop online training projects in partnership with employers; a new model which would combine college diplomas with apprenticeships; renewed programs to assist women in trades; and a new refundable Apprenticeship Tax Credit for employers in order to create jobs and increase the supply of skilled-trades workers in Ontario.

Targeting Access for Learning Disabled and Disadvantaged Students

The PC government targeted a variety of investments and programs to help students overcome financial barriers as well as to assist those with learning disabilities. The Ontario Student Opportunities Trust Funds (OSOTF), established in 1996, was one such program designed to allow universities and colleges to assist academically qualified individuals who face financial barriers to postsecondary education. This program requires institutions to raise funds, which would be matched on a dollar-to-dollar basis by the province, to create endowments for student assistance. It highlights one distinction between the Harris Tories and other right wing groups, in that the Tories supported welfare state measures to provide relief or opportunity to the least advantaged.⁶⁹ Alternatively, it could be a response to the recognition of inequalities created by the market economy, and that not all social groups enter the education market as equals. Hence, there is a need to ensure that a lack of financial resources does not limit opportunities for students to pursue postsecondary education. By 1999, more than \$600 million had been raised to

⁶⁹ Budget 1998 introduced a variety of measures to support and provide opportunities for people with disabilities by increasing accessibility to employment, transportation, education and training so that they could get off welfare and contribute to the economy. Underpinning these measures is the conservative ideology that values the well being of individuals only to the extent that it is a duty and necessary for maintenance of the strength of the community (Johnston, 1996).

help 185,000 college and university students over a ten-year period. Phase two of the Fund was introduced in Budget 2003 with a commitment of \$400 million to enable an estimated 400,000 students to attend colleges and universities over the next decade.

To further assist students in overcoming financial barriers, Budget 1998 announced a new Canada-Ontario Millennium Fund for Students (\$9 billion over ten years) to meet the financial needs of approximately 200,000 students and limit student debt. Budget 1999 also established a new Aiming for the Top tuition scholarship to help students who earn top marks and require financial assistance to attend postsecondary education starting in September 2000. The \$35 million provided would fund an award of up to \$3,500 to 10,000 students for up to four years. If matched by the private sector, the number of students assisted would double.

For students with learning disabilities, the Tory government also implemented some recommendations from the Learning Opportunities Task Force (1998), initiating nine pilot projects to integrate and support learning-disabled students in nine CAATs and four universities. The projects provided postsecondary programs needed by over 2,000 learning-disabled students over the next five years. By 2003, \$14 million had been committed to provide special support for students with learning disabilities.

Tuition Fee Policy

The Tory government thought it appropriate that students should pay 35 per cent of the cost of university and college education. It instituted a five-year cap on tuition fee increases for most programs at 2 per cent over the maximum allowable levels set in 1999/2000. While fees for general arts and science programs were generally regulated, fees for engineering and computer science programs were deregulated. Fees were also deregulated for graduate and

certain professional programs including business/commerce, dentistry, law, optometry, pharmacy and veterinary medicine.

Private Institutions

The *Postsecondary Education Choice and Excellence Act*, 2000 permits private institutions to operate a university or to offer programs leading to a degree, either with the consent of the Minister or by an act of the Legislative Assembly. To ensure quality of programs, all applications for ministerial consent must be referred to the Postsecondary Education Quality Assessment Board (QAB). The QAB, an advisory board, makes a recommendation after conducting an evaluation. With the exemption of existing Ontario degree-granting institutions, all other institutions, including out of province degree-granting institutions and colleges, are subject to the QAB process. This legislation opens a door for CAATs to offer programs leading to degrees and blurs the traditional distinction between universities and colleges in Ontario.

A number of universities from other jurisdictions have been lobbying the Ontario government to allow them to operate a university campus in Ontario.⁷⁰ Under the *Degree Granting Act*, 1983 consent was given where the degree program was in an area that Ontario universities were unable or unwilling to meet student demand or societal needs.

Proponents of the policy to permit private institutions to operate in Ontario argue that it would increase options for students and their parents to choose institutions that match their needs and preferences. It would also increase access without putting more financial strain on government and taxpayers, and increase competition. Competition, in turn, would stimulate public institutions to further enhance quality of performance and accountability. And, if the

⁷⁰ Such universities include the University of Phoenix, Lansbridge University, and British IMC University. The University of Southern California was granted permission in 1999 to offer diploma programs.

appropriate measures are adopted, high standards and quality would prevail both private and public institutions (Powell, 2004).

Access and Funding Policy Under the Liberals (McGuinty)

Given that the McGuinty Liberals won the election in late 2003, they have not had sufficient time to implement policies that warrant inclusion in this examination. There is no doubt that the Liberal government also sees the link between education and economic growth. For the Liberals, education is more than an economic imperative. It is the measure of Ontario's commitment to opportunity and the foundation of an engaged citizenry and a strong democracy (Ontario, 2005b).

Its first Liberal budget contains elements of access policies consistent with preceding governments, including a two-year freeze on tuition fees (with compensation to make up revenue shortfalls from both years of the freeze), improvements to student financial assistance, increased funding to postsecondary education, and commitments to research and development. Its *Getting Results for Ontario Progress Report* (Ontario, 2004c) identifies three key priorities: student success (in K – 12 education), better health and strong people, and a strong economy. Under strong people and a strong economy, the goal is increased participation in postsecondary education and skills training. The strategies include increasing enrolment in postsecondary education by 50,000 full-time students; restructuring the funding and design of postsecondary education; increasing the number of apprenticeship registrations by 7,000; increasing employer incentives to train more skilled trades apprentices; and providing support and incentives for youth and those lacking basic skills to improve their job prospects in the high-skill economy.

The Liberal government commissioned former premier Bob Rae to conduct a comprehensive review of postsecondary education not long after it formed the government. His

mandate was to make recommendations on how to provide Ontarians “with a high-quality, accountable, affordable systems of postsecondary education – one that gives Ontarians the opportunity to achieve their full potential, regardless of income” (Ontario 2004a, p. 18). The *Rae Report* (Rae, 2005) formed the basis of *Reaching Higher: The McGuinty Government Plan for Postsecondary Education* (Ontario, 2005c).

Reaching Higher (Ontario, 2005c) includes a \$683 million increase in 2005/06, rising to \$1.6 billion by 2009/10, and representing a 39 per cent increase from 2004/05 to improve access, quality and accountability in postsecondary education. Access goals include enhanced student financial assistance, increased enrolments, and expanded opportunities for aboriginals, francophones, new Canadians, persons with disabilities and students whose parents did not attend postsecondary institutions. Some specific goals include: expanding graduate education by 12,000 full-time students by 2007/08 and 14,000 students by 2009/10; expanding first-year medical education spaces by 15 per cent; increasing the number of new entrants into apprenticeships to 26,000 by 2007/08; and to have a new tuition framework in place by September 2006. Of the \$1.6 billion by 2009/10, \$358 million is for improving student financial assistance; \$1,156 million is to increase operating grants to colleges and universities; and \$87 million for training, apprenticeships and other programs (Ontario, 2005a).

Fiscal Policy Related to Access

Over the last 15 years, public attention has been focused on fiscal responsibility and lower taxes. These demands have placed governments between a rock and a hard place when it comes to funding social services such as health and education. Unless endowed with other revenues, governments have had to make trade-offs among government priorities by spreading their available resources, often very thinly, among various programs. It is not uncommon for

funding rate increases to fall behind the rate of inflation. Rae (2005, p. 24) indicates that “governments in the past have often taken the position that funding is a matter entirely of what government in any given year thinks it can afford rather than what the revenue needs of the institutions really are”. Throughout the period covered in this study, and even more so today, postsecondary education has had to compete for government resources with health care. As baby boomers grow older, the need for health care resources will only increase.

Generally speaking, postsecondary funding is influenced by a combination of key factors including economic conditions, competing government priorities, government's fiscal plan, provincial ideology and federal transfer payments. Given that postsecondary education has been a priority for government, funding measured in nominal dollars shows that spending has increased almost every year, with some exceptions. When measured in constant dollars, however, funding for postsecondary education per student has decreased. This decrease suggests that more of the actual costs of education are devolved to students through increased fees. Given the restrictions on fee increases, the quality of postsecondary education has been compromised as result of under-funding.

There are several potential ways to resolve this funding gap. One avenue is greater federal funding through increased transfer payments as called for by Rae (2005). The health sector, particularly in British Columbia had been required by the BC government to find new ways of delivering services more cost-effectively through outsourcing and job scope re-definitions. Likewise, postsecondary education may find ways to “do more with less”, or otherwise find alternative funding sources such as private donations, partnerships with business enterprises, and income from royalties and commercialization of its patented technology and research findings. The issue could become more problematic if and when the electorate begins

to expect not only lower taxes and balanced budgets, but also debt reduction in the absence of significant economic growth.

The following section presents a discussion of fiscal policies from 1985 to the present, in relation to postsecondary education within the prevailing economic context. The description and analysis intends to characterize the relationship between postsecondary education funding and economic conditions.

Fiscal Policy under the Liberals

The Liberals had the great fortune to form a government in the late 1980s, just as the economic struggles of the mid- to late-1970s and early 1980s were giving way to a short boom period. Table 4.1 shows some key economic indicators during the Peterson administration. For the first four consecutive years, real growth in Ontario exceeded 4 per cent. As a result of this little boom, the Peterson regime was able to increase spending while delivering the first balanced budget in 20 years in 1989/90. This balanced budget occurred despite dramatic decreases in federal transfer payments.⁷¹ The balanced budget was achieved not through fiscal conservatism but through revenue growth because of strong economic conditions and tax policy changes. However, the tax and spend approach was not sustainable and the economic bubble eventually burst in 1990.

During this period, revenue grew from \$26 billion to \$43 billion, an increase of 65 per cent. Notwithstanding large revenues, total provincial debt also grew from approximately \$33 billion to \$42 billion, an increase of 27 per cent, because of government borrowing to cover

⁷¹ Between 1979/80 and 1989/90, the federal government had reduced Established Programs Financing payments by \$1.2 billion for health and postsecondary education as well as another \$560 million for other federal funding. Budget 1989 estimates that the federal share of these programs dropped to less than 38 per cent from a high of 51 per cent in 1979/80. The federal government has also reduced its commitment by 50 per cent for regional economic development in Ontario.

the large deficits and capital spending. For example, Budget 1987 provided for a capital budget increase of: \$79 million for school facilities; \$260 million over three years for upgrade and expansion of the transportation system; and \$220 million for the construction of affordable rental housing as part of government's strategy to enhance housing and integrated support services for the homeless, the disabled, discharged psychiatric patients, victims of family violence, the frail elderly and other socially disadvantaged groups (Ontario, 1987).

Table 4.1: Some Key Economic Indicators (1985/86 – 1990/91).

Year	GDP Growth (%) (\$1986)	Unemployment Rate (%)	Inflation Rate (%)	Budget (\$B) Surplus/ (Deficit)	Revenue (\$B)	Debt (\$B)
1985/86	5.3	8.0	4.1	(2.6)	26.2	32.9
1986/87	6.1	7.0	4.4	(2.6)	29.5	35.1
1987/88	4.5	6.1	5.0	(2.5)	32.5	37.0
1988/89	6.7	5.0	4.8	(1.5)	37.3	39.0
1989/90	2.2	5.1	5.7	0.09	41.7	39.3
1990/91*	-3.0	6.3	4.9	(3.0)	43.4	42.3

* The 1990/91 Budget Plan was to return a surplus of \$30 million. However, because of the onset of recession, a \$3 billion deficit occurred. By then, the Liberals were no longer in power.

Source: Ontario Ministry of Treasury and Economics, Ontario Economic Outlook and Budget Papers (1985 – 1992).

The year-to-year increase in funding for colleges and universities more or less approximated the year-to-year increase in the province's total budget spending, except during 1988/89 and 1989/90 when the annual rate of increase differed by approximately 2.5 percentage points. Table 4.2 outlines the expenditure plan for postsecondary education and other program areas during the Liberal regime. When total spending increased by 7.5 percent in 1986/87, and by 7.8 per cent in 1990/91, the budget of colleges and universities increased by 7.3 per cent and 8.5 per cent respectively. However, as a percentage of budgetary expenditures, the budget for colleges and universities was on a downward slide from 6.7 per cent (in the early years between 1985/86 and 1987/88) to 6.4 per cent (in the later years, 1988/89-1990/91). In contrast, the

portion of spending for health and community and social services remained on an upward climb throughout the Peterson administration.

Overall, the rate of budget increases for colleges and universities does not appear to follow a consistent pattern in relation to the GDP growth rate. In 1988/89, the highest year of GDP growth, the spending increase for colleges and universities was relatively moderate compared to the spending increase in 1987/88 (a year when GDP growth was not at its strongest). The budget increases for colleges and universities also do not appear to correspond to the provincial budget's rate of increase. While the rate of change in the provincial budget was highest in 1988/89, the rate of increase for the budgets of colleges and universities was highest in 1987/88.

Table 4.2: Expenditure – Budget Plan 1985/86 to 1990/91.

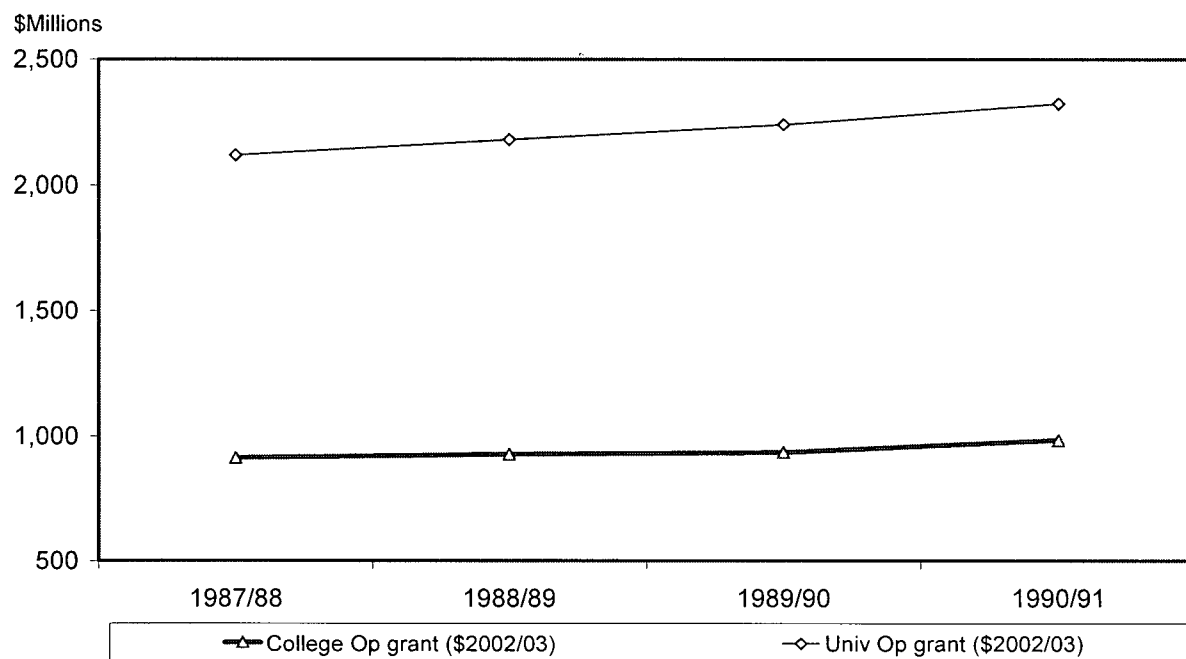
Ministry Expenditure (\$M)	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91
Colleges and Universities (CAU)	1,928	2,069	2,300	2,473	2,636	2,861
Community and Social Services	2,826	3,087	3,551	4,243	4,971	5,761
Education	3,637	3,477	4,235	4,561	4,900	5,456
Health	8,966	9,853	11,050	12,435	13,714	15,063
Skills Development	418	456	455	408	433	248
Rest of government	11,080	11,633	12,300	13,359	14,203	14,869
Total Budgetary Expenditure	28,855	31,031	34,346	37,887	41,290	44,506
% YTY Change of CAU		7.3%	11.2%	7.5%	6.6%	8.5%
% YTY Change of Total Budget		7.5%	10.7%	10.3%	9.0%	7.8%
% share of Total						
Colleges and Universities	6.7%	6.7%	6.7%	6.5%	6.4%	6.4%
Community and Social Services	9.8%	9.9%	10.3%	11.2%	12.0%	12.9%
Education	12.6%	11.2%	12.3%	12.0%	11.9%	12.3%
Health	31.1%	31.8%	32.2%	32.8%	33.2%	33.8%
Skills Development	1.4%	1.5%	1.3%	1.1%	1.0%	0.6%
Rest of government	38.4%	37.5%	35.8%	35.3%	34.4%	33.4%
GDP at market prices (\$B)	184	201	224	250	272	277
CAU Exp as % of GDP	1.04%	1.03%	1.03%	0.99%	0.97%	1.03%
% Change in GDP at market prices		9%	11%	12%	9%	2%

Source: Ontario Ministry of Treasury and Economics, Budgets.

These patterns suggest that funding decisions for colleges and universities during this period were not determined primarily by economic conditions but other factors, including educational policies and competition for resources by other government programs. For example, in 1987/88, the Liberal government provided its largest increase to postsecondary education because it was the government's top priority in that year to improve the quality of education in Ontario and alleviate widespread structural unemployment that was caused by the major restructuring of the world economy. Beginning in 1985/86, major layoffs had occurred in Ontario as a result of major restructuring in the world economy. By then, 27,000 Ontarians had lost their jobs. The government saw education not only as essential for long-term economic growth but also as a vehicle to deliver lifelong opportunities for learning and skills development.

Literature suggests that there is a strong trend toward vocationalism over the past 25 years, while there is also widespread agreement that a good university education is more appropriate to a high technology and knowledge-based economy (Brown et al, 1997). Figure 4.1 compares the provincial grants to the college and university sectors and the year-to-year changes. It suggests that if there was an emphasis on any one sector, it was the university sector. Throughout the Peterson administration, provincial grant increases to universities were higher than those to colleges. Outside of 1990/91, when the increase was 5 per cent, annual increases to colleges were in the 1 to 3 per cent range. Increases to universities were in the 3 to 4 per cent range. In 1990/91, when economic conditions turned sour, universities continued to receive funding increases of 4 per cent and colleges received 5 per cent.

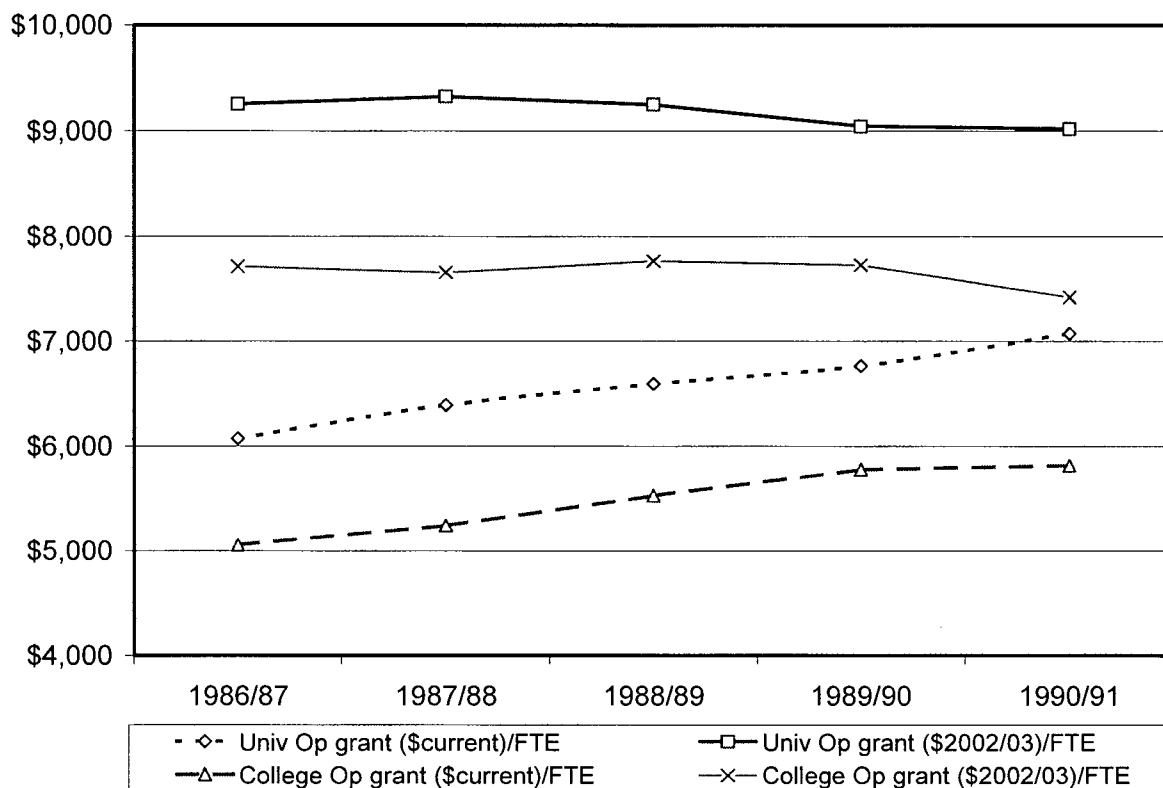
Figure 4.1: Operating Grants from the Province in Constant Dollars (1987/88 – 1990/91).



Source: COU, Resource Document and ACAATO, Environmental Scan.

Figure 4.2 shows the provincial grant per FTE in current and real dollars by sector. The patterns indicate that provincial grants to universities on an FTE basis remain approximately \$1,500 higher on average than grants to colleges during that period. While the grant for universities increased annually, the grant per FTE steadily decreased starting in 1987/88. The university grant per FTE was approximately \$9,250 in 1986/87, and declined to \$9,020 by 1990/91 (in constant dollars). As for colleges, the grant per FTE also generally decreased during that period from \$7,710 in 1986/87 to \$7,420 in 1990/91 (in constant dollars).

Figure 4.2: Operating Grants from Province per Full-Time Equivalent Student (1986/87 – 1990/91).



Source: COU, Resource Document and ACAATO, Environmental Scan.

Fiscal Policy Under the New Democrats

Soon after the NDP took office, the little boom of the late 1980s busted and Ontario's economy was in deep trouble. To make matters worse, the budget decisions of the Mulroney federal government affecting transfer payments under the Canada Assistance Plan (CAP) and Established Programs Financing (EPF) resulted in significant revenue losses to Ontario. As a result of the extension of a per capita freeze on entitlements for EPF and a 5 per cent annual growth limit for CAP, Ontario stood to lose \$2.7 billion for EPF and \$1.8 billion for CAP in 1992/93.⁷² There was no doubt that Ontario was in a recession in 1991. Compared to the 1982

⁷² The 1992 Ontario Budget indicated that the effects of the federal restrictions on major transfers have been concentrated in Ontario. Ontario would bear almost one-half of all 1991/92 revenue losses suffered by provinces as

recession, the 1991 recession reflected more serious structural changes. In 1982, 24 per cent of major layoffs were owed to permanent closures compared to 65 per cent in 1990. Also, business bankruptcies were up 73 per cent in 1990 compared to the previous year, whereas the bankruptcy rate was 24 per cent higher in 1982 compared to 1981 (Ontario, 1991).

Table 4.3 shows some key economic indicators for Ontario during the NDP regime. As a result of the NDP's attachment to economic theories that suggest governments can successfully spend themselves out of a recession, the 1991 Budget set out a plan for an unprecedented amount of provincial spending at \$53 billion⁷³ including capital expenditure, leaving a deficit of approximately \$11 billion.⁷⁴ The 1992/93 deficit turned out to be even higher, at approximately \$12 billion, such that interest payments alone were as much as government spending on schools, and were completely unsustainable. Budget 1992 contained savings measures but it in essence followed the same spending pattern and increased provincial spending to \$55 billion.

Table 4.3: Some Key Economic Indicators (1991/92 – 1995/96).

Year	% GDP Growth (\$1992)	Unemployment Rate (%)	Inflation Rate (%)	Budget (\$B) Surplus/ (Deficit)	Revenue (\$B)	Debt (\$B)
1991/92	-3.2	9.6	4.7	(10.9)	40.8	53.1
1992/93	1.1	10.9	1.0	(12.4)	41.8	68.6
1993/94	1.1	10.6	1.8	(11.2)	43.7	79.4
1994/95	4.7	9.6	0.0	(10.1)	46.0	88.6
1995/96	3.3	8.7	2.5	(8.8)	49.5	101.4

Source: Ontario Ministry of Treasury and Economics, Ontario Economic Outlook 1998.

a result of transfer limits. The limit amounted to \$1,748 for a family of four in Ontario in 1992/93. All other provinces taken together experienced a loss of \$1,130 per family of four (see Table 2 on p.113).

⁷³ As White (1998) says, this amounted to total spending of some \$4,150, in constant 1986 dollars, for every person in the province – up dramatically from \$3,640 per person in Bob Nixon's 1986 Budget, or a mere \$3,007 per person in Frank Miller's hard times budget of 1982.

⁷⁴ Robin Smear, principal secretary to Bob Rae (then NDP opposition leader in 1988), advised the NDP caucus as follows: "The size of the debt does not leave a great deal of room for significant growth – as would be required in any major counter-recessionary spending undertaken to fight the downturn...A Keynesian solution to rising unemployment and declining growth would be risky and probably short-lived – even in Ontario. We would not have the capacity to double the deficit to kick-start the economy as was done in the past two sharp recessions" (quoted in Ehring and Roberts, 1993, p. 203).

As a result of its decision to fight the recession, the NDP government spent its remaining time in office increasing taxes⁷⁵ and making deep spending reductions including implementing the Social Contract⁷⁶ and Expenditure Control Plan, even after economic conditions began to improve in 1993/94.⁷⁷ The recovery was underpinned by a strong rise in exports, notably auto exports to the United States, and increased business investment in processing and other equipment. Key factors that promoted strong economic activity included low nominal interest rates and the depreciation of the dollar to a more competitive level (Ontario, 1993b).

During the Peterson administration, the rate of budget increase for colleges and universities did not appear to follow a consistent pattern in relation to the GDP growth rate.⁷⁸ Table 4.4 illustrates the budget/expenditure plan for postsecondary and other program areas during the Peterson administration. In 1994/95, the year of highest GDP growth, there was a spending reduction for education and training. The largest spending increase took place in 1991/92 when GDP growth was at -3.2 per cent as a result of the NDP's strategy to fight the recession through spending increases.

⁷⁵ For example, Budget 1993 increased the Personal Income Tax for the wealthiest bracket and introduced a Corporate Minimum Tax on profitable corporations.

⁷⁶ As a result of popular resistance to it, Rae himself opined that the "Social Contract was a good idea but it was a political failure" (White, 1998, p. 235). Announced in Budget 1993, the Social Contract in essence was a strategy to reduce public sector spending by \$2 billion across the board while avoiding the elimination of 20,000 – 40,000 jobs. It entailed restructuring services, redeploying workers to new jobs and retraining workers as the workplace changes (the details of which were to be worked out between employers and unions). The Social Contract included a failsafe that permitted employers to negotiate for new compensation to meet government targets, and failing that, the employers had the authority to unilaterally institute measures to reduce compensation (Ontario, 1993a).

⁷⁷ The slow pace of recovery was largely attributed to an ongoing overhaul of Ontario's industrial structure. Changing technology and lower world trade barriers precipitated widespread restructuring across the economy. Thus, the long-term unemployment increase was attributed not only to a slow recovery but skill mismatches that limited opportunities for immediate re-employment.

⁷⁸ Where the Liberal government had failed in reducing the bureaucratic behemoth created during the PC Dynasty, the Rae government succeeded. In doing so, it became unpopular with the labour movement and the political left who were not concerned with large debts and deficits (White, 1998).

Table 4.4: Expenditure – Budget Plan 1991/92 to 1995/96.

Ministry Expenditure (\$M)	1991/92	1992/93	1993/94	1994/95	1995/96
Education and Training*	9,360	9,363	9,683	8,782	8,979
Community and Social Services	8,142	8,544	8,884	9,372	8,968
Health	17,394	17,525	17,571	17,352	17,744
Rest of government	12,913	15,211	13,910	15,982	16,632
Total Budgetary Expenditure	47,809	50,643	50,048	51,488	52,323
% YTY Change of E&T	10.9%	0.0%	3.4%	-9.3%	2.2%
% YTY Change of Total Budget	11.9%	5.9%	-1.2%	2.9%	1.6%
% share of Total					
Education and Training	19.6%	18.5%	19.3%	17.1%	17.2%
Community and Social Services	17.0%	16.9%	17.8%	18.2%	17.1%
Health	36.4%	34.6%	35.1%	33.7%	33.9%
Rest of government	27.0%	30.0%	27.8%	31.0%	31.8%
GDP at market prices (\$B)	281	286	293	307	324
CAU Exp as % of GDP	3.33%	3.27%	3.30%	2.86%	2.77%
% Change in GDP at market prices		2%	2%	5%	6%

* The Education and Training Estimate Budget shown is the sum of Education, Colleges and Universities and Skills Development in 1991/92 and 1992/93. During a government reorganization, the K - 12 education, colleges and universities and skills development were merged into one portfolio.

Source: Ontario Ministry of Treasury and Economics, Budget Papers.

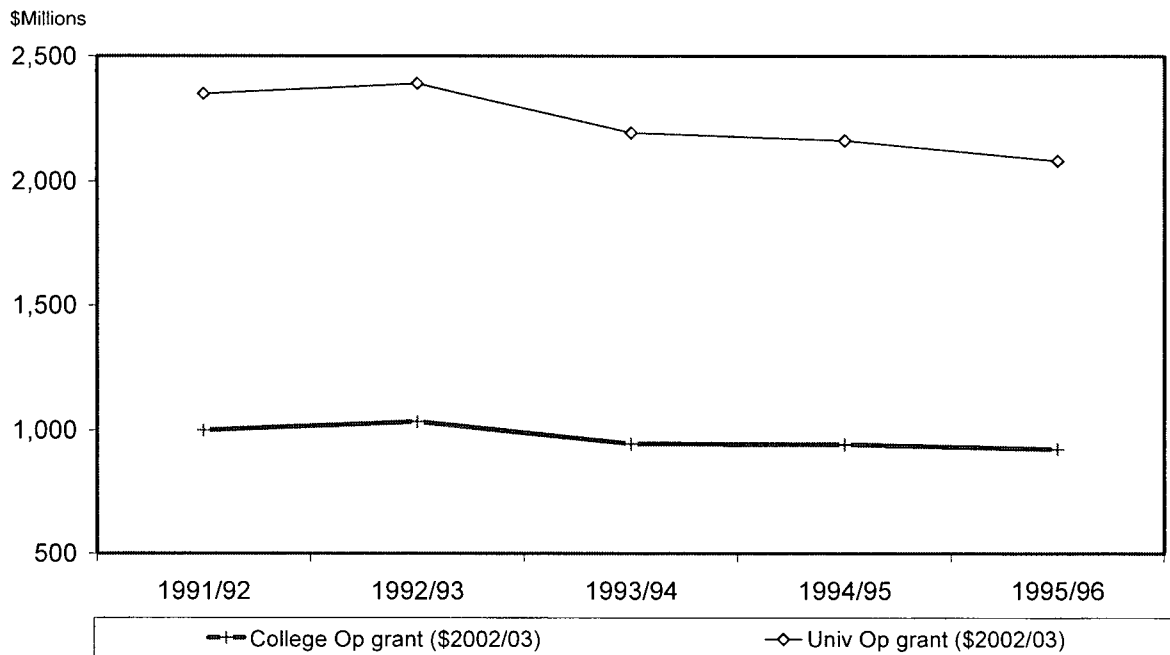
The rate of budget increases for education and training did not consistently correspond to the rate of increases in the provincial expenditure budget. There was some correlation in 1991/92 and 1995/96, but not in the years in between (see Table 4.4). In 1994/95, Education and Training lost its second place after Health, with respect to its share of the provincial budget to Community and Social Services. The share of spending for Education and Training declined during the Rae administration as well, from approximately 20 per cent to 17 per cent. Concerning social services, the Ministry of Community and Social Services was the single greatest beneficiary of increased public spending to fight the recession. Its funding increased from \$5.8 billion in the 1990/91 Estimates to \$8.2 billion in the 1991/92 Estimates. The spending decision is consistent with the liberal principle that in times of severe economic

hardship, those on the lowest rungs of the social and economic ladder deserve the greatest help (White, 1998).

Figure 4.3 shows the provincial grants for operating expenditures of colleges and universities in constant dollars and the annual rate of change. Compared to the Liberal government, the Rae administration appeared to emphasize vocationalism slightly more than (a good) university education. The establishment by the Rae administration of the University Restructuring Steering Committee, suggests that a perception existed that universities could do better at providing education that would meet the needs of the emerging labour market. Recognizing that universities play a critical role in increasing economic productivity, universities received some funding increases in 1991/92 and 1992/93. However, on a percentage basis, the increases were less than those to the college sector. The NDP government provided significant funding increases in those years in spite of a recession because it had hoped to spend itself out of the recession.

Unfortunately the spending strategy not only failed but also resulted in large deficit budgets. Therefore despite improved economic conditions starting 1993/94, cuts to spending were instituted during the latter years of the Rae government to deal with a deficit of approximately \$12 billion. When the cutbacks were made, funding reductions were more dramatic for universities than for colleges.

Figure 4.3: Operating Grants from the Province in Constant Dollars (1991/92 – 1995/96).

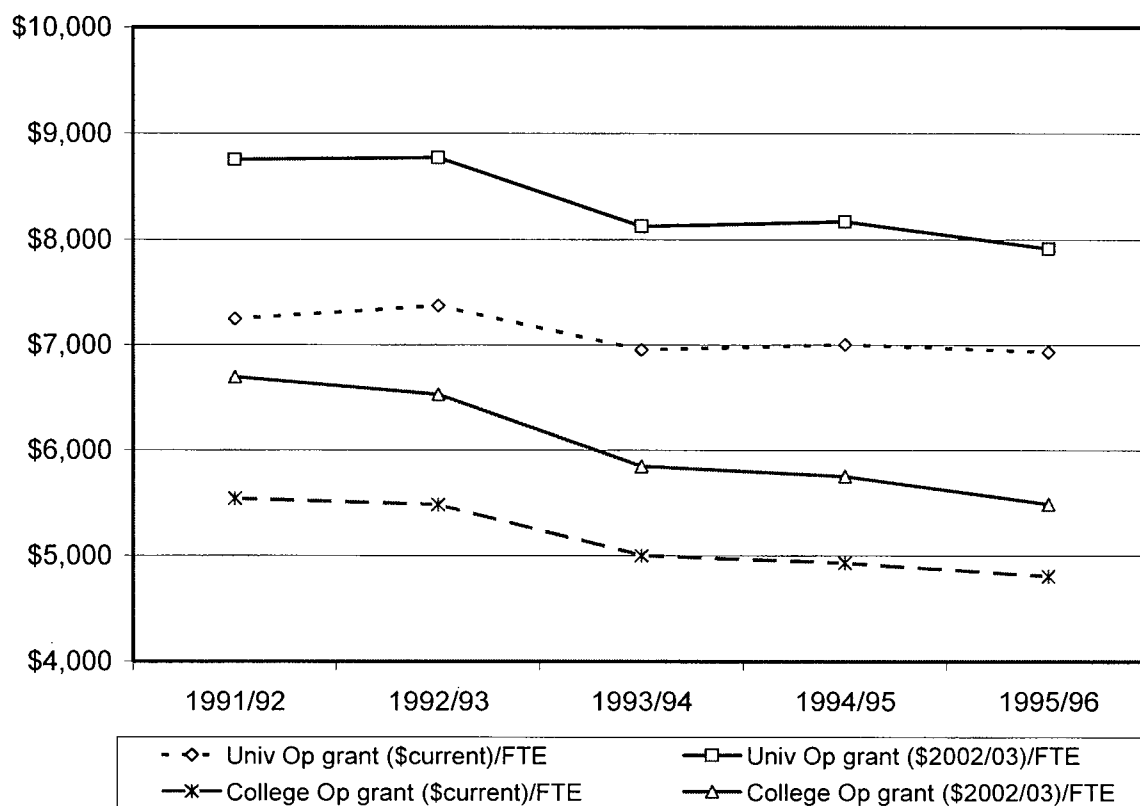


Source: COU, Resource Document and ACAATO, Environmental Scan.

Figure 4.4 indicates provincial grants to colleges and universities on an FTE basis in current and constant dollars. The university grant per FTE declined from approximately \$8,750 in 1991/92 to \$7,920 by the end of the Rae administration, a decrease of 10 per cent.⁷⁹ The college grant per FTE decreased from \$6,690 in 1991/92 to \$5,490 in 1995/96, a drop of 18 per cent. The college sector was squeezed harder than universities during this period. The average difference in per provincial funding per FTE for colleges and universities was \$2,285, approximately \$780 more than the previous administration.

⁷⁹ According to COU, between the late 1970s and 1994/95, total spending by universities for each student declined by 11 per cent, in constant dollar terms, while spending for each hospital patient increased 83 per cent, for each elementary and secondary school student by 35 per cent, and for each adult offender by 2 per cent. COU further concludes that Ontario has one of the most poorly funded university systems in all of North America. See Council of Ontario Universities, *The Financial Position of Ontario Universities*, October 1996.

Figure 4.4: Operating Grants from Province per Full-Time Equivalent Student (1991/92 – 1995/96).



Source: COU, Resource Document and ACAATO, Environmental Scan.

Fiscal Policy Under the Progressive Conservatives

When the Harris administration started its term in office, the economy was still sluggish. However, the economy turned around and began to grow in 1997 at a rate that surpassed the government's projections.⁸⁰ The Ontario economy had strengthened as a result of cyclical changes in the international markets and, as Courchene and Telmer (1998) would say, not because of anything the government did or omitted to do. As Table 4.5 indicates, throughout the Harris administration, with the exception of 2001/02, Ontario enjoyed economic growth rates of over 4.5 per cent. During that period, Ontario enjoyed the lowest interest rates, the lowest

⁸⁰ Real GDP growth projections by the Ontario Ministry of Finance were 2.8 per cent and 3.0 per cent for 1997 and 1998, respectively (Ontario, 1996). You don't have a reference for this citation.

inflation rates and the most competitive economy since the Robarts era in the 1960s. As a result, the Harris Tories delivered a surplus budget at the end of 1999/2000 despite estimating a deficit, and tabled a balanced budget in 2000/01 as promised. The Harris government successfully delivered four consecutive balanced budgets starting in 1999/2000.

Table 4.5: Some Key Economic Indicators (1996/97 – 2003/04).

Year	% GDP Growth (\$1997)	Unemployment Rate (%)	Inflation Rate (%)	Budget (\$B) Surplus/ (Deficit)	Revenue (\$B)	Debt (\$B)
1996/97	1.1	9.1	1.5	(6.9)	49.5	108.8
1997/98	4.5	8.4	1.9	(4.0)	52.5	112.7
1998/99	4.8	7.2	0.9	(2.0)	55.8	114.7
1999/00	7.5	6.3	1.9	0.7	64.8	134.4
2000/01	5.6	5.7	2.9	1.9	66.0	132.5
2001/02	1.8	6.3	3.1	0.4	66.2	132.1
2002/03	3.6	7.1	2.0	0.1	68.6	132.6
2003/04*	1.3	7.0	2.7	(6.2)	68.3	139.4

* Interim figures from Budget Papers, 2004.

Source: Ontario Ministry of Treasury and Economics, Ontario Economic Outlook 2003.

In order to tackle Ontario's deficit of approximately \$11 billion, the Tories' Budget 1996 contained two simple measures. The first measure was reduced personal income tax for every taxpayer in Ontario, and the second was reduced government spending.⁸¹ Believing that a tax cut is the best strategy for job creation, the Harris Tories promised a 30 per cent income tax cut over three years to benefit all taxpayers, even when the budget deficit forecast that year was \$8.1 billion. The 1996 Budget announced a personal income tax cut resulting in an estimated \$4.8 billion reduction in government revenues in 1997/98 (Ontario, 1997). The belief that a "smaller government presence in the economy was closely associated with stronger economic performance ...[and that] too much government spending can hamper growth" (Ontario, 1996a, pp. 82-83) underpinned the Harris Tories' planned cost savings of approximately \$3 billion from

⁸¹ When the final phase is implemented, more than 90 per cent of Ontario taxpayers will see an income tax cut of at least 30 per cent with the middle-income taxpayers (\$25,000 to \$75,000) receiving \$64 per cent or almost \$3 billion of savings from tax cut every year.

government spending by fiscal 1997/98.⁸² Because of economic growth, the Tories balanced the budget in 1999, one year ahead of schedule.

Confident that tax cuts were the keys to economic growth, the Tories implemented more tax cuts.⁸³ In Budget 2001,⁸⁴ contrary to those who said that tax cuts would reduce government revenues, James Flaherty, then Minister of Finance, indicated that “since we started cutting taxes, our tax revenues have increased by more than \$15 million” (Ontario 2001b, p. 6). He announced Ontario’s Edge, a package of initiatives to keep businesses strong that included four components: corporate income tax cuts, capital tax cuts, a tax incentives review, and infrastructure (namely transportation and environmental initiatives) (Ontario, 2001b, p. 6). The Tories held to the position up to the last year of their mandate that tax cuts are the key to economic growth. The 2003 Budget Speech indicates,

Our government has put in place a multi-year tax reduction plan to return Ontario to growth and prosperity. Combined with this Budget’s proposals, individuals and businesses would benefit from \$16 billion in tax relief in 2003/04. At the same time, tax revenues have increased by \$16 million (Ontario, 2003b, p. 7).

While Budget 2003 was the last Tory budget, Budget 2001 was the last budget under Premier Mike Harris. Ernie Eves succeeded him when Harris resigned about six months after the September 11, 2001 attacks on the United States took place. After a brief period of economic

⁸² The plan involved finding cost savings in government over two years (1996/97 – 1997/98) as follows: \$300 million annually (33 per cent by 1997/98) from internal administration; \$1.2 billion (33 per cent) from program delivery and operations; \$220 million (28 per cent) from agencies, boards and commissions; and \$1.4 billion (28 per cent) from government grants (Ontario, 1996). You don’t have a reference for this citation.

⁸⁴ Ernie Eves, then Minister of Finance, indicated in Budget 1999 that “with more people working, taxation revenues have gone up by over \$6 million, even as tax rates were going down” (cite and reference). Encouraged by the economic growth, Minister Eves firmly declared that cutting taxes builds a strong economy, and having already made 69 cuts, he went on to make another 30 tax cuts. Among these further tax rate reductions were personal income tax (further reductions beyond the 30 per cent already provided), residential tax, business capital tax, and small business tax. A manufacturing and processing tax reduction, as well as the phasing out retail sales tax on motor vehicle insurance premiums and on repairs and replacements made under warranty were announced in Budget 2001.

⁸⁴ “The measures taken by the Ontario Government since 1995 have laid a solid foundation for economic growth. Cutting taxes, balancing the budget, eliminating red tape, renewing infrastructure, removing barriers to growth and strengthening incentives to work and invest are spurring a healthy economy and a rising standard of living” (Ontario, 2001b, p.6).

slowdown after September 11, the Ontario economy rebounded by 2002.⁸⁵ Before Premier Harris stepped down, his administration introduced the *Public Accountability Act* in 2001 to require all public sector organizations to report on their performance and to balance their budgets every year. With this Act, what Neave and Van Nugt (1991) characterize as “entrepreneurial managerialism” emerged. Part of this accountability exercise included a value-for-money review of government services to ensure cost-effective service delivery, and a panel review of the role of government in the 21st century. Prior to this, the Harris administration also passed the *Taxpayer Protection Act*, 1999 and the *Balanced Budget Act*, 1999, in which government guaranteed accountability to taxpayers. It did so by requiring balancing budgets every year or cutting the salaries of Cabinet members by 25 per cent for each year of deficit spending and 50 per cent for each consecutive deficit.

Table 4.6 indicates the expenditure plan for postsecondary education and other program areas during the Harris/Eves administrations. During the Tory administration, the rates of budget increases for colleges and universities do not appear to follow a consistent pattern in relation to the rate of GDP growth. In 1999/00, the highest year of GDP growth, there was a small expenditure increase for education and training. The largest spending increase occurred in 2003/04, when GDP was at 1.3 per cent (to prepare for the double cohort). Funding for colleges and universities as a percentage of total provincial spending decreased from approximately 7 per cent to 6 per cent between 1996/97 and 2003/04, even though spending for postsecondary education increased every year except in 2001/02. K – 12 education and health, on the other hand, consumed higher and higher portions of provincial spending during this period.

⁸⁵ Honourable Janet Ecker, then Minister of Finance explained in her 2002 Budget Speech the government’s strategy as follows: “After September 11, we took further action to restore consumer confidence by accelerating tax cuts. Coupled with prudent management and the use of our \$1 billion reserve, we balanced the budget last year – for the third year in a row” (Ontario, 2002b, p. 4).

Table 4.6: Expenditure – Budget Plan 1996/97 – 2003/04.

Ministry Expenditure (\$M)	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Training Colleges and Univ (TCU)	3,568	2,988	3,215	3,284	3,387	3,365	3,521	3,994
Education	4,935	5,492	7,167	7,913	8,026	8,471	8,895	10,022
Community and Social Services	8,200	7,848	7,848	7,677	7,504	7,756	7,814	8,281
Health	17,718	18,295	18,682	20,173	21,988	23,486	25,452	27,595
Rest of government	17,065	16,957	24,882	25,709	18,080	18,248	17,772	18,206
Total Budgetary Expenditure	51,486	51,580	54,627	56,843	58,985	61,326	63,454	68,098
% YTY Change of TCU	10.9%	-16.3%	7.6%	2.1%	3.1%	-0.6%	4.6%	13.4%
% YTY Change of Total Budget	11.9%	0.2%	5.9%	4.1%	3.8%	4.0%	3.5%	7.3%
% share of Total								
Training Colleges and Universities	6.9%	5.8%	5.9%	5.8%	5.7%	5.5%	5.5%	5.9%
Education	9.6%	10.6%	13.1%	13.9%	13.6%	13.8%	14.0%	14.7%
Community and Social Services	15.9%	15.2%	14.4%	13.5%	12.7%	12.6%	12.3%	12.2%
Health	34.4%	35.5%	34.2%	35.5%	37.3%	38.3%	40.1%	40.5%
Rest of government	32.9%	32.9%	45.5%	45.2%	30.7%	29.8%	28.0%	26.7%
GDP at market prices (\$B)	338	359	378	409	441	453	478	491
TCU Exp as % of GDP	1.06%	0.83%	0.85%	0.80%	0.77%	0.74%	0.74%	0.81%
% Change in GDP at market prices	3%	6%	5%	8%	8%	3%	6%	3%

Note: The budgets for Education and Colleges and Universities were combined between 1996/97 to 1999/20 under the Ministry of Education and Training. For those year, the figures indicated for Training, Colleges and Universities are the Actuals and the figures indicated for Education are plan budgets for Ministry of Education and Training less actual for Colleges and Universities.

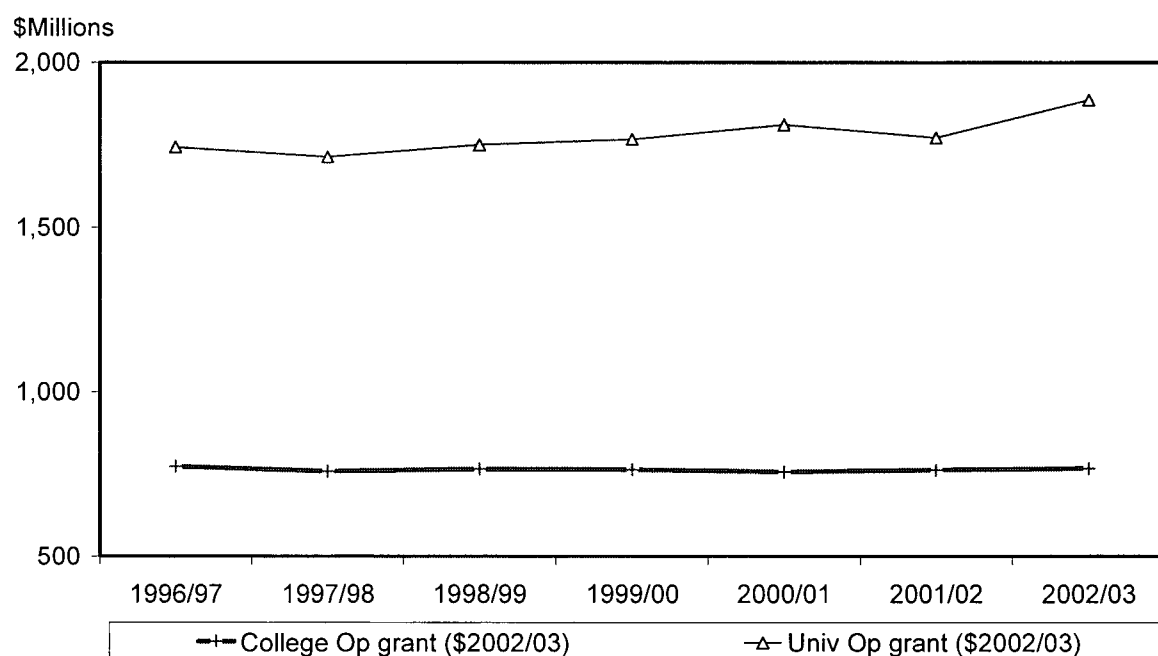
Source: Ministry of Finance, Budget Papers, various years.

Like the Rae government, the Tories appeared to emphasize applied skills but also focused on the differentiation of colleges and on awarding them degree-granting status. By doing this, the Tories, while blurring the division between degree and non-degree-granting institutions, preserved the binary structure of two parallel college and university systems and aimed to meet the needs of college students who wanted to pursue a degree. It remains to be seen if these new degree colleges will be given powers to award graduate and doctoral degrees or to become research-focused institutions.

Figure 4.5 indicates provincial grants toward the operating expenditures of colleges and universities in constant dollars and their annual rate of change. During the Tory administration, operating grants to both colleges and universities were lower than 1995/96 levels in constant dollars as a result of federal transfer reductions by the federal Liberal government in its effort to deal with federal budget deficits and the government's priority to reduce its spending,

particularly during its first mandate. Even though operating grants were eventually increased, starting in 1999/2000 when economic conditions were significantly improved compared to 1996/97, operating grant levels continued to be below the 1995/96 levels. The average college operating grant during 1996/96 and 2002/03 was approximately \$764 million while average university operating grant was approximately 2.3 times higher.

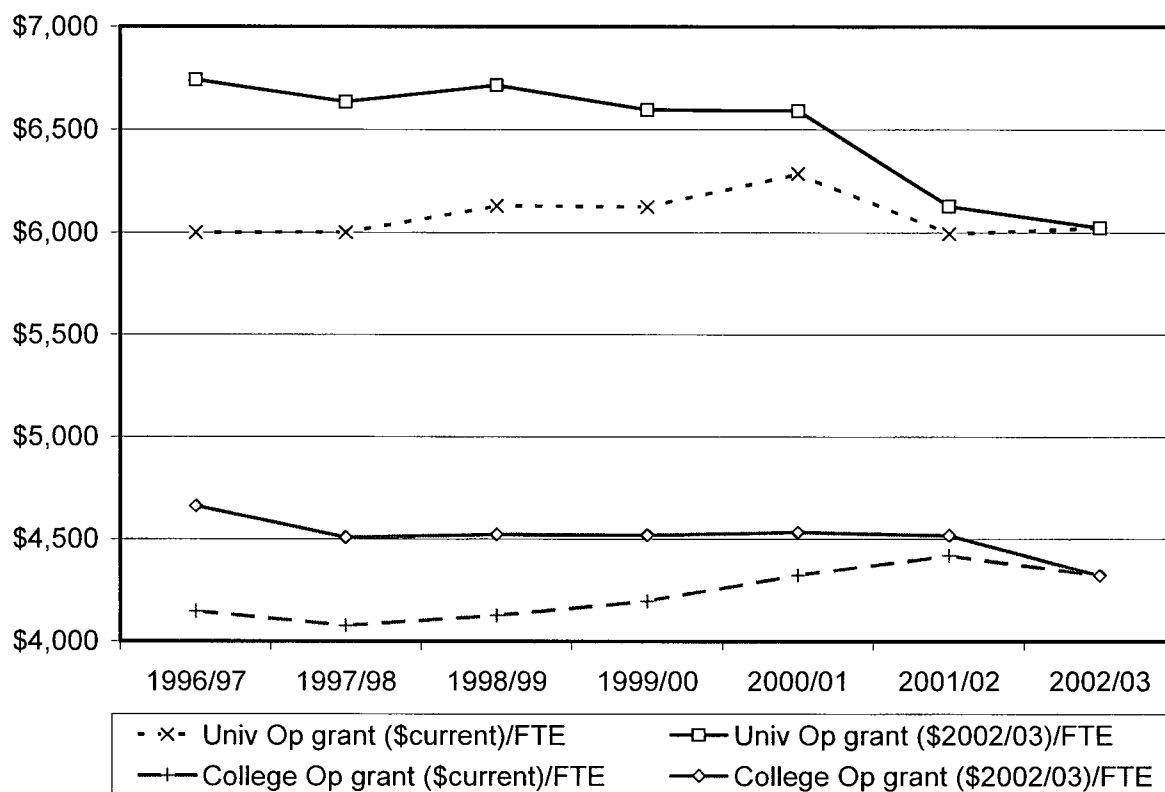
Figure 4.5: Operating Grants from the Province in Constant Dollars (1996/97- 2002/03).



Source: COU, Resource Document and ACAATO, Environmental Scan.

Figure 4.6 indicates provincial operating grants to colleges and universities on an FTE basis in both current and constant dollars. The operating grants per FTE for universities declined from \$6,740 in 1996/97 to \$6,020 in 2002/03, a decrease of 11 per cent overall. As for colleges, the operating grant per FTE also declined from \$4,660 in 1996/97 to \$4,320 in 2002/03, a decrease of 7 per cent.

Figure 4.6: Operating Grants from Province per Full-Time Equivalent Student (1996/97 – 2002/03).



Source: COU, Resource Document and ACAATO, Environmental Scan.

Impacts on Postsecondary Education Access

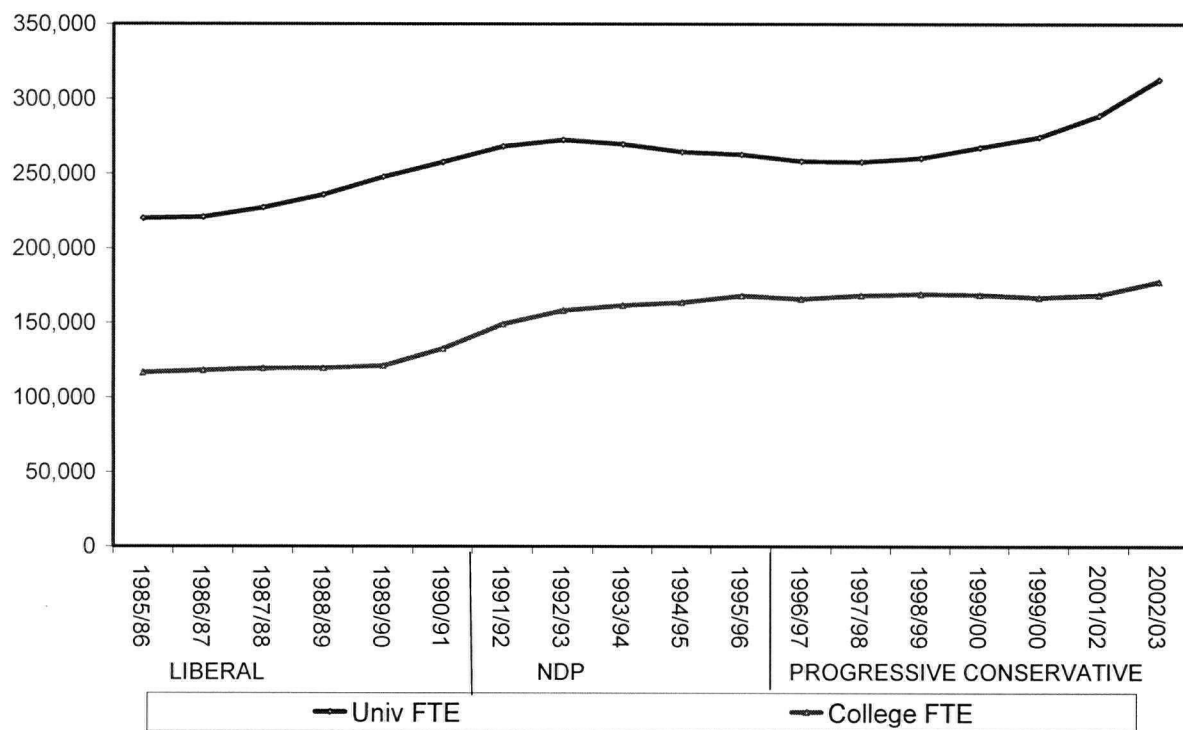
Having discussed the educational access and funding policies between 1985/86 and 2003/04, the question remains: what outcomes resulted from these policies? Without presuming that these outcomes are a direct result of these policies, the study will now look at some access and affordability trends over the period in question including enrolment, system design, participation, tuition fees, and costs of postsecondary education.

Enrolment

During the Liberal administration, university full-time equivalent (FTE) enrolment was growing faster than college enrolment. Between 1985/86 and 1990/91, FTE university enrolment increased from 220,220 to 257,710 (or by 17 per cent), while full-time college

enrolment increased from 116,790 to 132,690 (or by 14 per cent). As previously seen, provincial operating grants and total operating expenditures for the university sector also grew more rapidly than for the college sector. Figure 4.7 indicates the FTE student enrolment of university and college students from 1985/86 to 2002/03.⁸⁶ While FTE university enrolment increased faster than FTE college enrolment during the Liberal regime, college enrolment out-performed university enrolment during the NDP regime.

Figure 4.7: Full-Time Equivalent University and College Enrolments (1985/86 – 2002/03).⁸⁷



Sources: Statistics Canada, ACAATO and COU for FTE data.

Between 1991/92 and 1995/96, full-time university enrolment decreased from 268,480 to 263,010 (or by 2 per cent) while full-time college enrolment increased from 149,230 to 168,360 (or by 13 per cent). College enrolment grew more rapidly than university enrolment as a result

⁸⁶ Enrolment data for 2003/04 are not yet available.

⁸⁷ Data sources include: university student enrolment from 1985/86 to 2001/02 from Statistics Canada, and for 2002/03 from the Ministry of Training, Colleges and University and printed in COU's Compendium of Statistical and Financial Information; college student enrolment from 1985/86 to 2002/03 is from ACAATO.

of NDP programs that emphasized skills development and targeted the unemployed during this period, which was characterized by high unemployment rates.

Between 1996/97 and 2001/02, full time university enrolment increased from 258,470 to 313,130 (or by 21 per cent). Universities decreased their intake of students in 1996/97 and 1997/98 when funding was reduced. However, after funding was restored in 1999/2000, university enrolment again began to increase. Between 1996/97 and 2001/02, college enrolment grew from 166,080 to 177,660 (or by 7 per cent). The education policies of the Tory government emphasized academic and applied degree skills. Operating expenditures and enrolment at universities grew faster than colleges also because of student demand for degree programs and the ability of universities to attract outside sources of funding. Because of the double cohort and the initiatives of the Harris and Eves administrations, one would expect to have seen enrolment increases in both the college and university systems in 2003/04. Data available from COU/MTU for 2003/04 indicate university full-time enrolment at 313,100 (an increase of 14 per cent), compared to 2002/03 when full-time enrolment was at 274,690. Table 4.7 more clearly details enrolment and per cent changes from 1985/86 to 2002/03 by sector.

Table 4.7: College and University FTE Enrolment Increases.

Government	FTE College Enrolment Increase		FTE University Enrolment Increase	
	Enrolment Change	% Increase	Enrolment Change	% increase
Liberal	15,895	14	37,495	17
NDP	19,137	13	-5,472	-2
Tory	11,579	7	54,659	21

Sources: Statistics Canada, ACAATO and COU/MTU.

First Year Intakes and Turnaways

Has postsecondary education become more accessible in terms of increases in the number of intakes? Table 4.8 indicates the first year applicant/registrant data from 1989/90 to 2003/04 by high school graduates and non-high school graduates. The number of first year total

registrants did not consistently increase during this period. Total first year university registrants decreased during 1992/93 and 1997/98. During 2001/02 and 2003/04, however, the number of registrants increased by 6 per cent, 14 per cent and 34 per cent each year, respectively. Table 4.8 also indicates that the high school graduates who apply constitute over 82 per cent of total registrants at universities. Between 65 per cent and 71 per cent of high school graduands who apply are accepted and registered. The high school graduates intake increased by 43 per cent from 2002/03 to 2003/04 because of the double cohort. In 2003/04, universities registered 68 per cent of high school applicants (2 per cent lower than in 2002/03). As well, high school registrants constituted 90 per cent of total registrants, and the total registrants increased by 34 per cent that year. The turnaway rate for non-secondary school applicants has been approximately 74 per cent on average. In 2003/04, the turnaway rate was 77 per cent. The last time it was that high was in the early 1990s, when total applications were at a record high.

Table 4.8: First Year University Applicants and Registrants (1989/90 – 2003/04).

Year	Sec School Applicants	Sec School Registrants	% Accepted	Total Applicants	Total Registrants	% Accepted	% Sch/Total Registrants
1989/90	56,991	38,001	67	87,801	45,967	52	83
1990/91	57,432	38,297	67	89,525	46,524	52	82
1991/92	57,329	38,874	68	90,015	47,620	53	82
1992/93	58,226	38,100	65	92,510	45,904	50	83
1993/94	59,275	39,053	66	89,096	46,241	52	84
1994/95	58,658	39,302	67	89,348	46,293	52	85
1995/96	55,724	38,666	69	84,737	45,920	54	84
1996/97	55,195	39,004	71	83,687	46,374	55	84
1997/98	53,994	38,441	71	81,260	45,986	57	84
1998/99	54,730	39,098	71	79,246	46,669	59	84
1999/00	57,830	41,139	71	83,238	48,849	59	84
2000/01	58,844	40,106	68	86,086	48,472	56	83
2001/02	60,164	42,024	70	92,863	51,555	56	82
2002/03	69,841	49,008	70	103,119	58,706	57	83
2003/04	103,178	70,189	68	138,585	78,409	57	90

Source: COU Application Statistics, various years.

Overall, 52 to 59 per cent of university applicants gain acceptance and register as students. Between 1989/90 and 2003/04, the demand for Arts and Science programs was the

highest of all programs, averaging 57 per cent of total applications to universities, followed by Social Science at 16 per cent, and Engineering at 11 per cent. The turnaway rate for Arts and Science was also the lowest at 38 per cent on average. The turnaway rate for Health Professions (nursing and rehabilitation medicine) was the highest, averaging 71 per cent, while the number of health professional applications constitutes just three per cent of total applications (Council of Ontario Universities, 2005a).

Table 4.9 indicates the first year applicant and registrant data for colleges between 1998/99 and 2002/03. The number of total applicants to colleges declined between 1998/99 and 2001/02, but increased for Fall 2002. Overall, 63 per cent of secondary school applicants and 56 per cent of non-secondary school applicants gain acceptance and register as college students. For this period, the average rate of acceptance was 59 per cent of total applicants.

Table 4.9: First Year College Applicants and Registrants (1998/99 – 2002/03).

Year	Sec School Applicants	Sec School Registrants	% Accepted	Total Applicants	Total Registrants	% Accepted	% Sch/Total Registrants
1998/99	55,514	34,538	62	137,963	78,909	57	25
1999/00	52,760	33,603	64	130,653	77,915	60	26
2000/01	51,889	32,601	63	129,889	75,768	58	25
2001/02	51,813	32,658	63	132,274	78,200	59	25
2002/03	58,863	37,000	63	n/a	n/a	n/a	n/a

Source: King, Alan (2002), *Double Cohort Study – Phase 2 Report* for the Ontario Ministry of Education.

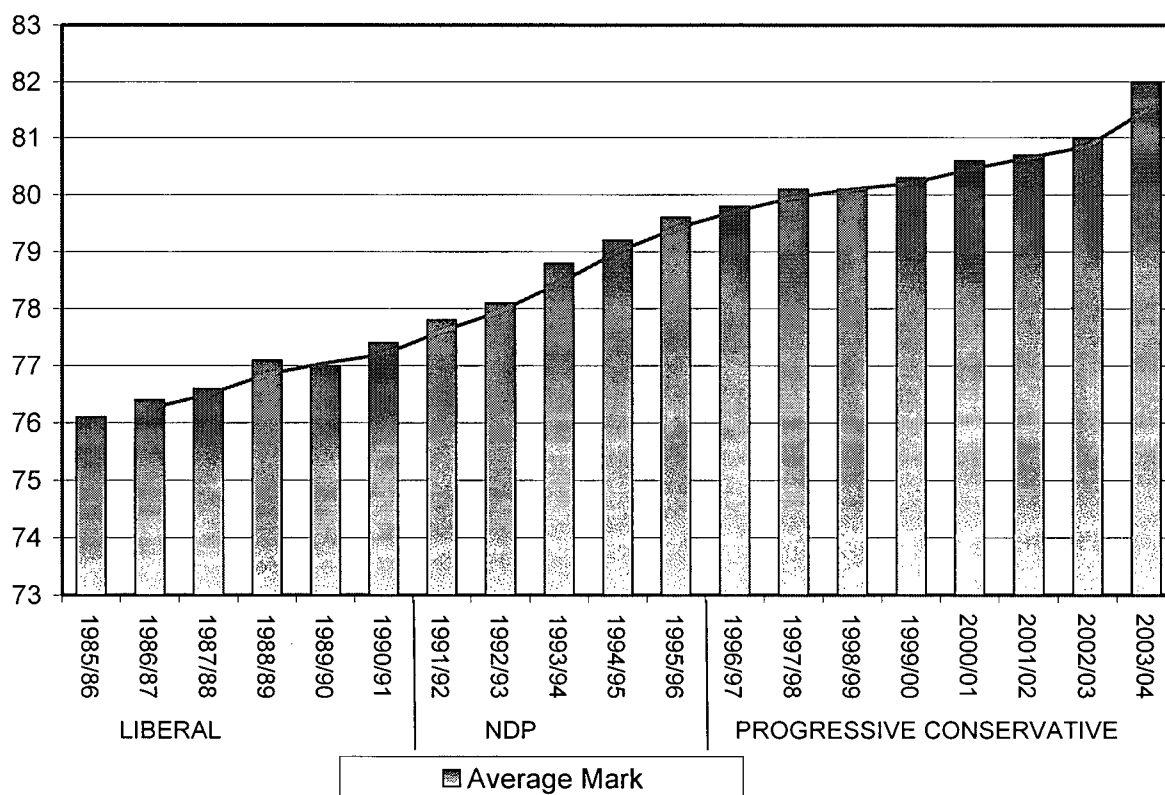
University Entrance Average Marks

Rising average grade of secondary school registrants could indicate grade inflation and/or stiffer entry requirements to qualify for entry to a university. The issue of grade inflation has had the attention of faculty and administrators alike and there is little agreement on whether it exists. Robert Mullen (1995, p.29) defines grade inflation as occurring “when a grade is viewed as being less rigorous than it ought to be.” There are at least two studies done for Ontario. The earlier study shows that high school grades remain generally reliable predictors of university

achievement (Allan, 1983). The second study shows that there has only been a moderate increase in entering grades between 1983 and 1993 and suggests that grade inflation must be distinguished from changes related to the size of the applicant pool and available spaces (Casas & Meaghan, 1995).

Figure 4.8 indicates that the average grade for university acceptance has crept up from 76.1 per cent in 1985/86 to 82.0 per cent in 2003/04. The grade increases were relatively higher between 1993/94 and 1998/99. These years coincide with significant funding reduction and lower enrolment. Because of reduced capacity of universities to accept all qualified applicants, only students with higher grades were accepted. In short, the pattern of grade increase in Figure 4.8 cannot be explained by grade inflation alone.

Figure 4.8: Average Mark of Registered Secondary School Applicants (1985/86 – 2003/04).



Source: COU. Facts & Figures. A Compendium of Statistics on Ontario Universities 2005.

Postsecondary Participation

Overall, the postsecondary participation trend in Ontario is not a straight incline. Figure 4.9 shows the full-time participation rate in Ontario from 1989/90 to 2002/03.⁸⁸ Postsecondary participation peaked during the NDP regime at 4.1 per cent and then dropped to 3.8 per cent during the Tory regime, then rose again to 1991/92 levels in 2002/03. The peak participation period corresponds with a period of low economic growth and NDP policies that emphasized the creation of a well-trained population. University participation fell from 2.6 per cent in 1991/92 to 2.4 per cent by 1995/96, while college participation rose from 1.4 per cent to 1.5 per cent.

The dip in participation rate to 3.8 per cent starting in 1996/97 coincides with federal transfer cutbacks, reduced provincial funding and increased tuition fees. University participation fell to 2.3 per cent that year while college participation remained stable at 1.2 per cent. The participation rate rose to 4.1 per cent in 2002/03 resulting from recent expansions to postsecondary education by the Tory government to accommodate the double cohort in 2003/04. By 2002/03, university participation had increased to 2.6 per cent from 2.4 per cent in 1996/97, but college participation was still at 1.5 per cent.

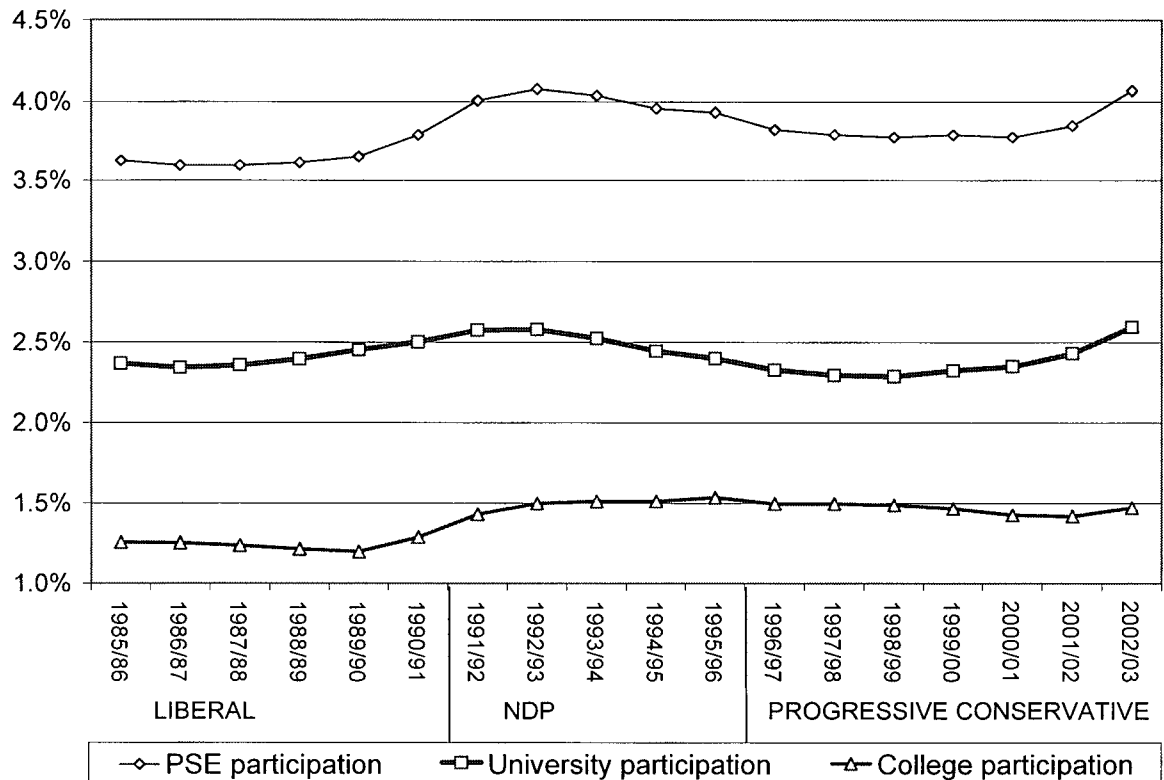
Understandably, it is important to ensure that not only people who qualify for access to postsecondary education are accepted, but also that there is access for under-represented groups. These groups include First Nations, ethnic minorities, low-income families and persons with disabilities. Unfortunately, data are not available to show a breakdown of participation by groups. As for the population aged 18 – 24, the university participation rate has increased from 21.5 per cent in 1989/90 to 28.6 per cent in 2002/03.⁸⁹ The college participation rate among 18 –

⁸⁸ The participation rate here pertains only to participation in publicly funded postsecondary institutions and does not include enrolment at private institutions, which have the potential to play a greater role as a result of the *Postsecondary Education Choice and Excellence Act*, 2000.

⁸⁹ Council of Ontario Universities' (2005b).

24 year olds increased from 10.5 per cent to 16.2 per cent. The postsecondary participation rate among this age group in 2002/03 was 38.5 per cent, having risen from 23.4 per cent in 1986/87.

Figure 4.9: Participation Rate in Ontario (1985/86 – 2002/03).⁹⁰



Sources: Statistics Canada (for population data) and ACAATO and COU (Full-time Enrolment).

The objective of this study is not to propose an ideal participation rate target although establishing such a target requires some examination. Rae (2005) urges setting very specific goals for levels of participation in the Ontario system. He opines that not everyone will have a postsecondary education, but most people should.

⁹⁰ Participation rate is calculated by dividing the sum of college and university full-time equivalent enrolment by the population specified. The Ontario College FT student enrolment data is from ACAATO, whereas the Ontario university FTE data is from COU's publication, *A Compendium of Statistical and Financial Information*, various years.

Tuition fees

Between 1988/89 and 2003/04, the average undergraduate tuition fees in Ontario increased from \$1,397 to \$4,161.⁹¹ The increase is approximately 198 per cent over this 15-year period.⁹² Given that studies have confirmed the value of postsecondary education in terms of the private return students receive in excess of their initial financial outlay toward education, the Quality and Financing Task Force in Ontario grappled with the issue of what is an appropriate contribution from students through tuition fees and from government through operating grants (George, 2004).⁹³

George (2004) points out that tuition fees and accessibility are inextricably linked in the public mind. At the same time, commentators are divided on this issue. On one hand, there is the view that rates should be kept low to ensure access for all, while on the other hand, keeping fees low only benefits upper-income families. Still, others point out that despite tuition increases during the last two decades, the participation rate of students from lower income levels has grown steadily. Without concrete findings one way or the other, public perception tends to sway politicians in their decisions, and the trend of late has been for governments to fluctuate between regulating tuition fees by capping increases and deregulating them to shift costs to students.

For example, to make postsecondary education affordable, the Peterson administration instituted a tuition fee increase cap of 4 percent in the mid 1980s. In the 1990s, tuition fees were deregulated (i.e. each institution had the flexibility to set tuition rates for individual programs).

⁹¹ The average tuition fees considered here is the average for Bachelor of Arts programs at nine universities including Carleton University, University of Guelph, McMaster University, University of Ottawa, Queen's University, University of Toronto, University of Waterloo, University of Western Ontario and York University.

⁹² See Council of Ontario Universities (2004). The average annual tuition fee for an undergraduate arts degree in Ontario was \$720 in 1979/80 (Ontario, 1990) you don't have a reference for this citation. The increase over that ten-year period was 111 per cent.

⁹³ Speech made at the *Higher Education in Canada* Conference at the John Deutsch Institute for the Study of Economics Policy at Queen's University in 2004. Peter George is the President and Vice-Chancellor of McMaster University and Chair of the COU Quality and Financing Task Force.

Although the government did not redesign student financial assistance to cater to the higher fees, it required institutions to set aside a specific portion of fees for financial assistance. Starting in September 2000, tuition fee increases were again limited, and, more recently, frozen by the McGuinty administration. During the proposed two-year freeze, a tuition policy will be decided upon.

The outcome of government regulating tuition fees in terms of the average Ontario university tuition for full-time undergraduate arts programs is depicted in Table 4.10 against the average personal and family income in Ontario. Tuition fees as a percentage of average personal and family incomes increased from 7 per cent in 1988/89 to 13 per cent in 2003/04, and from 3 per cent in 1988/89 to 5 per cent in 2003/04 respectively.

Table 4.10: Average Tuition and Average Income in Ontario in Current dollars (1988/89 – 2003/04).

Year	Average Tuition (\$)	% YTY Change	Average Personal Income (\$)	% YTY Change	% Tuition/Personal Income	Average Family Income (\$)	% YTY Change	% Tuition/Family Income
1988/89	1,397	-	20,920	-	7	51,784	-	3
1989/90	1,517	9	22,333	7	7	55,316	7	3
1990/91	1,639	8	23,114	3	7	55,691	1	3
1991/92	1,770	8	23,568	2	8	57,589	3	3
1992/93	1,894	7	24,008	2	8	57,631	0	3
1993/94	2,026	7	23,955	0	8	56,637	-2	4
1994/95	2,225	10	24,071	0	9	57,880	2	4
1995/96	2,451	10	24,749	3	10	59,631	3	4
1996/97	2,920	19	24,890	1	12	59,425	0	5
1997/98	3,213	10	25,741	3	12	62,162	5	5
1998/99	3,495	9	26,754	4	13	66,080	6	5
1999/00	3,812	9	27,992	5	14	68,073	3	6
2000/01	3,919	3	29,674	6	13	72,585	7	5
2001/02	4,001	2	30,312	2	13	74,556	3	5
2002/03	4,079	2	30,849	2	13	76,461	3	5
2003/04	4,161	2	31,713	3	13	78,601	3	5

Source: Council of Ontario Universities, Resource Documents, 2004.

Over the same period, tuition fees for undergraduate arts programs have been increasing by between 2 and 10 per cent annually. Average tuition fees for other programs are higher than for arts programs. For example, average tuition fees for undergraduate engineering programs rose from \$1,541 in 1988/89 to \$5,006 in 2003/04.

Rae (2005) rejects the approach of regulating tuition fees by setting a ceiling on all tuition fees across all institutions, and recommends allowing institutions autonomy to set tuition fees after first establishing a system of student financial aid.⁹⁴ This system would eliminate or reduce tuition fees for lower income students, and provide better loans for middle-class students. This approach supports the link between access and affordability, while recognizing that students—particularly those from families who can afford to pay—should pay, given the private benefit from that investment to the student. This approach also takes away the immediate need for government to figure out what portion of postsecondary education costs should be paid by students or their families.

Market principles of supply and demand would likely determine what rates institutions would set to assure quality. Institutions would be accountable to their students for their tuition fee rates and to government for how they meet their targets. For this approach to work, however, government would first have to increase both its grants to institutions as well as funding for student financial assistance in order to keep tuition fees reasonably affordable for low-income families. It also raises other issues such as how “need” is defined and the sustainability of grants to all low-income students who qualify.

Table 4.11 indicates the percentage of tuition fees collected by colleges and universities from 1985/86 to 2001/02 that went toward total and operating expenditures. In 1985/86, tuition fees contributed \$82 million (or 13 per cent) of operating expenditures for Ontario colleges and \$354 million (or 16 per cent) of operating expenditures for Ontario universities. By 2001/02, tuition fees contributed \$432 million (or 34 per cent) and \$1.7 billion (or 31 per cent) of operating expenditures for colleges and universities, respectively. While the increase in

⁹⁴ While institutions may set tuition fee rates, they would have the obligation to include provisions for grants to students with need where fees are above \$6,000.

operating expenditures for colleges was 99 per cent over this period, the increase in tuition fees collected was 430 per cent. For universities, the increase in operating expenditures was 147 per cent while the increase in tuition fees was 372 per cent.

Table 4.11: Per Cent Tuition Fees to Operating and Total Expenditures of Colleges and Universities (1985/86 – 2001/02).

	College Tuition Fee Revenue to Op Exp (\$M)	% College Fees/Op. Exp	College Tuition Fee Revenue to Total Exp (\$M)	% College Fees/Total Exp	University Tuition Fee Revenue to Op Exp (\$M)	% University Fees/Op. Exp	University Tuition Fee Revenue to Total Exp (\$M)	% University Fees/Total Exp
1985/86	82	13	156	6	354	16	351	14
1986/87	90	13	165	6	373	16	371	14
1987/88	99	13	178	6	399	16	396	14
1988/89	108	13	194	6	440	16	438	14
1989/90	112	14	210	6	489	17	487	14
1990/91	123	14	238	7	553	17	550	14
1991/92	145	15	275	7	610	18	607	15
1992/93	164	16	313	8	681	19	677	16
1993/94	178	18	337	8	740	20	736	18
1994/95	199	20	380	9	802	21	799	19
1995/96	218	20	444	10	869	23	868	21
1996/97	245	25	498	11	988	27	987	24
1997/98	268	27	540	12	1,077	29	1,077	25
1998/99	298	29	587	12	1,218	30	1,218	26
1999/00	409	34	709	13	1,402	31	1,402	26
2000/01	435	34	740	13	1,509	31	1,509	25
2001/02	432	34	750	14	1,668	31	1,668	26

Source: Statistics Canada, CANSIM Table 478-0004 and 478-0007.

During the Peterson administration tuition fees was at 16 per cent of operating revenues for Ontario universities from 1985/86 to 1988/89, and increased to 17 per cent in 1989/90 and 1990/91. College tuition fees, with few exceptions, were the same for all programs. The standard tuition fee for a full-time college student in 1989/90 was \$675.⁹⁵ Throughout the Liberal regime, tuition fees constituted 13 to 14 per cent of operating revenues for Ontario colleges.

During the Rae administration, tuition fees as a percentage of university revenue increased from 18 per cent in 1991/92 to 23 per cent in 1995/96. The economic downturn during the Rae administration resulted in funding restrictions to postsecondary education and what

⁹⁵ Average college tuition fee in 1979/80 was \$345 (Ontario, 1990).

appears to be relaxed regulation of tuition fee increases. For colleges, a similar creep of tuition as a percentage of college revenue took place, rising from 15 per cent in 1991/92 to 20 per cent in 1995/96. Toward the end of the NDP regime in 1995/96, the average undergraduate tuition fee in Ontario was \$2,451.

The Tory government deregulated tuition fee increases, allowing market principles to work in the educational environment for graduate and certain professional programs including business/commerce, dentistry, law, optometry, pharmacy, and veterinary medicine. The deregulation of tuition fees coincided with significant reduction in provincial grants to postsecondary education and with significant reduction in federal transfer payments. By reducing provincial grants and deregulating tuition fees, the Tory government shifted the burden for paying postsecondary education cost, of approximately \$400 million, from government (or taxpayers) to students and their families. One underlying premise for this shift is the idea that postsecondary education is a “private good” that benefits the individual, rather than a “public good” that benefits society.

Starting September 2000, the government regulated tuition fees for engineering, computer science, and general arts and science programs, and instituted a five-year cap for most programs of 2 per cent over tuition fee levels set in 1999/2000. By the end of the Tory regime in 2003/04, the average undergraduate tuition fee in Ontario was \$4,911 (Statistics Canada, 2004b). Total tuition fee revenues for universities increased from 27 per cent in 1996/97 to 31 per cent in 2001/02. For colleges, a similar creep from 25 per cent in 1996/97 to 34 per cent in 2001/02 occurred.

Student Financial Assistance

In 2002, government student loans were a source of funding for about 26 per cent of full-time students. In general, students rely on a variety of sources to finance their education including earnings from employment, savings, non-repayable contributions or loans from parents, scholarships, government student loans and bank loans. Like most provinces, Ontario has adjusted its total maximum assistance. In 2001, the total maximum assistance for a single, full-time student with no dependents was \$275 a week, or \$9,350 a year. This amount is just shy of the median total amount of \$9,740 spent by full-time postsecondary students for 8 months at school in 2001/02. The average government debt owed by an Ontario college graduate and university baccalaureate student at graduation was \$15,400 and \$21,700, respectively (Statistics Canada, 2004a).

Table 4.12 indicates how much the province spent on student financial aid from 1987/88 to 2002/03, in total and on an FTE basis, as well as available scholarships and bursaries for university students. If every student qualified for OSAP in 2001/02 and 2002/03, the funding available would only meet one-ninth of each full-time student's financial needs. Furthermore, the PC government announced that students attending private universities would have access to OSAP. Unless the government intends to increase the OSAP envelope significantly, the result will simply be the same amount of scarce dollars shared among a larger pool of students. Rae (2005, p. 20) concludes that:

Addressing the affordability issue means an infusion of grants to eliminate tuition costs completely for tens of thousands of students, and lowering net tuition for thousands now. It also means extending loan eligibility to those currently denied access to the current Canada Student Loan/Ontario Student Loan plan.

Table 4.12: Ontario Student Assistance, Scholarships and Bursaries (1987/88 – 2002/03).

Year	OSAP Actual (\$)	OSAP (\$2002/03)	Univ and College FT students	OSAP (\$constant)/ FT student	Scholarships & Bursaries (\$current)	Scholarships & Bursaries (\$constant)	Univ FT students	Scholarships/ FT student (\$)
1987/88	181,220,191	264,603,714	287,628	920	44,808,000	65,425,178	192,717	339
1988/89	185,163,933	259,840,897	295,338	880	45,378,000	63,679,033	201,188	317
1989/90	188,731,975	252,349,495	305,462	826	51,090,000	68,311,348	208,115	328
1990/91	203,434,746	259,471,970	319,197	813	58,636,000	74,787,610	216,199	346
1991/92	270,188,715	326,420,884	338,782	964	63,493,000	76,707,279	225,188	341
1992/93	327,021,357	389,155,415	352,179	1,105	71,036,000	84,532,840	230,260	367
1993/94 ¹	101,413,273	118,547,932	356,095	333	76,700,000	89,659,136	230,857	388
1994/95	139,711,970	162,997,298	359,676	453	86,232,000	100,604,000	229,819	438
1995/96	230,548,001	263,293,782	361,625	728	92,787,000	105,965,960	227,498	466
1996/97 ²	366,704,527	412,066,466	361,013	1,141	101,888,000	114,491,709	226,604	505
1997/98	634,051,334	701,227,776	362,717	1,933	126,928,000	140,375,762	226,886	619
1998/99	619,770,777	679,122,675	365,411	1,859	169,326,000	185,541,381	229,241	809
1999/00 ³	823,806,943	887,176,708	374,230	2,371	228,456,000	246,029,538	236,888	1,039
2000/01 ⁴	572,334,354	600,068,618	377,445	1,590	278,005,000	291,476,608	242,309	1,203
2001/02	366,427,332	374,612,135	391,647	957	334,216,000	341,681,306	253,544	1,348
2002/03 ⁵	440,544,500	440,544,500	422,076	1,044	384,896,000	384,896,000	274,685	1,401

Sources: Public Accounts of Ontario, 1987/88 - 2001/02 - OSAP data
Expenditures Estimates of Ontario, 2002/03 - 2003/04 OSAP data
Financial Report of Ontario Universities COFO-UO - Scholarships and bursaries
Ontario Ministry of Training and Universities and ACAATO - Full-time student enrolment

1. Policy change to discontinue grants in 1993/94.
2. Ontario Student Opportunity Trust Fund (OSOTF) began in 1996/97, and is added to this table; \$39M in 1996/97; \$110M in 1997/98; \$90M in 1998/99; \$56M in 1999/00 and \$6M in 2000/01.
3. Excludes an addition of \$100 million in Millenium Foundation grants and introduction of the Ontario Student Opportunity Fund.
4. Decrease due to the winding down of the loan forgiveness program that pertained to loans issued between 1993/94 and 1997/98.
5. Beginning in 2003/04, estimates are presented on the accrual basis rather than modified cash basis, hence not comparable with previous years.

Research and Development

From 1995 to 2000, R&D investment in Ontario grew by over 50 per cent, reaching \$797 per capita – the highest of all provinces. Inflows of international R&D investment into Ontario more than doubled between 1995 and 2002, rising twice as fast as investment during the previous five years. In 2000/01, Ontario attracted almost \$3 billion in international R&D investment. This accounted for nearly one-third of all R&D performed in Canada, the largest proportion of any province in the country. The latest data indicates that nearly 60 per cent of Canada's industrial R&D was performed in Ontario (Ontario, 2001a). Ontario's universities and colleges are the most successful in the country at attracting industry R&D investment,

accounting for nearly 11 per cent of all R&D performed by the Canadian higher education sector, which is higher than all other provinces.

Research and development can lead to the commercialization of education because of the opportunities that exist for partnerships with business and industry based on the commercialization of products emerging from cutting edge research findings. Studies have been completed on how colleges and universities try to compensate for declining operating grants from government through liaisons with business and industry (Fairweather, 1988; Slaughter & Leslie, 1997). Other benefits of research and development are prestige for the institution, the ability to attract the best and brightest researchers and students, the willingness of students to pay higher tuition fees, and other private funding.

The federal and Ontario governments have consistently funded research and development for various reasons, including the recognition that science and technology are the means to national economic prosperity. Table 4.13 indicates the gross domestic expenditure on natural science and engineering research by different sectors including the federal government, provincial government, the higher education sector itself, and business enterprises. Traditionally, the higher education sector spends the greatest amount, followed by the federal government. The funding provided by business enterprises to the higher education sector for R&D is low compared to the federal government's contributions but has picked up, and since 1993, has caught up with funding from the provincial government. Since 1993, provincial funding has trailed behind funding from business enterprises and is in last place. There are large annual fluctuations in funding from all four sectors.

Table 4.13: Natural Science and Engineering R&D Expenditures Spent on the Higher Education Sector by Funders (1985 – 2002).

Year/(\$2002/03)	Federal government (\$M)	Provincial government (\$M)	Higher Education (\$M)	Business (\$M)
1985	306	56	276	46
1986	276	82	299	44
1987	280	74	288	53
1988	299	94	589	65
1989	304	114	608	66
1990	316	120	578	75
1991	313	116	562	68
1992	322	117	584	77
1993	341	117	634	126
1994	335	124	632	134
1995	327	113	636	129
1996	307	102	608	162
1997	298	126	640	175
1998	316	119	688	196
1999	367	153	730	200
2000	453	197	827	252
2001	525	238	862	261
2002	602	246	957	285

Source: Statistics Canada. CANSIM Table 358-0001

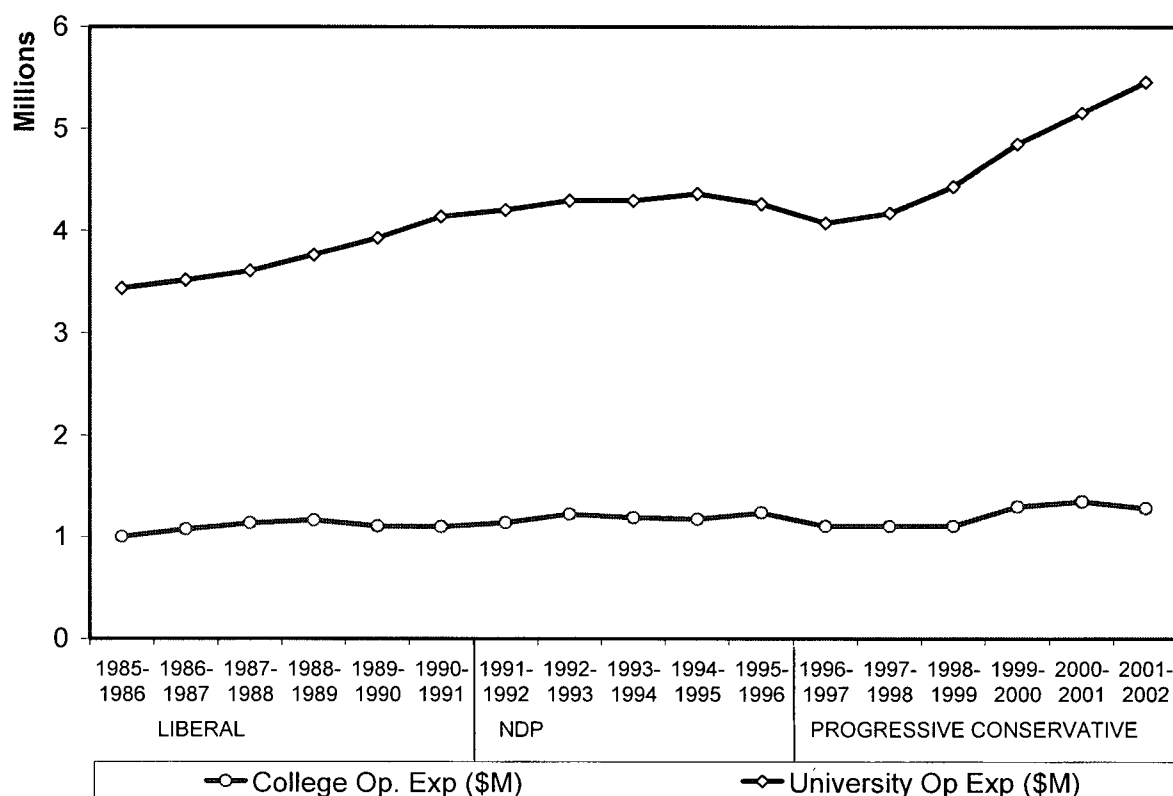
There has been discussion in recent years at both the federal and provincial levels about the need to encourage the commercialization of research, as it is a route to economic prosperity. Rae (2005), however, cautions against this and reminds us of the value of basic research, and that often it is the breakthroughs in basic science that eventually find their way to commercial use.

Cost of Postsecondary Education

Comparing 1985/86 and 2001/02, the cost of college education overall (based on operating costs) has increased more slowly than the cost of university education. University costs have increased by 59 per cent, while college costs have increased by 28 per cent in constant dollars. Figure 4.10 indicates the operating costs in constant dollars of colleges and universities and the year-to-year rate of change. The operating cost of universities was 3.4 times higher than

the operating cost of colleges in 1985/86. In 2001/02 however, the university operating cost was 4.3 times higher.

Figure 4.10: Operating Expenditures of Colleges and Universities in Constant Dollars (1985/86 – 2001/02).



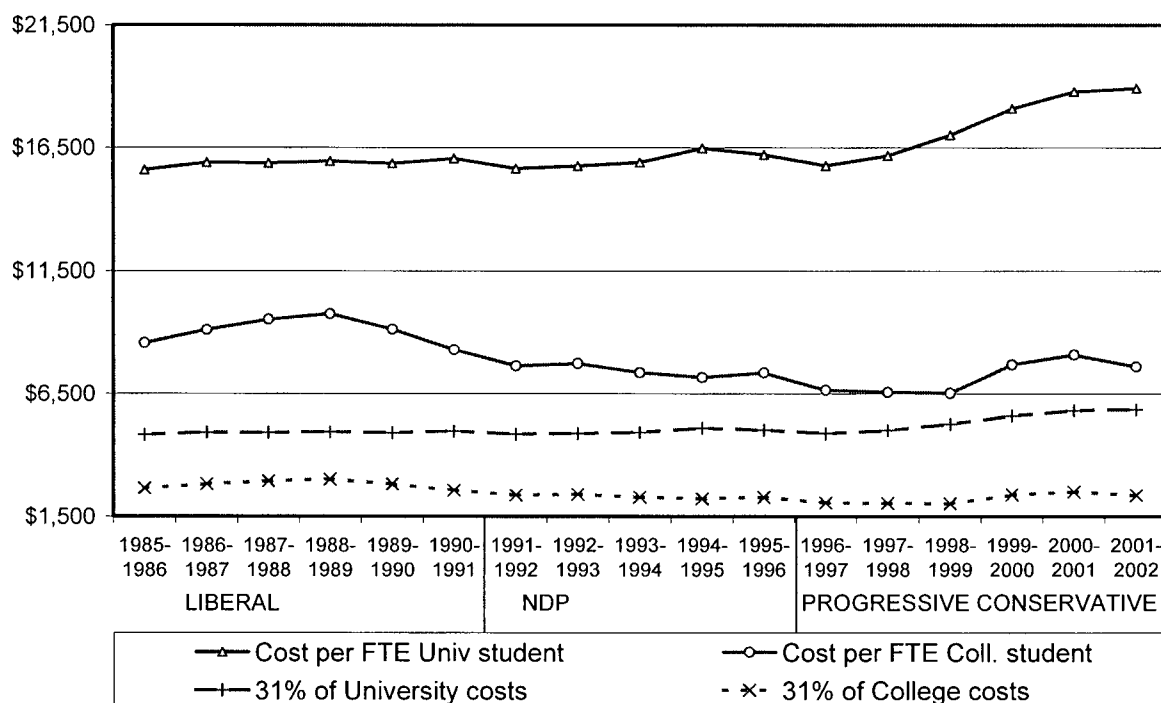
Source: Statistics Canada. CANSIM Tables 478-0004 and 478-0007.

Fluctuations in the yearly change for colleges were more dramatic than for universities. The highest negative percentage change occurred in 1996/97 for both colleges and universities when the federal government drastically reduced its transfer payments for health and education.

On a per FTE student basis, the cost of colleges has decreased while cost of universities has increased in constant dollars. Figure 4.11 indicates the cost per FTE for colleges and universities. It shows that the cost per FTE for college decreased from approximately \$8,600 to \$7,600 (or by 11 per cent) while the cost per FTE for university increased from approximately \$15,600 to \$18,900 (or by 28 per cent) between 1985/86 and 2001/02. Figure 4.11 also indicates

the average tuition fees payable if students had to pay 31 per cent of operating costs, which is equivalent to the percentage of tuition fee revenues.

Figure 4.11: University and College Operating Expenditures per FTE in Constant Dollars (1985/86 – 2001/02).

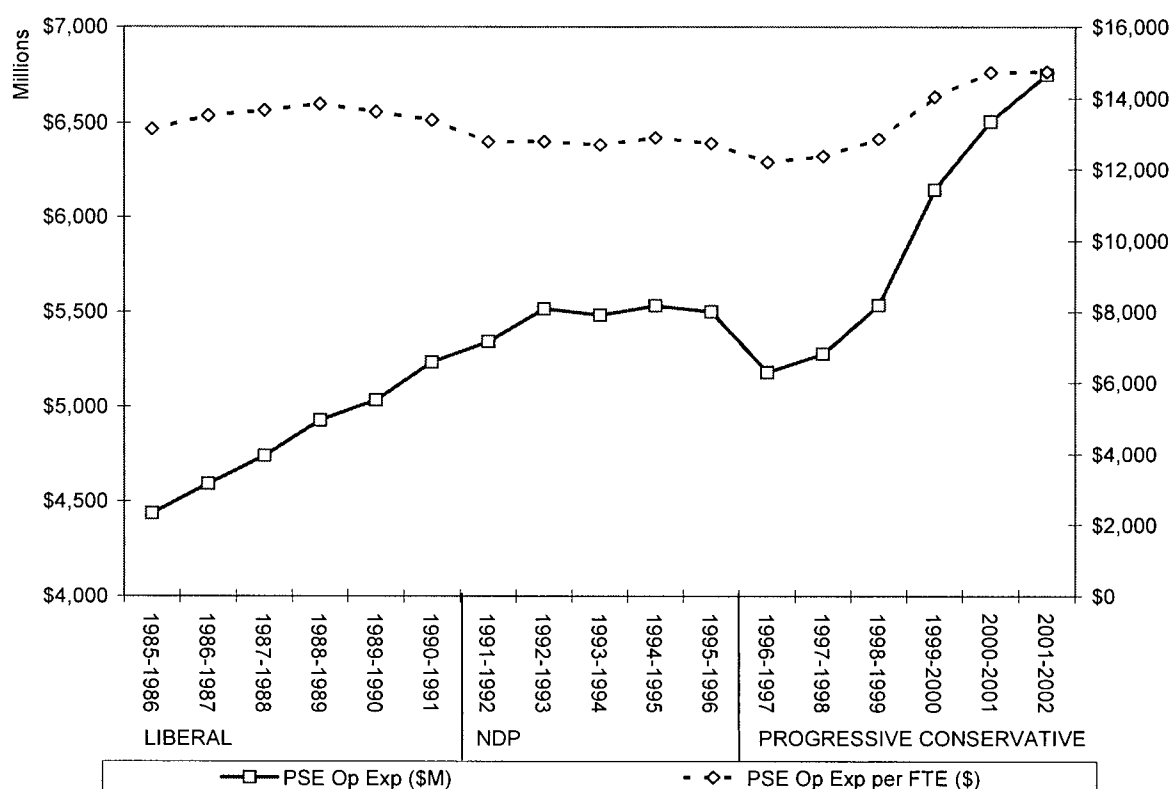


Sources: Statistics Canada, CANSIM Tables 478-0004 and 478-0007; COU for University FTEs and ACAATO for College FTEs.

Figure 4.12 indicates the postsecondary operating expenditures and the postsecondary expenditures on a per FTE basis from 1985/86 to 2001/02. Overall, postsecondary operating expenditures increased from \$4.4 billion in 1985/86 to \$6.7 billion in 2001/02, an increase of 52 per cent. The greatest yearly increase in operating expenditures, 11 per cent, occurred in 1999/00, a year when economic growth reached 7.5 per cent, the highest growth since 1985/86. The largest yearly decrease in operating expenditures occurred in 1996/97, when the federal government reduced its transfer payments for health and postsecondary education.

Postsecondary operating expenditures per FTE also increased overall. Between 1988/89 and 2001/02 they increased by 12 per cent, from \$13,160 per FTE to \$14,740 per FTE.

Figure 4.12: Postsecondary Operating Expenditures in Constant Dollars (1985/86 – 2001/02).



Sources: Statistics Canada, CANSIM Tables 478-0004 and 478-0007; COU for University FTEs and ACAATO for College FTEs.

Rising tuition fees and decreasing provincial grants suggest that more of the costs are being passed on to students. The Ontario government used to fund over 60 per cent of university operating costs from the 1970s to the early 1990s. However, the government has not been able to maintain that level of subsidy for a number of reasons, including competing demands from health services, K – 12 education and other social services. Table 4.14 indicates the percentage of provincial and federal grants to operating expenditures for colleges and universities from 1985/86 to 2001/02. In 2001/02, provincial grants constituted 58 per cent and 41 per cent of operating expenditures of colleges and universities, respectively. This is compared to 1985/86

when it constituted 86 per cent and 61 per cent, respectively. In 2002/03 dollars, the provincial grant per FTE was \$9,479 for university and \$7,404 for college in 1985/86. This is compared to \$7,670 for university and \$4,401 for college in 2001/02. As a percentage of operating expenditures, federal grants to universities have slightly increased from 12 per cent in 1985/86 to 13 per cent in 2001/02.

Table 4.14: Provincial and Federal Grants as Percentage of Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).

	% Federal Grant/College Op Exp	% Provincial Grant/College Op Exp	% Federal Grant/University Op Exp	% Provincial Grant/University Op Exp
1985/86	0	86	12	61
1986/87	0	89	11	64
1987/88	0	82	11	64
1988/89	0	80	11	63
1989/90	0	80	11	63
1990/91	0	80	11	62
1991/92	0	79	10	61
1992/93	0	77	11	61
1993/94	0	75	11	56
1994/95	0	69	11	55
1995/96	0	67	11	54
1996/97	0	62	9	48
1997/98	0	58	9	47
1998/99	0	64	9	48
1999/00	0	58	10	44
2000/01	0	53	12	42
2001/02	0	58	13	41

Source: Statistics Canada. CANSIM Tables 478-0004 and 478-0007.

Institutions, particularly universities, have had to rely more and more on private funding sources including bequests, donations, non-government grants, ancillary income, investment income and borrowings since the late 1990s. Table 4.15 indicates that as a percentage of operating expenditures, revenue from other sources increased for colleges from one per cent in 1985/86 to 7 percent in 2001/02, and from 11 per cent for universities in 1985/86 to 15 per cent in 2001/02. In terms of total university income, other sources increased from 21 to 29 per cent, or from \$587 million to \$1.8 billion in current dollars. Total income includes not only operating income, but also capital including land endowments and ancillary enterprises.

Table 4.15: Other Sources as Per Cent of Operating Expenditures (1985/86 – 2001/02).

	% Other Sources/College Op Exp	% Other Sources/University Op Exp	% Other Sources/University Total Exp
1985/86	1	11	21
1986/87	-2	9	21
1987/88	5	9	21
1988/89	7	9	23
1989/90	7	10	23
1990/91	6	10	23
1991/92	6	11	23
1992/93	7	9	22
1993/94	8	13	25
1994/95	12	13	25
1995/96	13	12	26
1996/97	13	15	27
1997/98	15	16	29
1998/99	7	16	28
1999/00	7	4	30
2000/01	13	15	29
2001/02	7	15	29

Source: Statistics Canada. CANSIM Tables 478-0004 and 478-0007; CAUBO, various years.

Some scholars have characterized the introduction of market mechanisms by the Tory administration as the commercialization of the Ontario postsecondary education system (Young, 2002). The shifts toward the market are apparent through various Tory policies including: allowing private institutions to grant degrees, deregulation, increasing private or industry partnerships, reducing the size of government, investing in research and development, and requiring institutions to meet market demands. The Tories' approach has not been outright privatization but one of compromise, albeit allowing market principles to creep into postsecondary education—which has traditionally been a public domain. However, it is plausible that some of these trends would have occurred under a different administration because of national and global economic trends. For example, increasing private and industry partnerships has occurred under left-wing administrations. Perhaps ultimately it is what the electorate is comfortable with because governments that want to be re-elected will not attempt to do what the public does not want.

System Design

The number of public postsecondary institutions in Ontario remained relatively stable after the dramatic increases during the 1960s and early 1970s. In 1990, there were 17 publicly funded universities (with the Ontario College of Art, a non-degree institution, treated as part of the university sector), 25 CAATs, the Royal Military College, four agricultural colleges, one health science college, a chiropractic college, a coast guard college, various bible colleges, and over 200 privately operating technical schools and colleges (Cameron & Royce, 1996).

To house the double cohort in 2002/03, and to promote collaboration between colleges and universities as well as between institutions and industry, the Tory government created hybrid institutes and a polytechnic university. This approach differs from the Liberal and NDP approach, which was to maintain the binary structure but also to encourage integration and transferability of credits between the two systems. The Tories' approach maintains the university and non-university systems but blurs the division between degree and non-degree-granting institutions, since colleges can now grant applied degrees. Skolnik (2004) opines that this area is a compelling one for governments to address in their higher education policy agenda. The structure of postsecondary education is a matter of public policy, and the following question must be asked: are the current structures still the most appropriate for the 21st century, or are they in need of significant renovation?

The Tories' approach also allows for the forging of greater links between colleges, universities and industry to serve labour market needs better—something the NDP government also recognized as essential and attempted to build, but with limited success. Finally, this postsecondary-industry approach anticipates more future private sector funding as the cost of postsecondary education continues to rise. By providing matching funds, institutions in Ontario

have had some success in increasing the amount raised from private sources for research, scholarships and buildings.

The Tory government also changed educational policy to allow new private programs and private degree-granting institutions in the province through the *Postsecondary Education Choice and Excellence Act*, 2000. It is expected that the private postsecondary degree-granting sector will fill the demand gap left over by public postsecondary institutions.

Summary of Key Findings

This section will summarize the key findings related to Ontario. Specifically, it covers the policy environment's impact on Ontario's postsecondary education access policies, the policy trends associated with key policies, the key factors affecting postsecondary education funding policies, and postsecondary education outcomes.

A number of factors significantly influenced governments' decisions to increase postsecondary education access in Ontario from the mid 1980s to the present. The first key factor is the perceived role of postsecondary education in the creation of economic wealth. Its perceived role evolved from helping citizens adapt to technological change during the Liberal administration in the late 1980s, to the development of human capital to drive economic development during the NDP administration, to developing the human capital to support market driven economic success during the Tory administration, and finally to producing innovative individuals who are on the economic edge of success during the current Liberal administration. The second factor is public demand for increased access to postsecondary education because of the private benefits like better-paying jobs. The third factor is labour market demand for trained and skilled labour, particularly as a result of worldwide structural changes in the workplace that occurred during the NDP regime.

In order to increase access, successive Ontario governments focused on three primary areas: increasing seats and transferability, enhancing affordability, and promoting research and development. However, the policy components of these areas were influenced primarily by the political economy at the time. For instance, in the area of seat capacity and transferability, the Liberals' approach was to leave institutions to their own creativity to increase accessibility, but also to nudge them toward increased accessibility by providing incentives through the funding formula and targeted funding. The NDP, however, saw increased accessibility as government's responsibility, and attempted to engage employers in skills training, believing that a tight relationship between work and education was essential for economic prosperity. One consequence of this approach was the appearance of the NDP's emphasis on skills. The approach of the Progressive Conservatives during their first mandate, on the other hand, was minimal government intervention because of fiscal constraints. However, during its second mandate, the Tory government aimed at seat increases for specific programs and targeted funding for improving quality.

In the area of affordability, the Liberals' policies primarily focused on tuition fee regulation. The NDP attempted to improve student financial assistance and focused on encouraging individuals on social assistance to access training. The Tory government probably did the most. In its effort to create a Tory welfare state, the government provided special assistance to students with learning disabilities. When it deregulated tuition fee increases, it stepped up financial assistance at the same time for students who were academically qualified but faced financial barriers. The Tories accomplished this by establishing two different funding programs which leverage private funding for scholarships.

In the area of research and development, the Liberal government established a fund to encourage business participation in technological innovation, and created centres of excellence to stimulate research and development. The NDP went further by adding tax incentives and facilitating capital investment. While the Tories expanded on tax incentives, they replaced the funding program initiated by the Liberals (and continued by the NDP) with a new fund that leveraged partnership funding and awarded that funding on a competitive basis. It also paid for overhead costs of research and established awards to attract and retain world-class researchers.

Policy trends observed for seat expansion in Ontario in more recent years include: 1) an erosion of degree-granting as the delineation between colleges and universities; 2) credential creep, in the sense that more and more colleges are able to offer degree programs traditionally reserved for universities; 3) a convergence of college and university programs; 4) a focus on computer science, engineering, and other programs to meet labour shortages and promote innovation; 5) the emergence of hybrid institutions; and 6) the use of private institutions to enhance accessibility to postsecondary education.

In the area of affordability, recent policy trends include: 1) an emphasis on vulnerable and under-represented groups; 2) an increase in student financial assistance in terms of student loans and scholarships; and 3) a reliance on private partnership funding. Current policy trends in the area of research and development include: 1) the use of tax incentives; 2) an emphasis on highly skilled researchers as the source of innovation and commercialization; and 3) the use of private partnership funding to leverage public funding.

Generally, postsecondary funding has not kept up with student enrolment increases. Accordingly, the provincial funding per FTE has been on a decline. Economic conditions alone have not been affecting funding decisions. If they did, one would expect to see funding policies

directly impacted by the GDP growth rate and the rate of increase in provincial spending, which is not the case. Other factors include competing government priorities, federal funding decisions and political ideology. Overall spending on postsecondary education as a percentage of total provincial spending declined from 6.7 per cent in 1985/86 to 5.9 per cent in 2003/04.

The large reduction in provincial grants to postsecondary education in 1996/97 was primarily a result of cuts in transfer payments under the federal Canada Health and Social Transfer program, and the government's Common Sense Revolution agenda. In contrast, the infusion of additional provincial funding to postsecondary education and other programs in 1991 was primarily because of the NDP government's belief in its ability to spend itself out of recession.

Certain provincial funding trends are visible. With respect to provincial grants as a percentage of university operating costs, it was 61 per cent in 1985/86, which decreased to 41 per cent in 2001/02. Colleges in Ontario traditionally rely on provincial funding more heavily than universities (i.e. 86 per cent in 1985/86 decreasing to 58 per cent in 2001/02). It should be noted that these data do not include the significant funding increases made by the Tory government starting in 2002/03 to prepare for the double cohort and, more recently, by the McGuinty Liberal government, which announced large funding increases through to 2009/10.

The decrease in provincial grants has been compensated by increases in other revenue sources, primarily tuition revenues. In 1985/86, tuition revenues constituted only 16 per cent of university operating expenditures and 13 per cent of college operating expenditures in Ontario. By 2001/02, tuition revenues as a percentage of operating expenditures for colleges and universities increased by 15 and 21 percentage points, respectively. The decrease in provincial

grants as a percentage of operating expenditures is a result of provincial grant increases that lagged behind the costs of postsecondary education.

With respect to enrolment, increases in university enrolment were most rapid during the Tory administration at 21 per cent, while college enrolment grew by 7 per cent. University enrolment grew by 17 per cent during the Liberal administration and shrank 2 per cent during the NDP administration. College enrolment grew at 14 per cent and 13 per cent during the Liberal and NDP administrations, respectively. Overall, there does not appear to have been much improvement in accessibility to postsecondary education. The level of accessibility by high school graduates who apply to universities has been more or less maintained in the 67 per cent to 71 per cent range. It also appears that seat capacity expansion has kept pace with the demand of the double cohort starting in 2003/04. However, the average university entrance mark rose to 82 per cent in 2003/04 from 77 per cent in 1989/90.

The postsecondary participation rate in Ontario reflects a peculiar pattern than coincides with each government administration. Shaped like an inverted "S" on its side, the peaks coincide with the NDP and the second Tory mandates, while the valleys coincide with the mandates of the Peterson Liberals and the first Tories. The university participation rate pattern is similar to that of the postsecondary participation rate. On the other hand, the college participation rate pattern has been more stable (it peaked during the NDP administration and slowly flattened out during the Tory administration).

Average university undergraduate tuition fees in Ontario have increased significantly since 1995/96. Between 1985/86 and 2003/04, tuition fees as a percentage of average personal income have risen from 7 per cent to 13 per cent. As a percentage of average family income, tuition fees have risen from 3 per cent to 5 per cent during that same period.

Research and development has grown rapidly in Ontario because of funding programs promoting R&D, and the ability of institutions to capture the largest share of available federal funding.

The structure of this chapter is replicated in the next chapter on postsecondary education access in British Columbia.

CHAPTER FIVE: BRITISH COLUMBIA

The first goal of the 2005/06 – 2007/08 British Columbia Government Strategic Plan is to create a strong and vibrant provincial economy. A skilled workforce—as measured by the percentage of the labour force with a postsecondary certificate, diploma or degree—is considered a vital objective for building a strong economy. At the same time, the first goal of the 2005/06 Ministry of Advanced Education Service Plan is to have a top-notch postsecondary education system.

British Columbia currently has 26 publicly funded postsecondary institutions, including six universities, three university colleges, twelve colleges, and five institutes.⁹⁶ Four of the six universities resemble traditional universities and offer baccalaureate, magistral and doctoral degrees under the *University Act*.⁹⁷ In 2004, however, the Liberal government adopted the University of California model by creating the University of British Columbia, Okanagan Campus, with its own independent senate that can set academic standards and programs.⁹⁸ The fifth university was established under the *Royal Roads University Act*, and differs from the older

⁹⁶ There are approximately 1,100 private postsecondary institutions in BC registered to operate by the Private Career Training Institutions Agency (replacing the former Private Postsecondary Education Commission) under the *Private Career Training Institutions Act (Bill 52)*, passed in November 2004. A board of industry representatives from across BC governs it, and has responsibility to administer and control the Agency's affairs (including administering the Student Training Completion Fund established through funds paid by registered institutions). The purpose of the fund is to compensate students who have not completed their programs in the event that the institution should cease to exist. As for degree-granting institutions, the *Degree Authorization Act* provides an application mechanism for private institutions. Under the Act, the Degree Quality Assessment Board reviews applications by private or out-of-province public institutions for consent to provide degree programs or to be called a "university" in BC.

⁹⁷ Like most traditional Canadian universities, these universities employ a bicameral governance model. Each Board of Governors has responsibility for the management, administration, and control of property, revenue, business, and affairs of the university, including powers to set and collect fees and to enter into agreements on behalf of the university. The Senate has powers related to academic and program issues. Under the *University Act*, the Board must consider recommendations from the Senate when making decisions concerning the establishment of faculties and departments. The only powers of the Minister referenced in the legislation are over approval of new degree programs and the right to request reports and information from universities.

⁹⁸ The establishment of UBC-Okanagan involved dismantling the former Okanagan University College and using its North Kelowna campus as the new UBC-Okanagan campus. By September 2005, a new Okanagan College will be established to provide trades and applied training programs throughout the Okanagan region.

BC universities in several respects.⁹⁹ Royal Roads University offers undergraduate and graduate degrees, as well as certificates and diplomas in selected applied and professional fields.¹⁰⁰ The newest university in BC is Thompson Rivers University, the first special purpose university of its kind, with a mandate to ladder college programs to undergraduate degrees, maintain a focus on open and distance access in concert with the new British Columbia Open University/Open College, and to foster economic growth in the region.¹⁰¹

Like Ontario, the characterization of universities as degree-granting, and colleges as non-degree-granting institutions, is no longer relevant. The BC college system is not homogeneous and is composed of colleges, university colleges and provincial institutes established under the *College and Institute Act*, 1977.¹⁰² For the most part, colleges in BC are non-degree-granting. Unlike colleges in Ontario, those in BC offer university transfer programs.¹⁰³ In addition, they provide career, technical and vocational training programs that lead to certificates, two-year diplomas and two-year associate degrees. As of 2002, the *Degree Authorization Act* has allowed

⁹⁹ The governance model of Royal Roads University is unique in that the President, who is also the Chief Executive Officer, has power traditionally held by the Board of Governors and the Senate. An academic council composed of elected internal representatives advises the President on such matters as qualifications for admission, curriculum content, academic standards, criteria for awarding certificates, diplomas, and degrees. There is also a program and research council composed of external representatives to ensure relevance of the university to community needs.

¹⁰⁰ After the establishment of Royal Roads University (RRU) in 1995, the NDP government established the Technical University of British Columbia (TechBC) in Surrey. In 2002/03, the BC Liberal government closed down TechBC because of low enrolment and high costs. When Tech BC was shut down, a Surrey campus of Simon Fraser University (SFU) was created and took responsibility for students from Tech BC. Since then the SFU Surrey campus has expanded to include a school of interactive arts and technology and a bachelor of business administration degree. Of the 25,000 new seats that the Campbell Liberal government promised to create by 2010, 3,000 of these seats are at SFU (1,150 new seats at the Burnaby campus and 1,850 seats at the Surrey campus).

¹⁰¹ The British Open University/Open College (BCOU/OC) is an offshoot of the Open Learning Agency that provided on-line access to a variety of certificates and diplomas until it was dismantled by the Liberal government in 2002. The new BCOU/OC is administered by the University College of the Cariboo, which will have a new mandate and be renamed the Thompson Rivers University in 2005.

¹⁰² Each of these institutions has a Board of Governors who has the responsibility to manage, administer and direct the affairs of the institution. However, unlike universities that have more autonomy, the powers of the Boards of Governors at colleges, university colleges and institutes are subject to the powers of the minister responsible for postsecondary education. The minister is responsible for setting policy or direction for postsecondary education and training in BC in consultation with the boards, given that the provincial ministry would provide 100 per cent of funding for college operations and capital. Local control was thus removed.

¹⁰³ The *MacDonald Report* (MacDonald, 1962) recommended the development of two-year colleges to provide academic programming at the first and second year levels for transfer to universities.

colleges and institutes to apply for approval from a body authorized by the Act to offer applied degree programs. A university college differs from a traditional college in that it is authorized by the *College and Institute Act* to offer four-year baccalaureate degree programs. In addition, the *Degree Authorization Act* allows colleges to offer courses for an applied magistral degree program. A provincial institute may also be allowed to provide instruction in career, technical, vocational, artistic, or other postsecondary education or training leading to a certificate, diploma or applied baccalaureate technology degree.

Unlike in Ontario, where intermediary bodies have played a major policy advisory role, the most significant body in BC is the University Presidents' Council of British Columbia (TUPC). Its predecessor was the Tri-University Presidents' Council voluntarily established in 1987 by agreement of the three universities in existence after the Universities Council, established in 1974 by the *University Act*, was abolished. It currently represents the interests of the public universities and its mandate includes identifying issues facing universities as well as system-wide leadership in the development of relevant public policy. It also acts as a focal point for dealing with government. With respect to the college sector, three intermediary councils that were established to coordinate planning and funding were eliminated in 1982/83. Since then, a ministry has had direct oversight responsibility for colleges.

The development of postsecondary education in British Columbia is attributable to a combination of factors including economic growth, federal funding, and public demand for education. By the 1940s, BC had become a wealthy resource-based economy with strong revenue growth. Up to the 1950s, the province was still relying on locals who had postsecondary education or training in other parts of Canada, or on migrants who had been trained overseas, to fulfill the labour requirements of a rising professional class (Moran, 1991). In 1950, the Roman

Catholic archbishop established Notre Dame University in Nelson.¹⁰⁴ During that time, the University of British Columbia and its affiliate, Victoria College, together with two Normal schools that provided grade thirteen education for transitioning to a university, comprised the entire spectrum of public postsecondary education in the province.¹⁰⁵

The irony underlying all this development was that W.A.C. Bennett's Social Credit government was not interested in an educational infrastructure. The government focused more on building an infrastructure of shipping lines, railroads, highways and hydroelectric power to facilitate the extraction, transportation and export of BC's natural resources in the north and central interior (Barman, 1996; Resnick, 1987). However, as a result of federal cost sharing programs and public pressure, the Bennett government became interested in social policy initiatives like education and hospital insurance, as well as programs for the elderly, blind, disabled, and unemployed (Prince, 1996).¹⁰⁶

Rising economic prosperity, higher high school completion rates and an emerging women's movement brought additional social pressure for greater access to postsecondary education. Enrolment at UBC doubled between 1955 and 1962, growing from 6,400 to 12,950 students. During the same period, enrolment quadrupled at Victoria College, increasing from 397 to 1,739 students (Jeffels, 1972; MacDonald, 1962). Classes were overcrowded, laboratories

¹⁰⁴ Notre Dame University did not offer third and fourth year courses until 1962. In 1977, when the university encountered financial difficulties, its board requested that the government step in and fund it. In response, Honourable Patrick McGreer, then the minister responsible for postsecondary education, established the David Thompson University Centre, which was administered by the University of Victoria. However, in 1984, as one of government's measures of restraint, the university centre was closed down when it proved too expensive to operate (Dennison, 1987).

¹⁰⁵ The University of British Columbia (UBC), founded in 1908, was established in the tradition of American land grant universities. From its inception, it had arts and science programs and offered professional programs in applied sciences and agriculture. By 1945, UBC had established a Law faculty. It subsequently established graduate studies in 1948, Pharmacy in 1949, as well as Medicine and Forestry in 1950.

¹⁰⁶ The federal government began funding universities on the basis of provincial population in 1952. The federal government's decision to fund universities was a response to the Massey Commission report in 1951. Norman MacKenzie, the UBC President at that time and a member of the commission, had pressed hard for federal funding. See chapter 3 for further discussion of federal funding policies.

were short of equipment, libraries were far from adequate, and it was extremely difficult to recruit faculty in competition with other North American institutions. At the same time, increased demand for educated workers worldwide made for a much smaller supply of trained workers from overseas.

The postsecondary education system in British Columbia expanded most rapidly during the 1960s and 1970s under the influence of three initiatives. The first was the federal *Technical and Vocational Schools Act* (TVSA) in 1960, which resulted in the establishment of vocational training schools.¹⁰⁷ These training schools later developed into BC's community college system. The second was the new interest in advanced technology sparked by the first flight of Sputnik and the fear of Russian technological supremacy (Barman, 1996).¹⁰⁸ The third initiative was John MacDonald's 1962 report called *Higher Education in British Columbia and A Plan for the Future*.¹⁰⁹ The report espoused the theory that a publicly funded postsecondary education system was essential to create a critical mass of educated citizens to transform BC into an industrial economy. It recommended a rapid expansion in the number of postsecondary spaces by establishing two new strata of four-year liberal arts colleges and two-year community colleges as

¹⁰⁷ Under the TVSA, the federal government provided funding for provinces to establish vocational training programs. BC took advantage of the legislation and constructed eight new institutions throughout BC in Burnaby, Kelowna, Dawson Creek, Prince George, Terrace and Victoria. These institutions were administered centrally by the Department of Education. Their curricula comprised short-term trades training, apprenticeship courses and academic upgrading for post-school aged students. The admission requirement was Grade 10 completion, although competition for spaces resulted in higher admission requirements for mature applicants (Dennison, 1987).

¹⁰⁸ Following the first flight of Sputnik, a provincial commission on education was established in 1958. Led by Dr. Sperrin Grant, Dean of Arts and Science at UBC, the commission recommended in 1960 the creation of an "institute of advanced technology" to provide training in a variety of areas. With federal funding, this led to the establishment of the British Columbia Institute of Technology (BCIT) in 1964.

¹⁰⁹ John MacDonald was the newly appointed President of UBC who initiated a faculty committee to study how enrolment trends would affect UBC. The committee found that the population had a profound interest in postsecondary education and that there was a deep-seated dissatisfaction with all postsecondary education facilities being located on the southwest tip of the province. The committee report indicated that lifelong learning was a cold fact of economic survival and that excellence within the postsecondary education system could only be promoted through the creation of alternative instruction, which must be diversified in the mandates of institutions and autonomous in their governing structures. The task in planning for higher education was to seek, encourage and reward excellence (MacDonald, 1962).

a network across BC. These colleges would carry university transfer credits and act as feeders to UBC, which would be a research-intensive institution.

In response, the government rejected MacDonald's recommendations. Instead, the Socred government created two fully autonomous universities, each having legal status equivalent to UBC.¹¹⁰ Victoria College, a former affiliate of UBC, became the University of Victoria in 1963. The second university, Simon Fraser University, was built on Burnaby Mountain and opened in 1965. The government also amended the *Public Schools Act* in 1963 to give school boards the authority to establish colleges subject to the approval of citizens living in the school district.¹¹¹ Between 1965 and 1975, thirteen colleges¹¹² were established in BC, resulting in a disarray of fiercely independent community-based institutions until the *College and Institute Act* removed school board control.¹¹³ By the end of the 1970s, the BC postsecondary

¹¹⁰ *The University Act* was passed in 1963 to define the powers, responsibilities and internal governing structures of the universities. In 1974, the act was amended to implement a number of recommendations from the University Governance Committee, which was chaired by Walter Young of UBC and established by Eileen Dailey, NDP Minister of Education. One of the changes was the inclusion of faculty, support staff and student representatives on universities' governing boards.

¹¹¹ In order to fund a new college, a referendum may be conducted to approve local taxation to cover capital costs. Thus schools districts, aided by community activities, education reformers and concerned citizens, could use the referendum process to approve and fund the development of colleges throughout the province. The first college to be established in this way was Vancouver City College. It was created by the Vancouver School Board, which already operated the Vancouver Vocational Institute and the Vancouver School of Art. The second was Selkirk College in Castlegar, which was the first publicly funded regional college in BC.

¹¹² The establishment of regional colleges began under the Social Credit government. When the NDP government was in power from 1972 to 1975, it established four new colleges in the regions not yet served by a college, and passed the new *Institute of Technology Act* that resulted in the differentiation of certain institutions. Under this new Act, control of BCIT moved from the Department of Education to a governance structure similar to that of colleges (Dennison, 1997). Through this change, BCIT was granted independent corporate status and institutional autonomy with freedom to develop its own curricula and distinctive institutional culture.

¹¹³ To establish government control, the Bennett government determined that board membership should include only government appointees. It also created three new intermediary councils to coordinate the planning and funding of academic and vocational programs (these were eventually eliminated in 1982/83). Some criticized the act for taking away the autonomy of institutions. On the other hand it had the effect of creating greater collaboration among college officials, albeit an increase in centralized control.

education system included three universities, fifteen community colleges, five provincial institutes and one distance learning institution.¹¹⁴

The period of controlled development of BC postsecondary education was halted in the early 1980s with the onset of a worldwide recession. The recession severely affected BC's provincial finances, resulting in a series of restraint measures followed by tax measures in an effort to revive the BC economy. Despite the economic depression, the Social Credit Party under Bill Bennett was re-elected in May 1983, following a campaign of government restraint. Of the twelve provincial elections prior to 1991, the Social Credit Party won eleven. When Premier Bennett resigned in 1986, William Vander Zalm led the Social Credit Party to its last election victory. The party was almost decimated in 1991, winning only seven seats in the Legislature.¹¹⁵ After two consecutive New Democratic Party (1991 – 2001) mandates, the BC Liberal Party formed government in 2001 under the leadership of Gordon Campbell. In the May 2005 election, the Liberal government was granted a second term.

¹¹⁴ Dr. Patrick McGreer, Minister of Universities, Science and Communications during the Bill Bennett administration (1975 – 1986), also worked on expanding an interconnected postsecondary education system with a number of innovations in delivery and administration through four reports he commissioned. The Winegard Report (1976), or the Report of the Commission on University Programs in Non-Metropolitan Areas, was released in 1976 and advanced the idea of a multi-campus university that would utilize classroom-based traditional teaching methods as well as telecommunications and other distance education techniques. The Report of the Committee on Continuing and Community Education in BC, also released in 1976, argued that lifelong learning opportunities were fundamental to planning the entire education system and that there is a need for greater expansion of adult learning opportunities under a variety of formats. The Goard Report (1977), or the Report of the Commission on Vocational Technical and Trades Training in BC, was released in 1977 and recommended the creation of a single provincial body to coordinate the planning and administration of vocational training. Finally, the Carney Report (1978), or the Report of the Distance Education Planning Group, outlined a coordinated approach to planning distance education and highlighted the need for distance education as an alternative to conventional educational institutions in more isolated regions. The idea of the Open Learning Institute came from several sources, including the Winegard and Carney reports. Another notable development was the establishment of Trinity Western University in 1979 through a private member's bill supported by Minister McGreer.

¹¹⁵ Despite the glittering success of Expo 86, the Coquihalla Highway, Skytrain, and the Tumbler Ridge coal development project, Premier Bennett resigned in 1986—barely three years into his third mandate. As Rayner (2000, p. 210) puts it, "He knew his government, after almost eleven years in office had become stagnant".

Access Policies and the Political Environment

As in Ontario, postsecondary access policy making in British Columbia has been supported by the belief that education is essential for economic development. The progressive evolution of what this means is evidenced by the policy focus of successive governments. The Socred government in the mid-1980s emphasized literacy (i.e. opening access in the North and remote communities so that BC has a literate workforce). During the NDP's first term, while access continued to be a priority, the focus of the government was on under-participation by minority groups (especially by Aboriginal youth), as well as skills development and apprenticeship. During its second term, it focused on academic development, knowledge and innovation. The NDP government also emphasized stronger linkages between education and workplace requirements and subsequently introduced education councils to ensure the relevance of college programs to local economies. The focus of today's Liberal government continues to be literacy, knowledge, innovation, and targeted access to specific programs to areas where there are labour shortages.

While components of postsecondary access policies are generally similar, different governments have emphasized different components. For example, the Socred government emphasized student financial assistance, and the NDP government emphasized controlling tuition fees. The Liberal government emphasized (and continues to emphasize) creating conducive environments for market principles to work. For example, to promote competition, it is allowing private institutions to offer degree programs in BC. To borrow gardening metaphors, while the Socred government laid the foundation bed of the postsecondary education system, the NDP nurtured and guided its growth, and the Liberals pruned it. While the three different regimes may not have taken it in a consistent direction all the time, growth has been consistent in

terms of student enrolment. No long-term vision for the postsecondary education system has been officially articulated by any administration. Through consultations, postsecondary stakeholders have been powerful forces of change over the last eighteen years. The extent, scope and approach to consultation have differed from government to government. The Socreds established commissions or task forces to study an issue, the NDP favoured large summit meetings with participants from labour, industry and postsecondary education, and the Liberals favoured specific forums with selective input. The resulting policies more often than not were underpinned by recommendations made by participants in the consultation process.

The next section presents a chronological narrative, from 1985/86 to 2004/05, of major postsecondary education access policies, initiatives and funding, including the political context and policy discussions at the times they were implemented. The descriptions and analyses are intended to characterize the relationship between postsecondary education access policies and the political environment.

Access and Funding Policies During the Social Credit Era

Premier William Vander Zalm was a proponent of neo-conservatism and privatization.¹¹⁶ A Privatization Benefits Fund was established to receive the proceeds from the privatization of certain government services and the sale of assets. The rationale underlying privatization is that selected services can be provided more efficiently by the private sector. If anything, the Vander Zalm administration wanted to be remembered as good fiscal managers who were also committed to deliver caring, compassionate and fair government, and to help those in need (British Columbia, 1991).

¹¹⁶ By 1986, a neo-conservative agenda was also apparent in Ottawa under the Mulroney government. The Socred party's electoral base used to comprise farmers, ranchers and merchants in rural BC, along side the small business sector in urban areas. Ideologically, the party has presented a socially and fiscally conservative populism that stressed self-help and entrepreneurialism.

During this period, the role of education in the wealth creation of a nation dominated policy discussions on education. The Human Capital Theory that lost favour after the 1970s returned under the guise of human resource development. The general belief by its proponents is that the more advanced the economy, the greater the returns to investment in education.¹¹⁷ The Socred government acknowledged the role to be played by education and educational institutions in its economic renewal strategy, and indicated that one of BC's greatest strengths in its effort to compete internationally will be the knowledge and skills of its people.¹¹⁸ To this end, "one of the aims of this government [was] to enable all students who would profit from a higher education to pursue that goal if they so [chose], and to encourage the best students to make that choice." (British Columbia, 1986, p. 13). This encouragement came in the form of providing loans to finance their education, granting partial remission of loans upon graduation, and scholarships for the top 30 per cent of students. A Fund for Excellence in Education totaling \$110 million for 1986/87, and a minimum of \$600 million over three years, was established to be drawn on by the Ministers of Education and Postsecondary Education (British Columbia, 1986).

One of the priorities of the Socreds 1987 Budget was "Investment in People". Given the prevailing high unemployment rate, that budget focused more on putting people back into jobs instead of investing in the postsecondary education system.¹¹⁹ It was not until their third budget

¹¹⁷ The capacity to adapt and adjust to new technologies is believed to improve with education. Given that new technologies are expected to increase productivity and efficiency, a more educated workforce is better able to adjust to rapid changes in new technologies and to compete globally (Marginson, 1997).

¹¹⁸ A 1987 report by the three BC universities, *The Role of the Universities in the Economic Development of British Columbia*, states: "The economic benefits of education in general, and of higher education in particular, are most apparent at times of intense competition. As the economies of the industrialized, developed countries become increasingly dependent on information and technology, the importance of higher education is increasingly appreciated" (*The Role of Universities*, 1987, p. 13).

¹¹⁹ The Vander Zalm administration commissioned a Task Force, chaired by Dr. Kenneth Strand, with a mandate to review and provide recommendations on key short-term training and unemployment issues, and on long-term strategies to facilitate adjustment and to increase employability of structurally unemployed workers in BC. The report, *Learning and Work: The Way Ahead for British Columbians* (BC Task Force in Employment and Training, 1991), traced structural unemployment in BC to three basic drivers found in many other jurisdictions: globalization, technological change, and demographic trends including an aging workforce and a relatively large cohort of young

in 1989, when economic conditions were much improved,¹²⁰ that the Vander Zalm administration announced a comprehensive package to expand access to postsecondary education and job training.¹²¹

Access for All

While education was recognized to be important for economic development, there were other objectives for *Access for All*, a government initiative to enhance access to postsecondary education throughout the province. Stan Hagen, then Minister of Advanced Education and Job Training, in his *Access for All* announcement speech, said:

Postsecondary education is important for reasons other than economic ones. Education is fundamental in preserving the balance between human values and the technological world. Education is a strong force in breaking the cycle of poverty and social malaise. Even in the roots of our democratic process, education is fundamental. Democracy is based on citizens making informed judgments of how our society should govern itself (British Columbia, 1989a, p. 3).

Access for All, a \$35 million initiative, was part of a larger initiative called *Education into the Twenty-First Century*. It was created in response to the Royal Commission of Independent Schools Report (1988) on K – 12 education, and the Provincial Access Committee (PAC) report, *Access to Advanced Education and Job Training in British Columbia* (British Columbia, 1988). The PAC report (British Columbia, 1988) indicates that BC ranked seventh among the ten provinces for total postsecondary participation in 1986/87. It identified needs including equity of access for all citizens, improvement in the overall rate of transition of

job seekers. It also found that the problem in BC was compounded by relatively low skills and education and a weak labour market information system. The report made 28 recommendations, many of which would be acted upon over the course of the NDP's skills agenda throughout the next decade.

¹²⁰ The economy was buoyant in 1988 with a forecast of continued growth at 2.5 per cent and a balanced budget.

¹²¹ Earlier in its mandate, prior to *Access for All*, as a government who believed in investing in people and providing help and opportunities, the Vander Zalm administration developed a new student financial assistance program with the objective of removing financial barriers to postsecondary education. It also announced initiatives including new centres of excellence, innovative teaching techniques and improved technology for distance learning. Budget 1988 provided increased funding of 9 per cent (for a total of \$17 million) for distance education to allow greater equality of access to postsecondary education, particularly for those who live in remote areas.

students from high school into advanced education and job training institutions of all kinds, improvement in retention and completion rates, improved literacy rates, support for people whose first language is not English, increases in occupational training, and expanded access to university studies to and research at both the undergraduate and graduate levels.¹²²

The components of *Access for All* addressed many, but not all, of the perceived needs of the above PAC report.¹²³ The largest component was expanding access to university and college programs as well as occupational training, including the immediate creation of 3,000 new university seats and up to 15,000 additional seats by 1995. University degree programs were made available in areas outside the traditional location of universities in Kelowna, Kamloops and Nanaimo through Okanagan College, Cariboo College and Malaspina College, respectively, in partnerships with provincial universities.¹²⁴ As well, the Socred government announced plans to establish a new degree-granting institution in the north. At the college level, over 1,400 new seats would be created along with 30 new programs in Career/Technical, Vocational, Adult Basic Education and Apprenticeship programs, along with 478 new seats in literacy and adult basic education programs. Concerning equity of access, a Task Force would be established to identify ways of increasing the attendance of First Nations students.¹²⁵ There would also be improved support services for students with disabilities.

¹²² Specific recommendations included: a university of the North, university colleges in densely populated areas which were inadequately served by universities, open learning courses through the Open Learning Agency, recognition of prior learning for admission, and the creation of a Council on Admissions, Transfer and Articulation.

¹²³ *Access for All* funding included \$19 million for enrolment growth at universities, colleges, institutes and distance education, and \$5 million to increase adult literacy rates, to expand English as a Second Language training, and to expand job preparation training for adult Native people (British Columbia, 1989b).

¹²⁴ This was the beginning of university colleges in BC. Simultaneously, the amendments to the *College and Institute Act* also authorized BCIT and the Emily Carr Institute of Art and Design to offer baccalaureate degrees. Another outcome of this report was the creation of the BC Council on Admissions and Transfer (BCCAT). Its role was to facilitate voluntary coordination among institutions to promote articulation and transfer. BCCAT still exists today.

¹²⁵ The Provincial Advisory Committee on Postsecondary Education for Native Learners was formed 1988 and after extensive consultation with Aboriginal organizations and other postsecondary stakeholders, its report was released in 1990.

Schuetze and Day (2001) note that *Access for All* had an immediate effect on enrolment, which increased by 5,400 FTE (2,400 more than committed by the Minister Strachan) in 1989/90, a further 4,600 FTE in 1990/91, and 7,000 FTE in 1991/92. The bulk of the growth was concentrated in the urban colleges and the new university colleges and small (rural) colleges experienced virtually little, if any, growth.

In June 1990, as follow up to *Access for All*, William Strachan, Minister of Advanced Education, Training and Technology introduced *The University of Northern British Columbia Act* (Bill 40) to establish a new university at Prince George. The northern university concept began with the creation of the Interior University Society in 1987. Minister Strachan, then MLA for Prince George South and Minister of State for the Caribou Region, supported the Society. With government support, the Society commissioned a study, *Building a Future of Excellence: A University of Northern BC*, which demonstrated both the credibility and feasibility of creating a full university. Given the great support for Social Credit in Prince George, the government endorsed the concept of a northern institution in principle and committed \$0.75 million to an Implementation Planning Group (IPG).

Comprised mostly of northerners, the IPG prepared a detailed argument that a university was the only kind of institution that had all the qualities needed to develop the social, cultural and economic resources of the North (Gallagher, 1989). The argument was couched in economic terms and stressed a need to promote more diverse economic development and increase the university participation rate of northerners. In November 1989, one month after Minister Strachan was appointed Minister of Advanced Education, Training and Technology, he received the IPG's report recommending the creation of a northern university that emphasized northern and rural themes.

Seeing that the Socred government had successfully established a northern university, another group began lobbying government to address potential access issues in the Fraser Valley area. Although the majority of the MLAs in this area were Socreds, this group was unsuccessful in its lobbying attempts partly because the process of garnering government support was interrupted by a provincial election in October 1991.¹²⁶

Science and Technology

The Vander Zalm administration believed that to compete successfully in the world, BC must become a leader in science and technology (British Columbia, Undated). One of its key components was to "recognize the importance of basic research, and encourage applied research of an international calibre in areas that contribute significantly to British Columbia's economic development and competitiveness" (British Columbia, Undated, p. 5). On the advice of the Premier's Advisory Council for Science and Technology (PACST), the Socred government established a \$10 million Science and Technology Development Fund in 1988/89, and subsequently increased the amount to \$15 million in 1989/90. In July 1989, a few months after announcing *Access for All*, Minister Stan Hagen introduced the *Science Council Act* (Bill 72) in the Legislature. The intent of the bill was to establish a more streamlined organizational structure and expand its mandate from a body that provided advice, coordination and research grants to one that was also committed to strengthening the links between technology and economic growth (British Columbia, 1989c, p. 8699). In November 1989, the Social Credit government also created the new Ministry of Advanced Education, Training and Technology.¹²⁷

¹²⁶ Honourable John Jansen, then Minister of Finance and Corporate Relations, indicated in his 1991 Budget Speech that: "the government is also studying the establishment of a degree-granting institution in the upper Fraser Valley" (British Columbia, 1991, p. 20).

¹²⁷ The government also consolidated the ministry's science and technology programs under one umbrella, the Science and Technology Division of the Ministry of Advanced Education, Training and Technology to provide leadership, coordination and funding to enhance the province's scientific and technological capability. The division

In April 1990, Minister Bruce Strachan introduced the *Science and Technology Fund Act* (Bill 18), which established the Science and Technology Fund Special Account and committed \$420 million over five years. The objectives of the fund included diversifying the economy, enhancing industrial competitiveness in new technologies, creating new export industries, and emphasizing new technologies that would promote a clean environment and a high quality of life. Through the fund, the government committed to increase its science and technology budget to \$123 million by 1994/95—an increase of almost 400 per cent, or of \$26 million, over 1989/90 funding. The Fund supported: industry-based applied research and development, by providing funding assistance to pay up to 50 per cent of total project costs; core research, by providing funding assistance targeted to specific industry and technology strategies identified through a planning process; and special projects, including applied research and development for a range of technologies in partnership with other levels of government and industry, to promote economic diversification and industrial competitiveness.¹²⁸

Articulation and Transferability of Credits

To facilitate admission, articulation and transfer arrangements among BC postsecondary institutions, the Vander Zalm administration established the BC Council on Admissions and Transfer (BCCAT) and appointed its members.¹²⁹ BCCAT is one of the few agencies that has withstood the test of time and has contributed to a highly developed transfer system in BC. Its role continues to be to develop policies and practices that facilitate student mobility, the

also provides programs and direction in research and development, public awareness of science and technology, human resource development and the building of physical and institutional infrastructure.

¹²⁸ The Fund maintained successful programs including the Science and Technology Development Fund, the Premier's Advisory Council for Science and Technology, and key provincial research agencies such as the Science Council of British Columbia and the Advanced Systems Institute.

¹²⁹ The voluntary nature of transfer has its roots in the old Academic Board for Higher Education, established pursuant to the MacDonald Report (1962) in 1968, and dissolved in 1974. It was formed by the government, and its role was to oversee the development of new colleges and to ensure academic standards were being met in relation to academic transfer programs. The Board was comprised mostly of university representatives who viewed its role as facilitative rather than directive (Gaber, 2003).

admission process for direct entry and transfer students, and transferability of postsecondary credit courses (BCCAT, 2004).

Access and Funding Policies During the NDP Era

Six months prior to the 1991 provincial election, Premier Vander Zalm resigned because of issues surrounding Fantasy Garden World, and was succeeded by Rita Johnson.¹³⁰ Despite maintaining a balanced budget for two consecutive years,¹³¹ the Social Credit Party was decimated in 1991, holding only seven seats after the election.¹³² The New Democratic Party won 51 of 75 seats under the leadership of Michael Harcourt. This victory initiated a ten-year NDP regime (two terms) under the following premiers: Michael Harcourt (1991 – February 1996),¹³³ Glen Clark (February 1996 – August 1999),¹³⁴ Dan Miller (August 1999 – February 2000),¹³⁵ and Ujjal Dosanjh (February 2000 – May 2001).

The NDP's major priorities were to reduce provincial debt, eliminate the budget deficit, protect the social safety net, maintain stability in the health care system, and invest in people through education and skills training. The NDP government regime saw the energetic expansion

¹³⁰ Fantasy Garden World was sold to a Taiwanese billionaire in the summer of 1990 for \$16 million. As a result of allegations by one of The Vancouver Sun's reporters of misconduct surrounding the sale, Premier Vander Zalm asked Conflict of Interest Commissioner Ted Hughes to conduct an inquiry. The Hughes report concluded that the Premier's actions constituted a conflict of interest (Rayner, 2000, p.219).

¹³¹ The NDP government later accused the previous Socred government of using the Budget Stabilization Fund to manipulate the fiscal bottom line. An independent financial review confirmed that the projected 1991 budget surplus was actually a deficit of \$395 million, and that the real forecast for 1991/92 was more likely a \$2 billion deficit after adjusting for the Budget Stabilization Fund.

¹³² The Social Credit Party dismantled, and regrouped with the Liberal Party which became the official opposition with 17 seats.

¹³³ On November 15, 1995 Premier Harcourt announced his resignation after a report found that the NDP and the Nanaimo Commonwealth Holding Society had collaborated for a long time to divert charity funds for political reasons. As Rayner (2000, p. 230) writes: "In the end, Harcourt had to leave not because he failed to govern BC properly but because he failed to control his own party. Although he blamed the media for his demise, Harcourt's hand on the tiller was too tentative to steer the good ship NDP on a proper course. That strong hand would come from his successor, who could certainly steer – right toward the rocks of oblivion".

¹³⁴ In August 1999, after two years in office, Premier Clark resigned while under criminal investigation for corruption. He allegedly received a benefit in the form of a discount for home renovations in return for using his influence on a casino license application for his friend, Dominos Pilarnis.

¹³⁵ In February 2000, Premier Miller resigned before the former Auditor General, George Morfitt, released his October report indicating that the fast ferries project was massively mismanaged. Premier Miller was the minister responsible for BC Ferries while the fast ferry project unfolded.

of the postsecondary education system in both the university and college sectors despite unstable economic conditions and budget deficits. The NDP government expanded access to education by creating new institutions that effectively hastened the qualitative stratification of the system. By the turn of the century, the former binary system of universities and colleges had fragmented into a spectrum of institutional types no longer distinguished by their status as degree or non-degree-granting.

During the NDP regime, education's role in BC's economic future became slightly better defined than it was during the Social Credit years. This role extended from simply improving literacy to producing an innovative, educated and highly trained workforce that would contribute to the future economic success of the province. The NDP government may have been influenced by the Organization for Economic Co-operation and Development's (OECD's) belief that economy and education were changing in ways that increased their interdependency, and that the distinction between education and economy was becoming less clear. The OECD notes that national differences in economic performance can be directly attributed to varying degrees of educational effectiveness and the learning capabilities of a country's population. The capacity to adapt and adjust to new technologies is believed to improve with education. Since new technologies are expected to increase productivity and efficiency, a more educated workforce is better able to adjust to rapid changes in new technologies and to compete globally (OECD, 1989, p. 19).

The NDP emphasized improving access to postsecondary education in both their 1991 and 1996 election campaign platforms. Specifically, the 1991 platform committed to catching up with other jurisdictions in providing opportunities to attend colleges and universities, as well as expanding research and development. It recognized that education encourages self-reliance and

social responsibility in a democratic society (New Democratic Party of British Columbia, 1991). The 1996 platform announced a Guarantee for Youth, which includes guaranteed access to postsecondary education for all qualified students and affordable tuition fees (New Democratic Party of British Columbia, 1996). In 1996, the NDP government commissioned a stakeholders' group to review and make recommendations to improve the transition of secondary students to postsecondary education.¹³⁶

As with most left modernizers, the NDP saw the focus on human capital development as the means to economic prosperity. Like their counterparts in Ontario, the BC NDP government initiated steps to ensure that the postsecondary education system meets the requirements of the economy. At the same time, they recognized the role of using market capitalism to some degree. The 1991 platform for a prosperous BC indicated:

A New Democratic government will work with the business community to develop new markets and new products that diversify our traditional resource base. We will promote BC's position as Canada's gateway on the Pacific to tap our potential as a trade, communications and financial centre. Our province's future economic success also depends on an innovative, highly trained and educated workforce... We will begin to reverse these short-sighted educational policies, expand research and development, encourage increased processing of resources in BC, and stabilize the labour relations climate (New Democratic Party of British Columbia, 1991, p. 6).

Consistent with fostering education-industry linkages and producer capitalism, the NDP government organized the Premier's summits on trade (1992) and skills development (1993) to bring BC leaders together to develop a consensus on goals and strategies for BC and to reverse

¹³⁶ The report, *Moving On* (British Columbia, 1997a), contained many recommendations that were acted on by government including career planning programs, secondary apprenticeship programs, and common secondary and postsecondary student identification numbers to track them through the systems.

shortsighted educational policies.¹³⁷ The NDP government also commissioned several studies that formed the backdrop to the 1993 Premier's summit.

The first was a ministry report, *Forces of Change Influencing Education and Training* (1992b) that reinforced the recommendations of the Strand Report.¹³⁸ This report raised the issue of relevance and identified three other challenges for BC's education and training system. These included: the challenge of quantity, as public demand for access continued to rise; the question of quality, cast as an imperative to find alternate delivery methods in the face of rising demand; and the question of resources as the state's fiscal limits were stretched. The second report, *Life-long Learning for the 21st Century: A Report on the Future Development of Adult/Continuing Education in BC* (Faris, 1992), recommended a policy framework for lifelong learning, equity and access, quality and responsiveness to community needs.¹³⁹ The third report, *Review of BC Student Assistance and Barriers to Postsecondary Participation: Final Report* (Orum, 1992) contained 173 recommendations to correct shortcomings and identified significant financial and other barriers that may hinder British Columbians from achieving a postsecondary education.¹⁴⁰

¹³⁷ Producer capitalism focuses on creating economic development by low-cost, long-term investment linked to the development of human capital. In contrast, market capitalism focus on creating a magnet economy capable of attracting high-skill, high-wage employment within the global economy.

¹³⁸ The Strand Report was commissioned by the Vander Zalm administration. See footnote 24.

¹³⁹ This report was triggered by the previous government's decision to transfer responsibility for school district adult basic education (high school completion including Adult English as a Second Language) from the Ministry of Education to the Ministry of Advanced Education, Training and Technology. The NDP government put the final phase of the transfer on hold and established a consultation process involving a wide range of stakeholders. The objective was to have recommendations for a policy framework for the delivery of adult/continuing education in BC.

¹⁴⁰ This report was triggered by government's concern over poverty rates in BC. The NDP government appointed a committee, chaired by Jennifer Orum, to review the BC Student Assistance Program and make recommendations. The government implemented a number of the recommendations including increasing the budget for various grants that target students with special needs and changing the child care subsidy policy so that students receiving financial assistance could qualify.

Several conclusions came out of the 1993 Premier's summit.¹⁴¹ The first relates to the emphasis on vocationalism and skill training, as it was recognized that equal value must be placed on vocational, technical and academic choices to meet future challenges. More work is required on revitalizing and expanding the apprenticeship system and providing relevant career counselling. The second conclusion relates to lifelong learning. The learning system must be flexible and modular, enabling smooth and effective transitions between school and work. Therefore, action areas include increased mobility and transferability between learning environments, as well as flexibility in work scheduling to permit skills upgrading. Attendants of the summit were also interested in new approaches to overcoming barriers, and called for improved data for decision-making and planning purposes. Following the summit, the Harcourt administration introduced *Skills Now!*, a program that reflected the government's emphasis on vocationalism and skills training.¹⁴²

Skills Now!

Skills Now! outlined an integrated two-year plan totaling \$199.5 million over 1994/95 and 1995/96. The four building blocks of *Skills Now!* were: linking high school to the workplace by providing work experience opportunities outside the classroom and career planning; increased access to college and university by providing 8,100 new student spaces; increasing the number of degree-granting colleges and institutes to six allowing for the addition of growing fields such as

¹⁴¹ 90 leaders from business, labour, universities, research institutions and government attended this summit to discuss issues related to three areas: a vision for the provincial economy, challenges and opportunities facing the province, and action to meet challenges and achieve the vision.

¹⁴² Prior to the announcement of *Skills Now!*, Tom Perry, Minister of Advanced Education, Training and Technology (also a UBC professor by profession), was moved to the backbenches and Dan Miller, then Minister of Forests, was appointed to the new super portfolio, Ministry of Skills, Training and Labour. The new ministry amalgamated the portfolios of labour and advanced education. Changes implemented by Tom Perry included: repealing the BC Association of Colleges Incorporation Act and replacing it with the Advanced Education Council of BC; introducing the Apprenticeship Board's administrative fee for application for exemption of qualified tradespersons who do not have BC certification; removing the requirement for each college and institute to justify its existence every five years; and amending the *University Act* to authorize public colleges and institutes to grant an associate degree in arts or science to students who successfully complete a two-year academic program.

film animation and environmental management; retraining workers by establishing telecommunications capacity at new community centres across BC as well as creating 300 new apprenticeship seats; and moving the employed from welfare to the workforce. Several legislative changes accompanied *Skills Now!*—two of which involved amendments to both the *College and Institute Act* and the *Institute of Technology Act*. These amendments gave university colleges and institutes powers to grant designated baccalaureate degrees in their own right, as well as powers to include elected representatives from faculty, students and support staff on governing boards. The amended Act also included a new provision requiring the establishment of education councils to provide advice on program issues.¹⁴³

As with the previous administration, the third NDP budget contained a comprehensive postsecondary education strategy.¹⁴⁴ Again, government's focus on a major postsecondary education strategy with significant spending only occurred after BC's fiscal foundation had been stabilized and the economy had been turned around after a world recession (this time in 1991). The 1994 Budget allocated a \$34 million increase in grants for postsecondary education and another \$90 million of new funding to implement *Skills Now!* in 1994/95. Data from the Ministry of Advanced Education indicate that between 1993/94 and 1995/96 the operating grant to universities increased by \$24 million, while that of colleges and institutes increased by

¹⁴³ These changes were supported by the Liberal/Social Credit members but opposed by two MLAs from the Progressive Democratic Party. Another piece of legislation, the *Skills Development and Fair Wage Act* (Bill 37)—which required everyone working as a tradesperson on a provincially funded construction project to be registered under the *Apprenticeship Act* and hold BC apprenticeship certification of qualification or inter-provincial seal—had a rougher ride in the House. Gary Collins, then Liberal MLA from Fort Langley-Aldergrove, objected to the act on the grounds that it went against free market ideals. Nonetheless, Bill 37 was passed on June 1, 1994. Fred Randall, the NDP MLA from Burnaby-Edmonds, explained that the legislation was required because many employers who had successfully bid on public projects were ignoring public policy by not paying fair wages and hiring unqualified workers. This bill is one example of NDP government's pro-unionism.

¹⁴⁴ The 1994 Budget was the NDP's third. In it, the Harcourt administration committed to bringing the deficit down to \$898 million (from \$1.28 billion the previous year) and to eliminate the deficit altogether by 1996/97. It also indicated that had there not been federal offloading, instead of a deficit, BC's budget would have been a surplus of almost \$900 million in 1993/94 and of \$1.6 billion in 1994/95.

\$37 million. In addition, colleges and institutes also received additional funding of approximately \$4 million for apprenticeship and entry-level trades training programs.

Toward the latter part of its mandate, the NDP government's vocational thrust exemplified by *Skills Now!* appeared to have slackened. The emphasis on "skills" expanded to "skills and knowledge for the new economy"—a phrase used consistently in Budget speeches in 1999, 2000 and 2001, when the government embraced the role of universities as the research engines of innovation and the purveyors of critical thinking essential for the new economy. The thinking of the NDP government in the latter part of its regime is probably captured in these words from Paul Ramsey in his 2001 Budget Speech:

As I said to our university presidents at UBC last September, our goal isn't just to teach facts and formulas. We have a larger, often unspoken goal of teaching young people how to think critically – how to think for themselves, because only those who are capable of critical, independent thought are capable of moving us forward, as an economy, and as a society. Today in BC, we need those critical thinkers more than at any other time in our history. Here's why. A strong resource sector will always be an important part of our economy and our identity as a province. But the world around us is changing. Technology advances so quickly that even our brightest innovators don't truly know where the future will take us. One thing, however, is certain. Today our natural resources – keys to our future prosperity in BC – are not just trees and minerals, but knowledge, skills and ideas (British Columbia, 2001a, p. 9).

This shift is arguably reflected in its funding pattern. According to Ministry of Advanced Education data, provincial grants to universities increased by 12 per cent between 1991/92 and 1996/97 (from \$473 million to \$528 million in current dollars), and by 23 per cent between 1996/97 and 2001/02 (from \$528 million to \$659 million in current dollars). Provincial grants to colleges and institutes (excluding university colleges) increased by 14 per cent between 1991/92 and 1996/97 (from \$317 million to \$362 million in current dollars), and by 21 per cent between 1996/97 and 2001/02 (from \$362 million to \$437 million in current dollars).¹⁴⁵ During

¹⁴⁵ According to Statistics Canada data, the provincial grant to universities increased from \$526 million to \$969 million (in current dollars) from 1991/92 to 2001/02, an increase of 84 per cent or \$443 million. Most of the

1996/97 and 2001/02 (the second NDP term) the rate of increase to provincial grants was greater for universities than for colleges, whereas the reverse was true during the first NDP mandate.

The Industry Training and Apprenticeship Commission

Consistent with the left modernizers' belief that a high-trust partnership between government, employers and workers is necessary to build a high-skill, high-wage economy, the NDP government legislated the Industry Training and Apprenticeship Commission (ITAC) in 1997. When introducing the legislation, Paul Ramsey, then Minister of Education, Skills and Training indicated that ITAC was government's response to concerns over the stability of supplying skilled labour to the workforce.¹⁴⁶ The cyclical effects of hiring and laying-off apprentices have resulted in great variation in the year-to-year level of entrants and graduates. ITAC also reflected a new approach of giving the industry responsibility for governing its training and apprenticeship system.

The commission consisted of members from business, labour, education and government. Its mandate included: facilitating a smooth transition from school to work and promoting ongoing skills, upgrading and lifelong learning; expanding the number of skilled persons in designated trades and occupations based on identified labour market needs; promoting labour mobility by developing a system of provincially recognized credentials that enable laddering, portability, mobility and transferability; and making the best use of available resources.

Another component of the commission's mandate was to increase the number of under-represented groups in designated trades and occupations. Superficially, this may appear

increase occurred in the latter part of the NDP regime. For colleges, provincial grants decreased from \$315 million to \$258 million during the same period, a decrease of 18 per cent or \$57 million. This pattern is accounted for by the change of some colleges to degree-granting institutions, thus becoming 'universities' for the purpose of data collection by Statistics Canada.

¹⁴⁶ The problem was identified in a Ministry of Skills, Training and Labour report entitled, *Environmental Scan, An Overview of BC's Learning, Socio-Economic and Labour Market Environment* (British Columbia, 1996b).

consistent with the modernizers' belief that the removal of social inequalities requires state intervention to ensure that genuine equal opportunity is available to all. Trades were traditionally associated with low paying, blue-collar jobs taken by people who were not academically gifted. The mandate emphasized higher participation by certain groups in trades even though there was low participation overall.¹⁴⁷

New Public Postsecondary Institutions

Apart from changing the status of university colleges to baccalaureate degree-granting institutions in their own right, four new institutions were created during the NDP regime. Two of these institutions were aboriginally controlled institutions and the remaining two were special purpose universities deliberately designed to be different from traditional universities.

Consistent with NDP ideology, the Harcourt administration was concerned about minority issues including First Nations' participation rate in postsecondary education. For a long time, the representation of Aboriginal students had been approximately 3 per cent in the college sector and 2 per cent in the university sector. In comparison, the 1995/96 proportion of First Nations people within the BC population was 5 per cent, and the proportion of First Nations youth within the provincial youth population was 7 per cent (BCLFDB, 1996).

To meet the needs of aboriginal students in the province, the Harcourt administration prepared the *Aboriginal Postsecondary Education and Training Policy Framework* (British

¹⁴⁷ Prior to ITAC, in 1994, the NDP government established the British Columbia Labour Force Development Board (BCLFDB), one of the 28 Strand recommendations, to further its vocational agenda and to create a parallel structure to the federal Labour Force Development Board. According to Hommen (1997), an important factor behind the BCLFDB's creation was a perception of growing federal encroachment into provincial labour force policy. With a rather loose mandate to facilitate multipartite cooperation and dialogue on labour market policy, the Board's most notable achievement was its controversial 1995 report, *Training for What?* (BCLFDB, 1995), which noted an undersupply of skilled graduates in technological and scientific fields, and a pronounced imbalance in the public postsecondary system toward degree and university transfer programs. The report drew much criticism from academics that perceived this observation to be anti-elitist university-bashing and a misguided assessment of the benefits of academic education to the labour market. To quell the controversy, Minister Dan Miller announced the dissolution of the BCLFDB in 1996, just two years after it was established.

Columbia, 1995a) in consultation with First Nations. The policy framework included the designation of two existing aboriginally-controlled institutions, the Institute of Indigenous Government in Vancouver Downtown and the Nicola Valley Institute of Technology, as publicly funded institutions. This approach is somewhat consistent with Brown and Lauder's (1997) view that to ensure social equality, the state should intervene to ensure that genuine opportunity is available to all.

The creation of Royal Roads University (RRU) was not planned. However, when the federal government offered to provide some financial assistance should the province take over the grounds and facilities of the Royal Roads Military College at Colwood (which it was closing down in 1994), the opportunity to create a new university on its site was too good to pass up. The NDP government created the Advisory Panel on the Future Directions for the Military College in 1994. The Panel's vision was to create an institution that specialized in modular, inter-disciplinary programs in applied science and technology, and to build skills in teamwork, entrepreneurship and international relations.

By June 1995, Minister Miller introduced the *Royal Roads University Act* (Bill 49) to establish RRU as an independent degree-granting institution. The Act incorporated much of the spirit and substance of the Panel's report including the recognition of prior learning experience for meeting admission requirements to attract mature students who lack formal education.¹⁴⁸ The governance model was also unlike that of traditional universities in that it included the board of governors, the president (who is also the chief executive officer), the program and research

¹⁴⁸ Instead of 'faculty', the Act uses the term 'professor' to reflect RRU's ability to assemble ad hoc teams of professors for specific purposes, which can disband after the task or goal is accomplished. Also, the teams can comprise members from private, labour, business and education sectors (British Columbia, 1995b).

council,¹⁴⁹ and the academic council¹⁵⁰ (British Columbia, 1995c). The concept of RRU appears to be working well. By 2003/04, RRU had just over 1,850 funded FTE students, having grown from 250 funded FTE students in 1996/97. Its funded FTE seats are expected to increase to 1,890 in 2005/06 and 1,930 in 2006/07. Since RRU's inception, its actual FTE count has either met or exceeded its funded FTE spaces almost every year.

In contrast, the fate of the Technical University of British Columbia (TechBC) is dissimilar to RRU's. Soon after the creation of UNBC, lobbying for a university in the Fraser Valley began. Two separate committees (Schroeder, 1991; Neylan, 1993) concluded that the Fraser Valley's population was expected to double from 606,000 in 1991 to 1,383,000 in 2021, and that the area would have a larger growth in the population of 18 – 24 year olds than anywhere else in the province. During the NDP regime, the Fraser Valley area was the home constituency of three NDP MLAs who supported the idea of a new university to serve the needs of an exploding population.

On June 9, 1997, Minister Ramsey, then Minister of Skills, Training and Labour, introduced the *Technical University Act* (Bill 30) to create TechBC. The objective was explicitly vocational, as the new institution would help fuel a regional high-technology economy both by producing 'market-ready' technicians and by incubating research and development innovations through strategic partnerships with private industry. TechBC's mandate included offering certificate, diploma and degree programs at the undergraduate and graduate levels in applied technology and related professional fields. The new university would be responsive and flexible,

¹⁴⁹ The program and research council is comprised of a majority of appointed external representatives to advise the board in instructional, program and research priorities, program objectives, and desirable learning outcomes to ensure relevance to the mandate of the institution.

¹⁵⁰ The academic council, also composed of elected external representatives, advises the president on such matters as qualifications for admission, curriculum content, academic standards and criteria for awarding certificates, diploma and degrees.

able to adjust rapidly to the changing needs of the labour market and to attract high quality teaching staff and state of the art technology through its close partnerships with business and labour. Its governance model was not unlike RRU's, except that it went further. Teaching staff neither had tenure nor did they sit on the governing board. Instead of a Senate, there were program advisory committees that made recommendations on program development. These committees included teaching staff and students, but the majority of members represented business groups, labour groups, professional associations and other educational institutions.

Despite fierce opposition from labour groups¹⁵¹ and the university community regarding its corporate model of governance, the *Technical University Act* was passed in December 1997 and the new TechBC began operating in the fall of 1999.¹⁵² Between 1999/2000 and 2001/02, TechBC consistently missed its FTE target by a large margin. As a result, it was finally shut down in 2002/03 by the Liberal government as a cost saving measure.

Tuition Fee Policy

The NDP government's tuition fee policy delighted students but created financial hardship for BC's postsecondary institutions after being enforced for six straight consecutive years, without offsetting compensation until the latter years. The NDP government levied its first tuition fee freeze in Budget 1992, and in 1996 imposed a prolonged tuition fee freeze at the 1995/96 levels.¹⁵³ In 1998, when introducing the *Tuition Freeze Act* (Bill 8) to extend the freeze

¹⁵¹ Organizations such as the Canadian Association of University Teachers (CAUT) and the Confederation of University Faculty Associations (CUFA) feared that the lack of an academic senate and tenure for academic personnel would lead to the demise of academic freedom and autonomy of the university.

¹⁵² This disagreement with labour was more an exception than the rule for the NDP government. In 1992, the *University Amendment Act* that empowered colleges to grant two-year Associate Degrees had also granted university professors the right to form faculty associations, thus bringing BC law in line with international labour standards. Similarly in 1994, the *College and Institute Amendment Act* created education councils to provide democratic oversight in academic matters by college instructors. This was an important symbolic acknowledgement of their status as professional educators rather than mere classroom technicians.

¹⁵³ The first tuition freeze was levied as part of the *Tax and Consumer Rate Freeze Act*, which held auto insurance premiums, hydro rates and tuition fees constant for three years.

for a third consecutive year, Premier Clark explained that increasing access was the rationale behind this policy (British Columbia, 1998). During the second reading of the tuition freeze bill, the Honourable Andrew Petter, then Minister of Advanced Education, Training and Technology, argued that:

It is essential that we make sure that the doors to postsecondary education are thrown open wider, that people are given more access to knowledge, not less, that education becomes more of a universal right and entitlement and less of market commodity (British Columbia, 1999b, p. 12570).

In the 1999 Budget Speech, Joy MacPhail, then Minister of Finance, said:

With this budget, tuition fees remain frozen for the fourth straight year. BC's tuition fees are now the second lowest in the country. It is having a real effect...for the first time since 1976, the proportion of British Columbians attending postsecondary institutions is above the Canadian average. Among 18 to 24 year olds, we are second only to Quebec. There are thousands of students in our universities and colleges who wouldn't be there, couldn't be there, if tuition fees were going up by 20 or 30 per cent, as they have in other provinces...A good education is a door to a good job and a better future. And that's a door we want to keep open for every young British Columbian (British Columbia, 1999a, p. 13).

A year later, Minister Petter's successor, the Honourable Graeme Bowbrick invoked the same vision of social solidarity as follows:

We believe that postsecondary education is an inherent public good and should therefore be funded out of public resources to the greatest extent possible. That's what the tuition freeze is all about. What we're saying to students with this legislation is this: "You're not alone. We collectively, as a society and as your government, will support you if you seek higher education (British Columbia, 2000, p. 14812).

Denied of their ability to raise revenue through tuition, postsecondary institutions felt the squeeze and began to make their predicament known through various means including media,¹⁵⁴

¹⁵⁴ Dr. David Strong, then President of the University of Victoria, was published in the Times Colonist stating as follows: "We've cut \$9 million from our budget over the last four years, and our class sizes went up 20 per cent. Tuition fees imposed by the provincial government since 1995 have delighted students, but they have led to the elimination of some courses and programs" (1999). TUPC (2002) indicates that there was a \$40 million investment gap that resulted from "inadequate funding to absorb inflationary pressures from student growth that was mandated but not funded by the provincial government and from the provincial tuition policy" (see its paper on The Core Review).

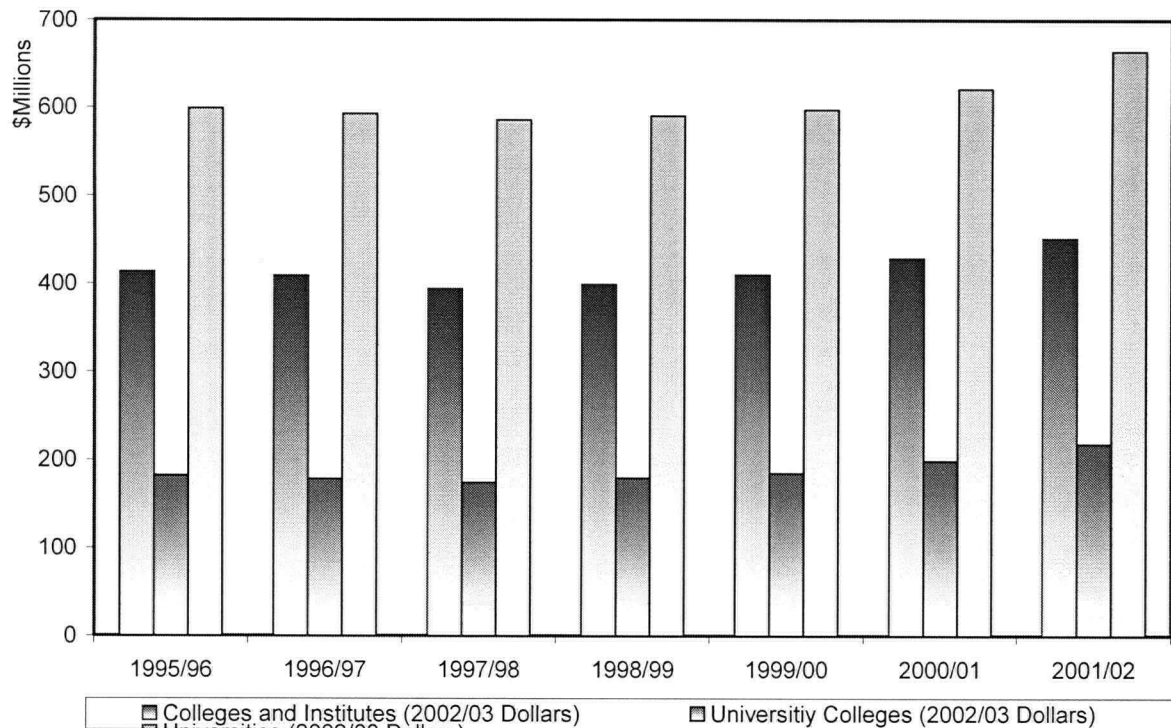
MLAs,¹⁵⁵ and task forces.¹⁵⁶ The squeeze on institutions coincided with policy discussions related to the decline in government funding sources and the push for institutions to become more productive and efficient (Neave and Van Vught, 1991; Zideman and Albrecht, 1995). During the first four years of the six-year tuition freeze, not only were BC institutions squeezed by the prohibition of raising additional revenues through tuition, but provincial operating grants to institutions also declined below 1995/96 levels (after factoring in inflation).

Figure 5.1 indicates provincial grants to universities, university colleges, colleges and institutes in 2002/03 dollars, and the year-over-year percentage change. It was not until 2000/01 that provincial grant levels rose above 1995/96 levels in all three sectors. Between 1995/96 and 1997/98, while the tuition freeze was enforced, postsecondary institutions also experienced decreases in provincial grants. By 1998/99 and 1999/2000, annual increases to provincial grants were in the 1 to 3 per cent range, eventually climbing to the 4 to 10 per cent range in 2000/01 and 2001/02. Annual increases to university colleges were the highest compared to other BC public postsecondary institutions: 8 per cent and 10 per cent in 2000/01 and 2001/02, respectively.

¹⁵⁵ MLA Jack Weisbeck spoke up in the house and suggested that the tuition freeze was impeding access. He read from an executive report from the Okanagan University College (OUC) as follows: "Provincial funding mechanisms and decisions are in large part responsible for a significant gap between what OUC receives to educate a student through tuition and provincial funding and the actual costs of providing that education. The gap has been growing and the problem has been exacerbated by a three-year old tuition freeze and other factors beyond OUC's control" (British Columbia, 2000).

¹⁵⁶ As a result of complaints of financial hardship, the Ministry of Skills, Training and Labour commissioned a task force to review. The report, *Critical Issues in Financing BC's College and Institute System* (British Columbia, 1997b), found that the system had exhausted its capacity to deliver further efficiency savings and could no longer cope with the size of the budget challenge.

Figure 5.1: Provincial Grants in Constant Dollars (1995/96 – 2001/02).



Source: Ministry of Advanced Education.

By 1999/2000, BC had the second lowest average undergraduate tuition fee (\$2,568) after Quebec (\$1,865). The Canadian average was \$3,328 (Statistics Canada, 2004a). When introducing the *Access to Education Act* (Bill 9) on tuition freeze in 2001, the Honourable Cathy McGregor, then Minister of Advanced Education, Training and Technology, outlined that the legislation will see average university fees in BC drop to \$2,166 per year. This would be about \$1,800 less than Ontario and about \$1,600 less than Alberta (British Columbia, 2001c).

Charting A New Course

Consistent with the emergence in the 1980s of “entrepreneurial managerialism” in western industrialized countries (Neave and Van Vught, 1991), which resulted in the upsurge of evaluation to ensure quality and accountability, performance measurement and government master planning—the NDP government developed *Charting A New Course: A Strategic Plan for Future of British Columbia’s College, Institute and Agency System* in 1996 (British Columbia,

1996a). This policy framework was created in collaboration with representatives from labour, education (including students), and business sectors. The fact that the government did not succeed in getting universities to participate in this planning exercise is telling of the invisible chasm between universities and colleges in BC. The universities maintained that they were autonomous institutions and quite distinct from colleges, which were subject to government control.

The plan set out a framework of accountability that included performance measures. It also iterated a specified funding structure including the various funding envelopes to reward partnerships with the private sector and other levels of government, development of on-line courses and capital expansion. The plan established a provincial committee to provide a conciliatory structure for policy discourse, and also defined roles for three provincial agencies to help achieve the goals of system integration.¹⁵⁷ The four key goals were relevance and quality, access, affordability, and accountability.¹⁵⁸ Access to postsecondary opportunities would be enhanced by the continued expansion of institutions, new learning technologies, prior learning assessment, and improved credit transfer and portability.

Access and Funding Policies During the Liberal Era

Despite the NDP successfully balancing the provincial budget, BC voters did not give them a third term. The Liberal Party enjoyed a record breaking landslide victory in 2001, winning 73 of the 75 seats in the BC Legislative Assembly. On June 5, 2001, the Liberal

¹⁵⁷ The three provincial agencies and their roles were: the Open Learning Agency, which would continue to play a role in educational broadcasting and distance learning including a credit bank for open learning; the Centre of Curriculum, Transfer and Technology, which would provide a range of services in relation to the government's goals of quality and relevance; and the Centre for Education Information Standards and Services, which would gather and disseminate data on labour market and higher education supply, compile annual report on employment outcomes for graduates of the college and institute system, and provide consulting and technical services on management information systems for colleges.

¹⁵⁸ Affordability outlined in the document involved achieving greater efficiency and cost-effectiveness for the college and institute sector, but did not include the tuition freeze and enhanced student financial assistance.

government was sworn in with Gordon Campbell as Premier. New Era, the Liberal campaign platform promised a new era of hope, which included reduced taxes and less government red tape, as well as a revitalized economy and job creation. In July 2001, the Liberal government made good on its tax reduction promise. In its July Economic and Fiscal Update, Gary Collins, then Minister of Finance, indicated:

The Fiscal Review Panel made it clear that BC has a structural fiscal imbalance and if we did nothing we could face a deficit of more than \$5 billion within three years. The Panel also said that our fiscal problems can be solved with fundamental changes in the way government operates. I'm announcing action on both fronts today to get our economy growing again: 1) we need to make our tax system competitive as a first step to revitalizing economic growth; 2) we need to bring some discipline to spending, with strong accountable fiscal management (British Columbia, 2001b, p. 3).

Concerning postsecondary education, the Liberal New Era commitments included: new student spaces in skills shortage areas; an expansion of online learning; investments in research; expansion of medical programs; forgivable student loans for doctors and nurses; a new model of industry training and apprenticeship; and removal of the tuition freeze.¹⁵⁹ Unlike members of the New Right, who favour allowing market principles to take their course, the Liberals, like the NDP, appear to have accepted the need for the state to focus more attention on growing an educated workforce within the province. At the same time, the Liberal government did something the NDP government would not have done, which was pass the *Public Education Flexibility Act* (Bill 28). As part of a larger package that overrides some provisions of public education sector collective agreements, the Act allows college and institute employers to

¹⁵⁹ Before determining the new model, the Liberal government consulted with several business groups including the BC Chamber of Commerce and the Coalition of BC Business, synthesized recommendations into a draft plan which employer groups discussed at a series of regional discussion forums hosted. The new Industry Training Authority Board (ITAB) is a nine-member board that has one labour appointee and no education representatives. In comparison, the old ITAB had a balance of members from employers, unions, education and government. ITAB has been criticized for being employer dominated and for being the cause of several problems, including low enrolment and completion rates in apprenticeship and trades training (FPSE, 2004).

override a provision that limits class size and student numbers, and that requires faculty agreement in assigning distributed learning courses.

Unlike the NDP, the Liberals did not engage in wide consultations with stakeholders from labour, business, and education all in the same room, but consulted with other selected stakeholders (especially business and employer groups) through forums such as the Core Review Task Force,¹⁶⁰ the BC Progress Board,¹⁶¹ and the Premier's Technology Council through written submissions and/or face to face presentations or meetings.

The Campbell administration appears to have accepted two key premises of a BC Progress Board Panel on education: that BC's prospects for prosperity—present and future—are directly linked to BC society's basic, overall capacity for learning and innovation, and that BC must build upon its current educational strengths and create a culture of ongoing learning in order to secure its economic and social future. Key policy decisions of the Liberal government that affect postsecondary education followed the recommendations of the BC Progress Board report, *Learning to Win – Ready, Set, Go Report of the Panel on Education, Skills, Training and Technology Transfer* (BC Progress Board, 2002).¹⁶² These include: expanding the capacity of the postsecondary system, extending the mandate of an existing provincial university to

¹⁶⁰ The University Presidents' Council in its paper, *The Core Review, What is it and What Does It Mean for British Columbia Universities?* (2002), suggests that there is a need to improve access. It states that "BC has made significant gains in access to degree-granting capacity improving from 65% in 1989 to 80% by 1998". However, the demand for spaces continues to grow at BC universities, grade point averages for admission continue to be higher than any other province, and BC has fallen further behind our major competitors in Alberta, Ontario, Washington, Oregon and California. As the New Era plan states, "we must do better" (BC Liberals, 2001, p. 2).

¹⁶¹ Premier Campbell established the BC Progress Board in July 2001 to advise the government on economic and social policy. The Board consisted of 14 businessmen and the Chancellor of UBC, and released a report in December 2002 recommending comprehensive reforms to the education sector.

¹⁶² The issues identified by the Panel include: 1) the demand for postsecondary seats exceeds the supply resulting in higher entrance requirements that are turning qualified students away; 2) the labour shortages in specific areas call for special attention to those areas; and 3) BC is lagging in its ability to leverage and access federal funding for research, development and innovation.

Kelowna, and sufficiently replenishing the BC Knowledge Development Fund to attract a higher share of federal research funding.¹⁶³

Many key education policy decisions have also come through recommendations of the Premier's Technology Council,¹⁶⁴ including doubling the number of graduates in computer science, electrical engineering, and computer engineering from 880 to 1,760 within the upcoming five years to promote growth in the high technology sector (British Columbia, 2002a). Another recommendation is the establishment of the Leading Edge Endowment Fund, a \$45 million partnership with the private sector, to create 20 research chairs (British Columbia, 2002b).

25,000 New Seats by 2010

Budget 2004 announced the creation of 25,000 new seats by 2010, including the 2,700 new seats announced in 2002/03. The government's objective was to ensure that students who had received a B grade or better in high school would have the opportunity to attend a postsecondary education institution close to their homes.¹⁶⁵ The seats would be distributed among the college regions as follows: 250 seats in the Northeast; 250 seats in the Northwest; 1,000 seats in North Central; 4,000 seats in Vancouver Island; 4,500 seats in the Lower

¹⁶³ Other recommendations by the Panel included: 1) increasing the numbers of international students by 50 per cent by 2010; 2) rationalizing college administration, beginning with the Greater Vancouver area; 3) reallocating the existing research and capital infrastructure of BCIT to Kelowna and Prince George; 4) Sponsoring a Learning Summit every two years that would focus on the development of partnerships between industry, communities and educational institutions, to foster workforce education and lifelong learning; and 5) increase the number of students completing graduate research degrees within our university system by 7.5 per cent.

¹⁶⁴ The Council's vision for BC--to be globally recognized as one of the top ten technology centres in the world, with a highly skilled technology workforce and an education system structured to support and respond to industry's needs--will no doubt affect government policies not only in education but in other areas as well. Its mission is to create a positive business and public policy environment that introduces market principles.

¹⁶⁵ The Ministry of Advanced Education's three-year service plans, for both 2003/04 - 2005/06 and 2004/05 - 2006/07, each identified a top-notch education system that provides students with accessible, affordable high quality and relevant postsecondary education as one of the goals. The intent to lower grade point average for entry to university may be inconsistent with the creation of a top-notch education system unless there are other initiatives to attract, develop and keep the brightest Canadian students within the BC system or to enhance the quality of education in BC.

Mainland; 8,000 seats in Surrey/Fraser Valley; 700 seats in Kootenays and 6,300 seats in the Okanagan/Central Interior.¹⁶⁶

The programs targeted for growth are included among the occupations identified as “high opportunity”, including the doubling of computer graduates, training more social workers and nurses, and increasing medical graduates.¹⁶⁷ Both colleges and universities may provide some of these targeted programs, albeit at different competency levels. For example, computer and nursing programs delivered by colleges are more applied in nature and graduates are awarded a diploma or an applied degree upon completion. University programs have both theoretical and applied foci and students graduate with a baccalaureate or magistral degree.

The expansion of access to medical programs involves a collaboration of three universities: the University of British Columbia, the original university with a medical program; the University of Northern British Columbia, to prepare doctors for northern and rural areas; and the University of Victoria, to train doctors for rural and coastal communities.¹⁶⁸ The plan will increase the annual student intake for medical training to 224 by 2005/06, and is based on the assumption that medical graduates tend to remain in their community and region where they receive their education. All graduates will receive a UBC degree.¹⁶⁹

¹⁶⁶ The distribution of seats among the postsecondary regions appears to roughly approximate regional population growth projections prepared by BC Stats. For example, BC Stats projects that between 2002 and 2011, the 18 – 19 year old population in the Fraser Valley will increase by 33 per cent. The allocated seat increase for the Fraser Valley region is 8,000, which constitutes 32 per cent of total new seats. Similarly, the Okanagan region has 25 per cent of new seats and its projected population growth is 24 per cent.

¹⁶⁷ Other high opportunity occupations not specifically targeted for funding include: auditors; accountants and other financial officers; chefs and cooks; construction and industrial electricians; plumbers; steamfitters; pipefitters; gasfitters; managers in accommodation, food and retail trade industries and senior managers. The ministry’s letter to each public postsecondary institution in March 2004 indicated that institutions would be encouraged to address the needs of existing and emerging skills shortages and to support economic and social priorities (e.g. education and training needed to prepare for the 2010 Olympics, oil and gas, mining, aerospace and other sector needs).

¹⁶⁸ BC has been hiring new doctors at the rate of 300 to 400 a year (British Columbia, Honourable Shirley Bond, then Minister of Advanced Education at Open Cabinet on March 15, 2002).

¹⁶⁹ The number of seats are distributed as follows: UBC with 128 seats, plus 24 in 2004/05, plus another 24 in 2005/06; UNBC with 24 seats starting in 2004/05; and UVic with 24 seats by 2005/06.

By 2004/05, the college system would provide approximately 88,600 student spaces in addition to 6,000 trades training spaces, while the university sector would provide 69,300 spaces.

New Public Postsecondary Institutions

Unlike the NDP, who expanded the postsecondary education system both by establishing new institutions and expanding the mandates of some existing institutions, the Liberal government has changed the postsecondary landscape by expanding the mandate of three existing institutions while shutting down TechBC.¹⁷⁰ At the time of closure, Tech BC had only 400 students and was costing \$24 million annually to operate.¹⁷¹

The first of the three changes was the expansion of Simon Fraser University into Surrey. On March 5, 2004, Premier Campbell announced a capital investment of \$70 million for the Surrey Campus. Since taking responsibility for students from TechBC in 2002, the Surrey Campus has expanded to include a school of interactive arts and technology and a bachelor of business administration degree. Student enrolment has grown such that the existing facility, a former Zellers store, has become too small. The new campus located within the Central City Complex, which will increase access for students in the Fraser Valley. It will have five faculties including applied arts and science, business education, arts, and science. Of the 25,000 new sets committed by the Campbell government, 3,000 of them will be at SFU, with 1,850 at the Surrey Campus and 1,150 at the Burnaby Campus.

¹⁷⁰ The Liberal government also eliminated agencies such as the Centre of Curriculum, Transfer and Technology and the Centre for Education Information Standards and Services in Budget 2002. The College Institute Educators' Association of BC (CIEA) claimed that the loss of these agencies limits the ability of the institutions to work together in the interest of students (FPSE, 2003).

¹⁷¹ When introducing the second reading of the bill to shut down Tech BC, Gary Collins, then Minister of Finance, underlined the government's commitment to fiscal accountability as follows: "Continued operation of the Technical University of British Columbia in its current form is simply not feasible. Since it was established in 1997, the Technical University of British Columbia has consistently failed to meet its original mandate in terms of enrolment, operating costs, funding and industry partnerships. Government has increased funding for the Technical University of British Columbia several times and has repeatedly adjusted enrolment targets and...the Simon Fraser University proposal will cost \$22.4 million less over three years than the continued operation of the Technical University of British Columbia under its most recent business plan" (British Columbia, 2002c, 2284-85).

The second change is the expansion of the University of British Columbia into the Okanagan.¹⁷² The Okanagan campus is modeled after the University of California such that it has its own independent senate that will set academic standards and programs to meet the needs of people in the region. However, the trade-off is the dismantling of Okanagan University College. The North Kelowna campus of the former university college will be the UBC-Okanagan campus and a new Okanagan College will be established by September 2005 to provide trades and applied training programs throughout the region.

The third change is the establishment of the former University College of the Cariboo as a special purpose teaching university in April 2005. It is named Thompson Rivers University and will administer the new British Columbia Open University/Open College (BCOU/OU). Finally, to further address e-learning, the Ministry of Advanced Education has designed BC Campus—the provincial online and distance learning service.¹⁷³ BC Campus is a collaboration of postsecondary institutions in British Columbia providing a central access point to postsecondary online and distance learning courses, programs, and resources. It is intended to facilitate a seamless path for distance learners in British Columbia from application to graduation. In addition to providing access to online and distance education courses and programs available throughout the British Columbia public postsecondary system, BC Campus will provide support services and other resources for learners, faculty, course developers, staff and administrators.

¹⁷² This was announced on March 12, 2004. During the announcement, the Premier acknowledged that the Okanagan is home to six Liberal MLAs, five of whom are cabinet ministers, namely: Tom Christensen (Okanagan-Vernon); Rick Thorpe (Okanagan-Westside); George Abbott (Shuswap); Sindi Hawkins (Okanagan West); and Wendy McMahon (Columbia River-Revelstoke).

¹⁷³ Premier's Technology Council reviewed the BC Campus design and recommended that the plans be fully implemented in its fifth Report, dated January 12, 2004.

Tuition Fee Policy

In February 2002, the Liberal government announced the lifting of the tuition fee freeze and total deregulation of tuition fees in public postsecondary institutions. Following this announcement, tuition fees increased by 30 to 40 per cent. Currently, however, the Liberal government may be reversing its decision to deregulate tuition fees. The 2005 Throne Speech delivered on February 8, 2005 indicated as follows:¹⁷⁴

To fully support the new student spaces, your government will further increase funding for advanced education by \$132 million over the next three years. Together with the funding increase announced last year, the operating budget for advanced education will be \$195 million higher by 2007 than it was in 2004. This new funding will provide new capacity to moderate rising tuitions. Your government recognizes that rising tuition costs are a concern to many BC families. Now that our tuition rates are again comparable to those in other provinces, your government will act to limit future tuition increases to the rate of inflation, effective this September. Legislation giving effect to that measure will be introduced later this year (British Columbia, 2005a, p. 17).

There has been pressure on the government to re-institute a tuition freeze. Malcolmson and Lee (2004) argue in favour of a tuition freeze and believe that the financial crunch faced by BC's institutions in the late 1990s, which is often blamed on the tuition freeze, in fact had more to do with insufficient funding during a period of fiscal restraint prior to the freeze. Doherty-Delorme and Shaker (2004), who rank provinces annually according to their level of commitment to postsecondary education across four indicators (equity, quality, public accountability and accessibility), dropped BC from second to fourth place—down from first place three years ago. The drop in ranking occurred because, from the authors' perspective, the end of the freeze adversely affected accessibility.

¹⁷⁴ At the time of writing, the Liberal government has not tabled any legislation to this effect in the Legislative Assembly. However, there is little doubt that if the Liberal government wins a second term, it would follow through on that promise.

Research and Development

One of the Liberal New Era commitments is establishing of the Leading Edge Endowment Fund (LEEF) for research and development. The fund was created with \$45 million to award 20 British Columbia Leadership Chairs and \$7.5 million to award six Regional Innovation Chairs.¹⁷⁵ All funds allocated are to be matched by non-provincial funding, leveraging an additional \$53 million for research.

As well, funding of \$27.5 million was provided to Genome BC in 2002/03. This funding leveraged an additional \$34 million in federal funding for genome research projects that focused on areas such as human health, forestry, aquaculture and the environment. Also, the Michael Smith Foundation for Health Research received \$8 million in 2002/03, an additional \$25 million in 2003/04, and will receive a further \$100 million by 2007/08. Established in 2001, and provided with \$110 million from the NDP government for its operations until 2006/07, the Foundation's goals include attracting researchers to BC and training future researchers.

In order to create a competitive environment for the high-tech sector, the Campbell administration introduced a number of tax cuts in 2001 that would benefit the sector.¹⁷⁶ The new Premier's Technology Council was established in 2001 to achieve the goal of establishing BC as one of the top ten high-tech centres in the world. By 2004, the government had implemented many of the Council's recommendations, including extending by five years the Scientific Research and Experimental Development Tax Credit, starting in 2004/05.

¹⁷⁵ TUPC applauded this decision to create the research chairs. It also indicated that the lack of provincial funding has meant that BC has not taken its share of federal matching dollars, thus "leaving money on the table" to be taken up by other provincial jurisdictions. See *The Core Review. What is it and what does it mean for British Columbia's Universities?* (TUPC, 2002).

¹⁷⁶ These tax cuts include the reduction in the top marginal personal income tax rate to the second lowest in Canada; elimination of the corporation capital tax on general corporations; a sales tax exemption for production machinery and equipment; and enhancing to small business venture capital programs announced in the previous budget.

To help BC institutions qualify for federal matching funds (such as the Canada Foundation for Innovation), the BC Knowledge Development Fund (BCKDF) focuses on investment in research infrastructure including modernization, acquisition or development. Research infrastructure is any equipment, specimens, scientific collections, computer equipment and software, or intangible properties used for conducting research. The BCKDF funds up to 40 per cent of all eligible project costs leaving remaining costs to be paid by other funding sources. Only postsecondary institutions are eligible to apply, as teaching hospitals and affiliated non-profit research agencies may apply through a postsecondary institution.

Fiscal Policy Related to Access

Throughout 1986/87 and 2004/05, economic growth in British Columbia was often below 3 per cent, with the highest growth rate being 4.6 per cent. The highest rate occurred in 1987/88 during the Socred regime and it has not since reached such a level. Despite the absence of an economic boom, all governments throughout 1986/87 to 2004/05 have consistently protected funding for postsecondary education. Even though funding increases have not been as generous as those for health, postsecondary education received yearly increases with few exceptions. One of the few exceptions occurred during 1996/97 and 1997/98 as a result of reductions in federal transfer payments.

The provincial grant to universities was approximately \$492 million in 1986/87 and was increased to \$660 million in 2003/04 (in constant dollars). The total provincial grant to colleges, however, was much lower to begin with (\$219 million in 1986/87), but it grew and exceeded the total grant to universities during the NDP regime. By 2003/04, the provincial grant to colleges was \$683 million (\$23 million higher than grant to universities). The shift to funding non-university education more than universities as a way to reduce provincial spending for

postsecondary education costs is evidenced here. Non-university seats were cheaper to fund than university seats. Hence, over the period investigated, as university student enrolment increased disproportionately to funding increases, grants per student for universities decreased whereas grants per student for colleges fluctuated but remained relatively constant.

Although postsecondary education was always a government priority, growth in its share of provincial spending was consistently low in comparison to health. In 1986/87, 28.6 per cent of provincial spending went to health and by the end of the Socred administration this number had risen to 32.6 per cent. By the end of the NDP regime, health spending rose to 38.0 per cent and has continued to rise during the Liberal administration, to 42.6 per cent in 2004/05. In contrast, postsecondary education spending has been relatively stable: 7.5 per cent at the end of the Socred administration in 1990/91; 7.9 per cent in the last year of the NDP administration in 2001/02; and 7.6 per cent in 2004/05 during the Liberals' term in office. Under the NDP however, postsecondary spending as a percentage of total spending was at a record high of 8.5 per cent in 2000/01 only because of a significant infusion of funding.

Faced with rising costs that exceeded growth in provincial grants, postsecondary institutions have had to turn to other sources of revenue. From 1985/86 to 2001/02, the share of the provincial grant to the operating costs of postsecondary institutions dropped from 80 per cent to 74 per cent for colleges, and from 61 per cent to 53 per cent for universities.

The next section presents a discussion of fiscal policies from 1986 to 2004 as they relate to postsecondary education within the prevailing economic context. The description and analysis intends to characterize the relationship between overall postsecondary education funding, overall government fiscal policies, and the economic environment.

Fiscal Policies During the Socred Government

The Vander Zalm administration delivered its first budget in 1987. By then, the BC economy had recovered from the 1981 worldwide recession. At that point, it had inherited a structural deficit of \$1.2 billion.¹⁷⁷ Inflation was very high at 14 per cent in 1981/82, but had settled to below 6 per cent during the Vander Zalm years. By 1985, the BC economy was beginning to grow again.

Table 5.1 shows some key economic indicators for the province between 1986/87 and 1991/92. Unemployment was high to begin with at 12.5 per cent in 1986/87, but steadily decreased to 8.3 per cent by 1990/91. Revenue growth was slow and relatively flat between 1990/91 and 1991/92 because of the onset of another worldwide recession. With the assistance of the Budget Stabilization Fund and increased tax revenues, the Vander Zalm administration managed to balance its budgets in 1988/89 and 1989/90.¹⁷⁸

Table 5.1: Some Key Economic Indicators (1986/87 – 1991/92).

Year	GDP Growth (%) (\$1981)	Unemployment Rate (%)	Inflation Rate (%)	Summary Account (\$B) Surplus/ (Deficit)	CRF Revenue (\$B)	Total Provincial Debt (\$B)
1986/87	1.0	12.5	3.0	(0.6)	9.5	17.1
1987/88	4.6	11.9	3.0	0.1	11.0	17.0
1988/89	4.0	10.3	3.6	0.9	12.6	16.5
1989/90	3.0	9.1	4.5	0.5	13.7	16.3
1990/91	2.5	8.3	5.5	(0.7)	14.2	17.3
1991/92	-0.5	9.9	5.3	(2.3)	14.6	20.0

Source: British Columbia Ministry of Finance and Corporate Services, Budget Documents and Economic and Statistical Review.

¹⁷⁷ From a surplus of \$542 million in 1979/80, BC experienced a deficit of \$257 million, \$174 million, \$984 million, \$1.1 billion, \$994 million, \$937 million and \$1.2 billion in 1980/81, 1981/82, 1982/83, 1983/84, 1984/85, 1985/86 and 1986/87, respectively.

¹⁷⁸ The *Budget Stabilization Fund Act*, 1988 established this special fund. Transfers were made into the fund during years of high revenue so that money could be transferred out for use in the general revenue fund in years of lower revenues.

The Socred government campaigned on promises of fiscal responsibility, a lower deficit, careful spending of taxpayers' dollars and more local responsibility.¹⁷⁹ At the same time, one of the seven principles used to guide its economic and fiscal policies was: "we believe in providing help and opportunities so that the disadvantaged in our society can become full participants in our development" (British Columbia, 1987, p. 2). Through restructuring major taxes and reallocating spending from other areas, the Vander Zalm administration increased spending in its priority areas, which included assistance for disadvantaged groups, health care programs, and local government.

Another Socred principle was: "we believe we must invest in our best resource – our people – because they are our most valuable asset" (British Columbia, 1987, p. 2).¹⁸⁰ Table 5.2 shows the annual budget plan for the five areas with the largest budgets during the five years allocated by the Vander Zalm administration: health, education, social services, postsecondary education and transportation. Overall, the rate of budget increase for colleges and universities indicates a strong government emphasis on postsecondary education. The rate of increase for postsecondary education spending exceeded the rate of provincial GDP growth during 1986/87 and 1991/92, and in some years was higher than the rate of increase of overall provincial spending.

¹⁷⁹ The Vander Zalm administration inherited a structural deficit of about \$1 billion.

¹⁸⁰ The remaining principles were: 1) we believe in open and fair government which is responsive to the rights and requirements of the individuals in our society and which is not subject to domination by special interest groups; 2) we believe government's role is to create a healthy climate for growth and envelopment, leaving business decisions to the private sector; 3) we believe in encouraging development that is responsive to the long-term needs and welfare of the community at large, at both the local and provincial level; 4) we believe the taxpayers' money should be used carefully; that government should be affordable and that our goal must be to reduce and eliminate the deficit so today's bills will not be left for tomorrow's generation; and 5) we believe that the provision of services in our society must relate to our ability to fund them and that users must bear a degree of responsibility for paying for the services that are provided.

Table 5.2: Expenditure – Budget Plan 1986/87 to 1991/92.

Ministry Expenditure (\$M)	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92
Advanced Education, Training and Technology (AETT)	617	801	862	995	1,122	1,237
Education	1,185	1,367	1,973	2,224	3,022	3,286
Health	2,755	3,176	3,915	4,309	4,803	5,400
Social Services and Housing	1,487	1,391	1,394	1,610	1,710	1,984
Transportation and Highways	1,001	863	731	1,016	1,217	1,271
Rest of government	2,598	2,622	2,960	3,333	3,386	3,367
Total CRF Budgetary Expenditure	9,643	10,220	11,835	13,487	15,260	16,545
% YTY Change of AETT	0%	29.8%	7.6%	15.4%	12.8%	10.2%
% YTY Change of Total Budget	6%	6.0%	15.8%	14.0%	13.1%	8.4%
% share of Total						
Advanced Education, Training and Technology (AETT)	6.4%	7.8%	7.3%	7.4%	7.4%	7.5%
Education	12.3%	13.4%	16.7%	16.5%	19.8%	19.9%
Health	28.6%	31.1%	33.1%	31.9%	31.5%	32.6%
Social Services and Housing	15.4%	13.6%	11.8%	11.9%	11.2%	12.0%
Transportation and Highways	10.4%	8.4%	6.2%	7.5%	8.0%	7.7%
Rest of government	26.9%	25.7%	25.0%	24.7%	22.2%	20.4%
Nominal GDP (at market prices)	57,050	62,866	69,557	75,774	79,528	82,087
AETT Exp as % of GDP	1.08%	1.27%	1.24%	1.31%	1.41%	1.51%
% Change in GDP at market prices	7%	10%	11%	9%	5%	3%

Source: British Columbia Ministry of Finance and Corporate Relations, Budget documents.

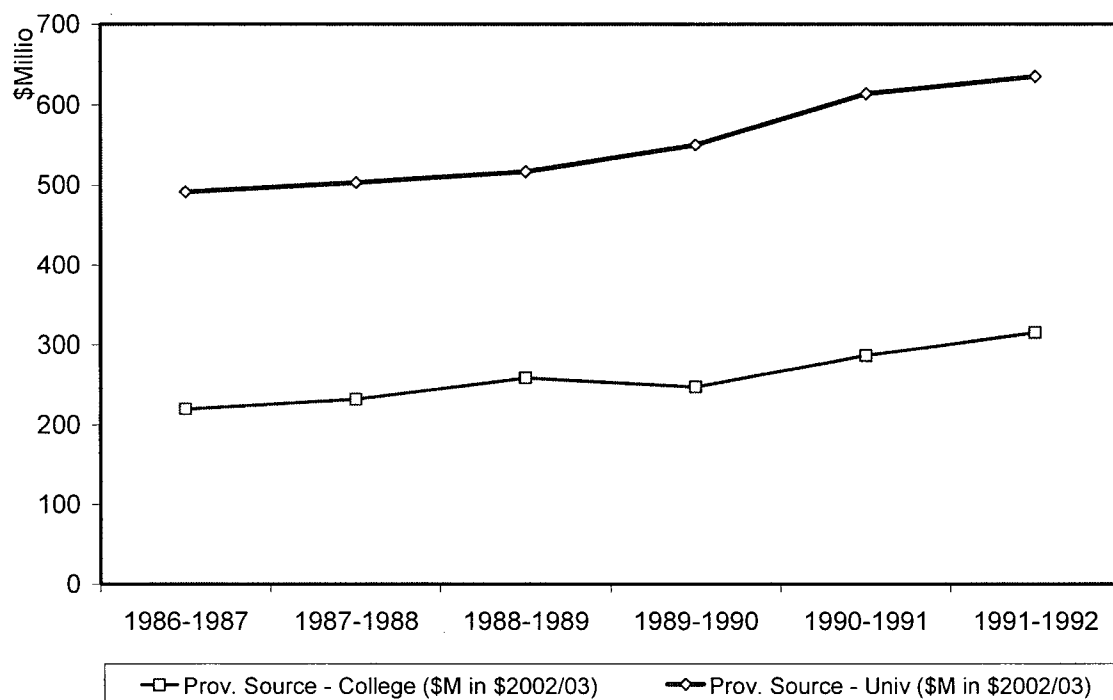
As a percentage of total provincial spending, spending on K – 12 education jumped from 13 per cent to 20 per cent, and health spending rose from 29 per cent to 33 per cent between 1986/87 and 1991/92. However, postsecondary spending as a percentage of total provincial spending was relatively constant around 7 to 8 per cent. Postsecondary spending also did not correspond to the rate of increase for overall spending in the provincial budget. While the rate of increase for provincial spending was at its highest in 1988/98, the rate of increase for postsecondary spending was at its lowest in that year during the Socred regime. These patterns suggest that spending increases for colleges and universities occurred during good economic times and were modified by other factors, including prevailing government priorities and policies.

Literature suggests that there was a trend toward vocationalism in Europe and North America in over the last 25 years (Hyland, 2001; Otterwill and Wall, 2000; Ashton and Sung, 1997). The trend toward vocationalism is accompanied by demand from industry for the graduates it employs to have more work-related skills. Elsewhere, throughout the western industrialized countries, there was an emphasis on employability skills and a desire by state and industry to influence postsecondary education. Was there a trend toward vocationalism in BC during the Socred period?

Figure 5.2 shows operating grants for colleges provided by the province from 1986/87 to 1991/92. It would be misleading to interpret the larger increases to the college sector (apart from two years of funding decline in 1986/87 and 1989/90) as an emphasis on vocationalism. Unlike Ontario, where the focus of the college sector is on vocationalism, BC colleges offer university transfer programs. One of the policy objectives of the Socred government was to use the regional colleges to deliver university transfer programs so that individuals living in areas without a university would have access to university programs. The large increase in funding to the college sector in 1988/89 corresponds to the Access for All initiative.

It was not until the last two years of its mandate that the Socred government increased funding for postsecondary education. The annual funding increases in 1990/91 and 1991/92 were 16 per cent and 10 per cent respectively for colleges, and 12 per cent and 3 per cent respectively for universities, despite the fact that economic growth was 2.5 per cent in 1990/91 and -0.5 per cent in 1991/92. There were also significant increases to K – 12 education as a response to recommendations from the Sullivan Commission during those years. In its 1990 Budget, the Socred government publicly acknowledged for the first time that a relationship exists between education and economic development, and put an emphasis on quality education.

Figure 5.2: Operating Grants from the Province in Constant Dollars (1986/87 – 1991/92).

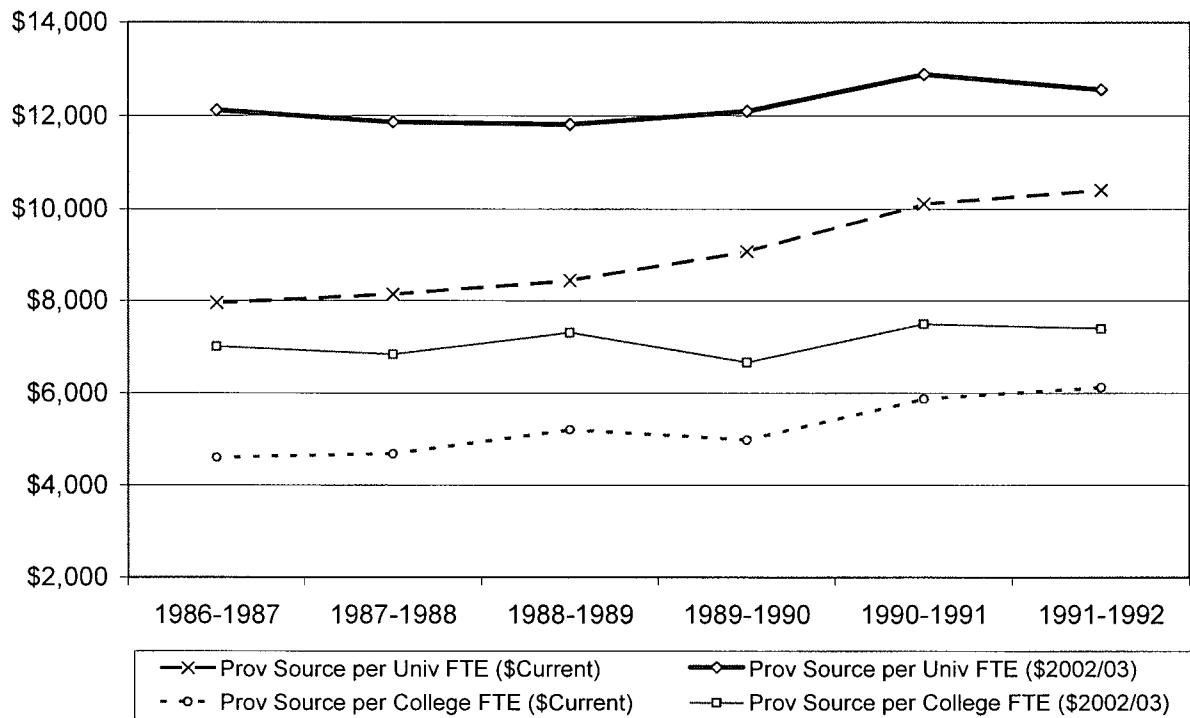


Source: Statistics Canada.

Figure 5.3 shows provincial grants toward operating expenditures on a per full-time student equivalent (FTE) basis for colleges and universities during the Socred mandate.¹⁸¹ Overall, the provincial grant per FTE increased almost every year. The rate of increase was slower than the rate of inflation, except for the years 1990/91 and 1991/92 (see Table 5.1 for the rate of inflation). The provincial grant per FTE student to universities was at least \$3,000 in current dollars (\$4,500 in 2002/03 dollars) higher than the grant for colleges for every year during this period. The provincial grant per FTE student to colleges peaked in 1988/89, dipped in 1989/90, and then rose again. The dip in 1989/90 was a result of a modest increase in the provincial grant coupled by a 5 per cent increase in college student enrolment that year, one year after implementation of *Access for All*.

¹⁸¹ The Resource Document of the Council of Ontario Universities (2004) indicates that BC ranked tenth among Canadian provinces in provincial university operating grants per capita and was below the Canadian average between 1988/89 and 1992/93.

Figure 5.3: Operating Grants from the Province per Full-Time Equivalent Student (1986/87 – 1991/92).



Source: Statistics Canada.

Fiscal Policies During the NDP Era

Starting in 1990, there was a slowdown in the world economy that resulted in lower than expected provincial revenues. By 1991/92 the Canadian economy had shrunk by 1.5 per cent, while BC's had shrunk by 0.5 per cent. In addition, the federal government was offloading more and more responsibility for social programs to provinces by freezing or cutting transfers for health, education and social assistance. This was done to manage federal debt, which was estimated to reach \$419 billion by the end of 1991. The cost of the federal offloading to BC was estimated to have been approximately \$1.4 to \$1.6 billion in 1992/93 (British Columbia, 1992a; British Columbia, 1993).

The NDP government delivered its first budget in 1992. The Socreds had left a deficit of \$1.7 billion resulting from unsustainable growth in government expenditures and repeated

cutbacks in federal transfer payments. Like the Socreds before them, the NDP government promised to bring the province's finances under control while addressing the priorities of British Columbians, which included health, education and social services. The NDP faced many challenges. Within a year of the 1991 provincial election, the unemployment rate rose to 10.7 per cent. Poverty among families with children had been rising and the portion of the BC population living in poverty had risen from 13.8 per cent in 1989 to 17.3 per cent in 1993 (Prince, 1996).

Despite the 1991 global recession, BC's economy grew by 2.4 per cent in 1992/93, while Canada's economy only grew by 1 per cent.¹⁸² Table 5.3 shows some key economic indicators during the NDP's ten-year regime. The highest rate of economic growth in BC was 4.3 per cent in 1994/95. BC was also at the brink of an economic recession in 1998/99 and again in 2001/02. Notwithstanding a sluggish economy, the unemployment rate continued to decline slowly throughout the NDP regime because of government policies that sustained existing part-time employment or generated new part-time employment, particularly in the construction industry.¹⁸³ As a result, the provincial debt continued to increase.¹⁸⁴ As a result of a one-time revenue windfall and a one-time accounting adjustment involving public sector pension funds, the NDP government successfully balanced the budget in 2000/01. The 1999/2000 budget was also balanced thanks to better than expected revenues stemming from economic recoveries in Asia

¹⁸² According to Scarfe (1996), BC hardly felt the recession because of the relative buoyancy of world market prices for BC exports and the substantial inflow of foreign direct investment from the Pacific Rim countries and the relatively low international values of both the US and the Canadian dollar in terms of offshore third party currencies. BC's economy was also buoyed by the in-migration of people to BC from other provinces and overseas. Net in-migration rose 15.6 per cent to a record 64,400 persons in 1990. Rapid population growth helped to sustain consumer spending and the housing market during the first half of 1990. As a result domestic spending was the main source of growth for the provincial economy and helped to offset the impact of declining export earnings (British Columbia, 1991).

¹⁸³ The NDP invested heavily in social infrastructure such as public schools, colleges, universities, hospitals, courthouses, non-profit housing and recreational facilities.

¹⁸⁴ The NDP justified this spending by arguing that today's taxpayers should not have to shoulder the entire cost of services and facilities that would benefit future British Columbians in the years to come (Prince, 1996, pp. 260-263).

and a very strong US economy. To reduce the budget deficit while maintaining spending on priority areas, the NDP slowed down growth in program spending and raised taxes in their early budgets.

Table 5.3: Some Key Economic Indicators (1992/93 – 2001/02).

Year	GDP Growth (%) (\$1997)	Unemployment Rate (%)	Inflation Rate (%)	Summary Accounts (\$B) Surplus/ (Deficit)*	CRF Revenue (\$B)	Debt** (\$B)
1992/93	2.4	10.5	2.7	(1.5)	16.2	23.4
1993/94	3.2	9.7	3.5	(0.9)	17.9	25.9
1994/95	4.3	9.4	2.0	(0.2)	19.5	27.1
1995/96	2.7	9.0	2.3	(0.3)	19.7	28.8
1996/97	0.5	8.9	0.9	(0.4)	20.1	29.3
1997/98	2.0	8.4	0.7	(0.2)	20.2	30.4
1998/99	-0.5	8.8	0.3	(1.0)	20.3	32.3
1999/00	1.4	8.3	1.1	0.2	22.0	34.4
2000/01	3.4	7.2	1.9	1.4	24.0	33.9
2001/02	-0.2	7.7	1.7	(1.3)	22.9	35.9

* Figures indicate General Fund Surplus/Deficit.

** Total provincial debt.

Source: Ministry of Finance and Corporate Services, Budget Documents and Economic and Statistical Review.

Tables 5.4 (1992/93 – 1996/97) and 5.5 (1997/98 – 2001/02) indicate the annual budget estimates for five areas with the largest budget allocation during the NDP regime. Compared to the Socred regime, the NDP's year-to-year budget increase for postsecondary education was small (0.7 per cent to 5 per cent), except for 1994/95 when *Skills Now!* was announced and 2000/01 when compensation was provided for tuition freezes. While the postsecondary budget as a percentage of Gross Domestic Market (GDP) decreased toward the end of the NDP years, it grew as a percent of CRF (from 7.2 per cent in 1992/93 to 8.5 per cent in 2000/01, then decreased to 7.9 per cent in 2001/02).

Table 5.4: Expenditure – Budget Plan 1992/93 – 1996/97 (1st NDP Mandate).

Ministry Expenditure (\$M)	1992/93	1993/94	1994/95	1995/96	1996/97
Education, Skills and Training (MEST)					5,795
Advanced Education (AVED)*	1,302	1,342	1,557	1,633	-
Education	3,589	3,663	3,782	3,990	-
Health	5,936	6,196	6,414	6,643	6,936
Social Services	2,365	2,837	2,736	2,782	2,601
Transportation and Highways	823	762	684	673	630
Rest of government	3,965	4,195	4,457	4,465	4,610
Total CRF Budgetary Expenditure	17,980	18,995	19,630	20,186	20,572
%YTY Change of AVED	5%	3.1%	16.0%	4.9%	3.1%
% YTY Change of Total Budget	9%	5.6%	3.3%	2.8%	1.9%
% share of Total					
Education, Skills and Training (MEST)	-	-	-	-	28.2%
Advanced Education (AVED)*	7.2%	7.1%	7.9%	8.1%	-
Education	20.0%	19.3%	19.3%	19.8%	-
Health	33.0%	32.6%	32.7%	32.9%	33.7%
Social Services and Housing	13.2%	14.9%	13.9%	13.8%	12.6%
Transportation and Highways	4.6%	4.0%	3.5%	3.3%	3.1%
Rest of government	22.1%	22.1%	22.7%	22.1%	22.4%
Current GDP at market prices (\$M)	87,400	94,259	100,670	105,841	109,049
AVED/MEST Exp as % of GDP	1.49%	1.42%	1.55%	1.54%	5.31%
% Change in GDP at market prices	6%	8%	7%	5%	3%

* The ministry had several names: Advanced Education, Training and Technology (1992/93 - 1993/94); Skills, Training and Labour (1994/95 - 1995/96); and Education, Skills and Training in 1996/97 - 1997/98).

Source: Ministry of Finance and Corporate Relations, Budget Documents (1991/92 to 1996/97).

The budget for Health grew consistently from 33 per cent to 38 per cent of the provincial budget at the Consolidated Revenue Fund (CRF) level from 1992/93 to 1996/97. Education as a per cent of CRF spending decreased slightly from 20 per cent in 1992/93 to 19.8 per cent in 2001/02, after decreasing to 19.3 per cent in 1993/94 and then again increasing to 20.8 per cent in 1998/99. There was a decrease in the enrolment of K – 12 students owing to shrinkage of the age group during this period. Nonetheless, annual provincial spending on education continued to increase on a per pupil basis.

Table 5.5: Expenditure – Budget Plan 1997/98 – 2001/02 (2nd NDP Mandate).

Ministry Expenditure (\$M)	1997/98	1998/99	1999/00	2000/01	2001/02
Education, Skills and Training (MEST)	5,783				
Advanced Education (AVED)*	1,651	1,663	1,755	1,904	1,920
Education	4,132	4,262	4,349	4,536	4,779
Health	7,315	7,242	7,720	8,269	9,235
Human Resources	1,698	1,563	1,554	2,026	2,360
Children and Families	1,361	1,427	1,482	1,501	1,690
Rest of government	4,314	4,379	4,185	4,064	4,311
Total CRF Budgetary Expenditure	20,471	20,536	21,045	22,300	24,295
% YTY Change of AVED	0%	0.7%	5.5%	8.5%	0.8%
% YTY Change of Total Budget	0%	0.3%	2.5%	6.0%	8.9%
% share of Total					
Education, Skills and Training (MEST)	28.2%	-	-	-	-
Advanced Education (AVED)*	8.1%	8.1%	8.3%	8.5%	7.9%
Education	20.2%	20.8%	20.7%	20.3%	19.7%
Health	35.7%	35.3%	36.7%	37.1%	38.0%
Human Resources	8.3%	7.6%	7.4%	9.1%	9.7%
Children and Families	6.6%	6.9%	7.0%	6.7%	7.0%
Rest of government	21.1%	21.3%	19.9%	18.2%	17.7%
Current GDP at market prices (\$M)	114,601	115,604	120,608	127,564	130,859
AVED/MEST Exp as % of GDP	1.44%	1.44%	1.46%	1.49%	1.47%
% Change in GDP at market prices	5%	1%	4%	6%	3%

** The ministry was called Education, Skills and Training in 1996/97 and 1997/98.

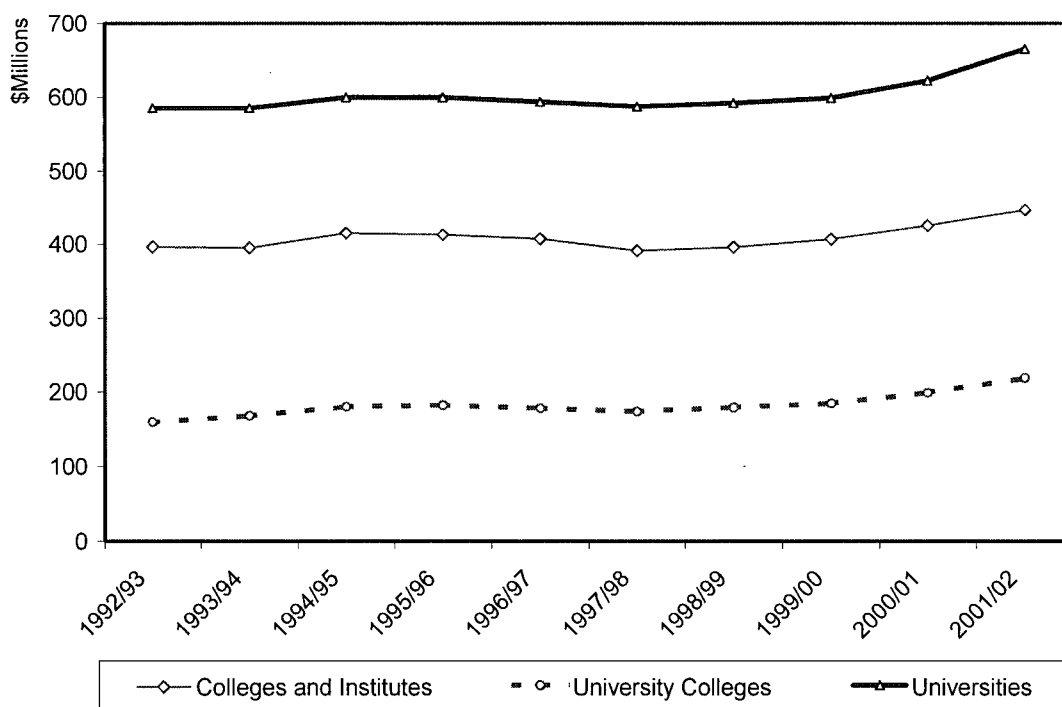
Source: BC Ministry of Finance and Corporate Relations.

Provincial spending on social services was significantly increased from 1997/98 to 2001/02. The Ministry of Social Services and Housing was split during the NDP's second term into the Ministry of Human Resources (responsible for social welfare programs) and the Ministry of Children and Family Development (responsible for children in care, adoption and children with special needs). The budgets of these programs were increased from \$3.1 billion in 1997/98 to \$4.3 billion in 2001/02. These spending patterns were consistent with the NDP's social priorities including equality for women, pay equity and child care.

University colleges with full degree-granting authority were created for the first time in 1994/95 under the *Skills Now!* initiative. Figure 5.4 shows provincial grants to colleges and

institutes, university colleges, and universities during the 10-year NDP regime in 2002/03 dollars.¹⁸⁵ Overall, the annual percentage increase in provincial grants to colleges and university colleges tended to be higher than grants to universities. All three sectors experienced a percentage decline in provincial grants in 1996/97 and 1997/98. At the same time, whenever a decline in provincial grants occurred, the loss for colleges and university colleges was slightly larger than for universities. The effects of federal transfer cutbacks were experienced throughout Canada during this period. Compared to Ontario, where postsecondary grants were actually reduced, BC provincial grants in current dollars were more or less maintained.

Figure 5.4: Operating Grants from the Province in Constant Dollars (1992/93 – 2001/02).



Source: BC Ministry of Advanced Education.

After factoring for inflation, it appears that provincial grants to postsecondary education did not increase but remained relatively stable at the 1992/03 level until 1998/99, particularly for the college and university sectors. Funding for the university college sector decreased after

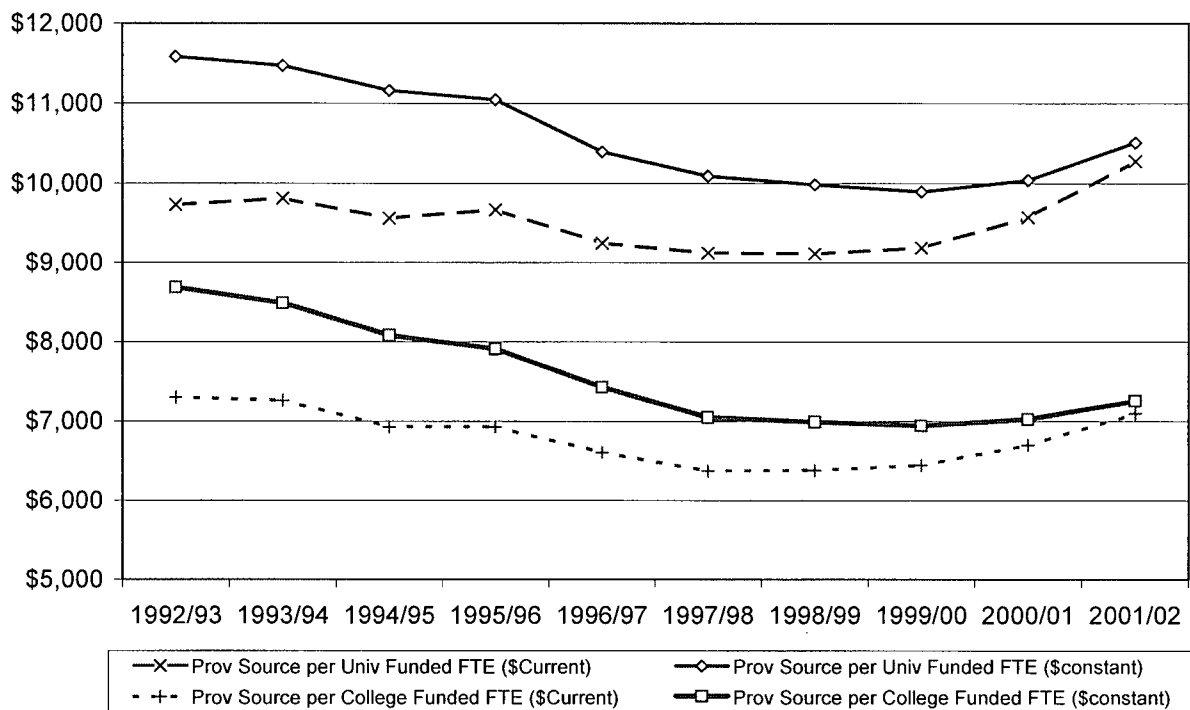
¹⁸⁵ Figures prior to 1994/95 have been restated to indicate funds to colleges that later became university colleges.

1995/96 and did not return to that level until 1999/2000.¹⁸⁶ Starting in 2000/01, provincial grants were increased more substantially. Budget 2000 announced \$46 million for library acquisitions and technology and another \$25 million for a number of areas including postsecondary collective agreements and accords, a new lender arrangement for student financial assistance, and heating assistance for educational institutions. Budget 2001 also announced another \$39 million for 5,025 new postsecondary seats, \$38 million for contracted salary and benefit increases, and tuition freeze compensation for institutions.

Figure 5.5 indicates provincial grants per student FTE for colleges and universities in both current and 2002/03 dollars. The provincial grant per funded FTE consistently decreased from 1992/93 to 1999/2000, with one exception for universities in 1995/96. After factoring for inflation, the provincial grant per FTE for both sectors in each year of the NDP regime was lower than the 1992/93 level. The provincial grant per FTE was at least \$2,900 (in 2002/03 dollars) higher for universities than for colleges (colleges, university colleges and institutes combined). The funding gap between universities and colleges widened to \$3,100 during 1994/95 and 1995/96 during the implementation of *Skills Now!*, but decreased to \$2,900 from 1996/97 until 1999/2000.

¹⁸⁶ *The British Columbia Public College Sector Performance Report 2000* (British Columbia, 2002d) indicates that in comparison to other provinces in 1996, BC ranked third among Canadian provinces in funding per capita and exceeded the Canadian average. From 1995/96 to 1999/2000 however, all provinces except BC and Quebec increased postsecondary expenditures per capita. By 2000, BC ranked seventh among Canadian provinces, and its level of funding trailed the Canadian average. The Resource Document of the Council of Ontario Universities (2004) indicates that BC ranked eighth in provincial operating grants per capita in 2000/01.

Figure 5.5: Provincial Grants per Funded FTEs (1992/93 – 2001/02).



Source: BC Ministry of Advanced Education.

Fiscal Policies During the Liberal Government

In the first year of the Liberal mandate, the Campbell government modified the NDP's 2001 Budget, introduced a tax cut, and increased the 2001/02 provincial deficit to \$1.3 billion. After the tax cut was delivered, the Campbell government set out to eliminate the structural deficit by relentlessly reducing government expenditures with the goal of balancing the budget by 2004/05. Budget 2002 for fiscal 2002/03 was the Liberal government's first budget, and it reiterated three major commitments: to restore sound fiscal management, to revitalize the economy, and to put patients and students first.

On January 17, 2002, or "Black Monday", the Campbell government announced a 35 per cent average reduction over three years in the budgets of all ministries with the exceptions of health and education. Certain services common to all government ministries, such as payroll and

human resources, were consolidated or “shared” to find economies of scale and efficiencies.

Where there was a business case demonstrating that services could be delivered more efficiently by the private sector, those services were outsourced.

Before Budget 2002 was prepared, the Campbell government established a Core Review and Deregulation Task Force to review every government program and service. Any program or service deemed inappropriate or outside the scope of government was eliminated or phased out. Only programs and services considered to be “core” received government funding. The Task Force recommendations led to decisions that restructured the postsecondary landscape somewhat. Changes included the closures of the Open Learning Agency and the Technical University of British Columbia, the dissolution of the Centre of Curriculum, Transfer and Technology and the Centre for Education Information Standards and Services (core agencies for system integration under *Charting a new course*).¹⁸⁷ Also, the Industry, Trade and Apprenticeship Commission was eliminated,¹⁸⁸ the Private Postsecondary Education Commission¹⁸⁹ was replaced with a new self-regulated/self-funded industry board, and new provisions were installed for degree-granting which permitted private institutions to operate and offer degree programs in BC.¹⁹⁰ These changes were underpinned by the argument that free market competition is the best means of making institutions accountable to the public.

Before the preparation of each budget, the *Budget Transparency and Accountability Act* provided that the government would conduct province-wide consultation on the province’s

¹⁸⁷ In October 2002, legislation was tabled to wind up the Open Learning Agency (OLA). BC Campus would take over some OLA programs while Open College and Open University programs would eventually merge with the new Thompson Rivers University announced in March 2004.

¹⁸⁸ ITAC’s 16 regional offices were closed by March 2003, dislocating 115 apprenticeship counsellors and other staff.

¹⁸⁹ In October 2003, the Liberal government passed the *Private Career Training Institution Act* (Bill 52), which established a board comprising industry representatives and the scope of institutions to be regulated.

¹⁹⁰ The Kootenay School of Arts, Contract Training and Marketing Society, the Commonwealth of Learning, the BC Centre for International Education, and three theological colleges also lost provincial funding starting in January 2002.

budget and fiscal plan. With respect to postsecondary education access, the *Report on the 2004 Budget Consultation Process* (British Columbia, 2003, p. 12) states:

The Committee was struck by the consensus among witnesses representing different sectors of the economy that any additional funding in future years should go first to improve access to public postsecondary education. College and university administrators, faculty and students, the business community, labour unions and concerned citizens all agreed that investment in knowledge and innovation is the key to future economic growth, and also that the access issue was a significant and widespread concern.

The 2005 budget consultation also suggested that the top priority for spending was health care, followed by K – 12 education and postsecondary education.

While the province has yet to experience an economic boom, economic conditions have been relatively stable, albeit somewhat sluggish. Table 5.6 shows some key economic indicators from 2002/03 to 2004/05. The unemployment rate has continued to slide after rising from its lowest rate of 7 per cent during the NDP regime to 8.5 per cent early in the Liberals' term. As promised, the Liberal government delivered a surplus budget in 2004/05 (which was larger than anticipated) as a result of deep reductions in government spending and a revenue windfall. Debt, however, continues to grow because of government borrowing to fund budget deficits and capital projects including Olympic venues¹⁹¹ and the Sea to Sky project.¹⁹²

¹⁹¹ In July 2003, Vancouver was selected as the host city of the 2010 Olympic Winter and Paralympic Games. As part of the bid, the province committed a total investment of \$235 million from 2003/04 to 2006/07 including: \$162 million in operating and capital grants toward the construction cost of venues; \$55 million in grants for an endowment to support ongoing operation of certain venues; \$3 million in funding for medical and security planning; and \$15 million in funding for First Nations and municipal legacies (British Columbia, 2004a).

¹⁹² As part of the Transportation Investment Plan, the Liberal government committed \$1,268 million in transportation infrastructure between 2004/05 and 2006/07; and an additional \$1,115 million leveraged through federal cost-sharing and partnerships with private partners. Projects under the transportation plan include ongoing rehabilitation, investment in Heartlands side roads, and improvements within the Kicking Horse Canyon and on the Sea-Sky-Highway (British Columbia, 2004a).

Table 5.6: Some Key Economic Indicators (2002/03 – 2004/05).

Year	Real GDP Growth (%) (\$1997)	Unemployment Rate (%)	Inflation Rate (%)	Summary Accounts (\$B) Surplus/ (Deficit)*	CRF Revenue (\$B)	Debt** (\$B)
2002/03	2.4	8.5	2.3	(2.7)	27.9	36.9
2003/04	1.5	8.0	2.1	(1.6)	29.5	37.8
2004/05*	2.8	7.9	1.6	1.4	30.4	39.5

* Forecast

** Figures indicate General Fund Surplus/Deficit.

*** Total provincial debt.

Source: Ministry of Finance and Corporate Services, Budget Documents and Economic and Statistical Review.

Table 5.7 shows the annual budget estimates for the five areas with the largest budget allocation during the 2002/03 and 2005/06 period, and the Liberals' proposed budget plan for 2006/07 and 2007/08. In compliance with its New Era commitment, the budget for postsecondary education was protected from cuts between 2002/03 and 2004/05 while other programs, with the exceptions of health and education, experienced reduction. Even though the public has identified postsecondary education as the last of the top three funding priorities, budget increases will not be provided until 2005/06 as a result of fiscal realities. While the postsecondary budget as a percentage of GDP decreased toward the end of the Liberals' first term, the budget as a percentage of CRF expense grew from 7.4 per cent in 2002/03 to 7.6 per cent in 2004/05, primarily because of shrinkage in total CRF spending in order to fulfill the balanced budget commitment by 2004/05. Starting in 2005/06, the budget for postsecondary education will be 2.9 per cent higher than the 2004/05 budget, and will continue to have yearly increases of 3.3 per cent in 2006/07 and 3.8 per cent in 2007/08. However, as a percentage of CRF total spending, the postsecondary budget will decrease to 7.3 per cent in 2005/06 because of significantly higher spending increases in other areas, most notably health.

Table 5.7: Expenditure – Budget Plan 2002/03 – 2007/08.¹⁹³

Ministry Expenditure (\$M)	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Advanced Education (AVED)	1,900	1,899	1,900	1,956	2,020	2,096
Education	4,861	4,860	4,921	5,060	5,151	5,174
Health	10,222	10,209	10,690	11,392	11,796	12,090
Human Resources	1,789	1,417	1,284	1,367	1,369	1,397
Children and Families	1,558	1,451	1,498	1,577	1,611	1,635
Rest of government	5,226	5,198	4,812	5,484	5,159	5,143
Total CRF Budgetary Expenditure	25,556	25,034	25,105	26,836	27,106	27,535
%YTY Change of AVED	0%	-0.1%	0.1%	2.9%	3.3%	3.8%
% YTY Change of Total Budget	24%	-2.0%	0.3%	2.8%	1.8%	0.4%
% share of Total						
Advanced Education (AVED)	7.4%	7.6%	7.6%	7.3%	7.5%	7.6%
Education	19.0%	19.4%	19.6%	18.9%	19.0%	18.8%
Health	40.0%	40.8%	42.6%	42.5%	43.5%	43.9%
Human Resources	7.0%	5.7%	5.1%	5.1%	5.1%	5.1%
Children and Families	6.1%	5.8%	6.0%	5.9%	5.9%	5.9%
Rest of government	20.4%	20.8%	19.2%	20.4%	19.0%	18.7%
Current GDP market prices (\$M)	135,552	145,500	155,041	162,274	169,499	177,051
AVED/MEST Exp as % of GDP	1.22%	1.31%	1.23%	1.21%	1.19%	1.18%
% Change in GDP at market prices	4%	7%	7%	5%	4%	4%

2006/07 and 2007/08 numbers are plan numbers and are available because budgeting has been done on a three-year basis since 2002/03.

Source: BC Ministry of Finance and Corporate Relations.

The budget for the Ministry of Health grew from 40 per cent to 44 per cent of the provincial budget at the Consolidated Revenue Fund (CRF) level from 2002/03 to 2004/05. Its spending will increase to 44 per cent by 2007/08 primarily because of federal funding increases.¹⁹⁴ Annual provincial spending on education continues to increase. Education as a percentage of CRF spending will remain at approximately 19 per cent despite a population decrease in the K – 12 school age group. Provincial spending on Human Resources and Children and Family Development will increase slightly under the 2005/06 – 2007/08 fiscal plan.

¹⁹³ 2005/06 to 2007/08 numbers were published in February 2005 under Budget 2005.

¹⁹⁴ During the September 2004 First Ministers meeting in Ottawa, the federal government reached an agreement on a 10-year plan to strengthen health care in Canada with provinces and territories. As part of the agreement, the federal government has agreed to contribute \$5.4 billion new funding for additional health care services. The total federal contribution for BC alone is estimated at \$444 million, \$523 million and \$544 million for 2005/06, 2006/07 and 2007/08. In response, the BC government committed to spend all the new federal funding on healthcare.

Spending in the rest of government increased by 14 per cent from 2004/05 to 2005/06. The largest spending increase was for the Ministry of Small Business and Economic Development, whose budget increased from \$140 million in 2004/05 to \$521 million, primarily for infrastructure development.

While the total budget for the Ministry of Advanced Education remained constant during 2002/03 to 2004/05, the total provincial grant to postsecondary institutions in 2003/04 was \$23 million higher than in 2002/03, in current dollars. After factoring in inflation, the increase was approximately \$7 million in constant dollars. Between 2001/02 and 2002/03, the increase was \$32 million in current dollars, or a \$3 million increase in constant dollars. The increase was made possible by reallocating from other spending within the ministry's budget,¹⁹⁵ including savings from restructuring.¹⁹⁶

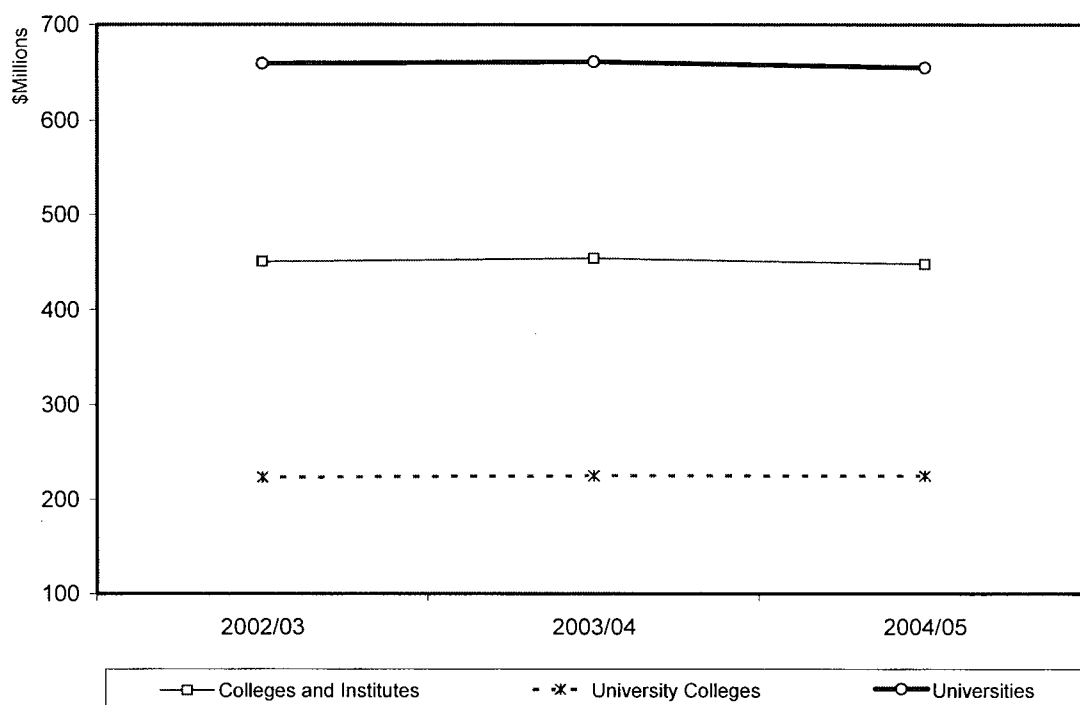
Figure 5.6 indicates provincial grants in constant dollars for 2002/03 to 2004/05. While there was a small funding increase in current dollars in each of those years, after factoring in inflation, there was actually a funding decrease between 2003/04 and 2004/05. Colleges received a 1.4 per cent funding decrease, universities a 1 per cent decrease, and university colleges a 0.1 per cent decrease. The funding decrease for colleges was slightly higher compared to the decrease for universities, despite the colleges' inability to increase tuition fees to offset funding decreases. During this period, the funding to the Ministry of Advanced Education, which includes provincial grants for postsecondary education, was more or less maintained while

¹⁹⁵ The Ministry of Advanced Education budget covers the following costs: operating grants to postsecondary institutions, student financial assistance, debt servicing costs, and costs of ministry operations.

¹⁹⁶ A few restructuring initiatives have been discussed in the body of this chapter. Key restructuring initiatives included: elimination of Youth Community Action, a program that encouraged young people to volunteer in the community in return for tuition credits; closing-down of Tech BC; lifting the tuition fee freeze and deregulation of tuition fees; restructuring of the Open Learning Agency and the Industry Training and Apprenticeship Commission; and the passage of the *Public Education Flexibility and Choice Act* which allows college and institute employers to override collective agreement provisions that limit class size and student numbers, and that require faculty agreement on assigning distributed learning courses, student assistants or contractors.

the funding for other ministries, with the exceptions of Health and Education, was slashed in order to balance the provincial budget by 2004/05.

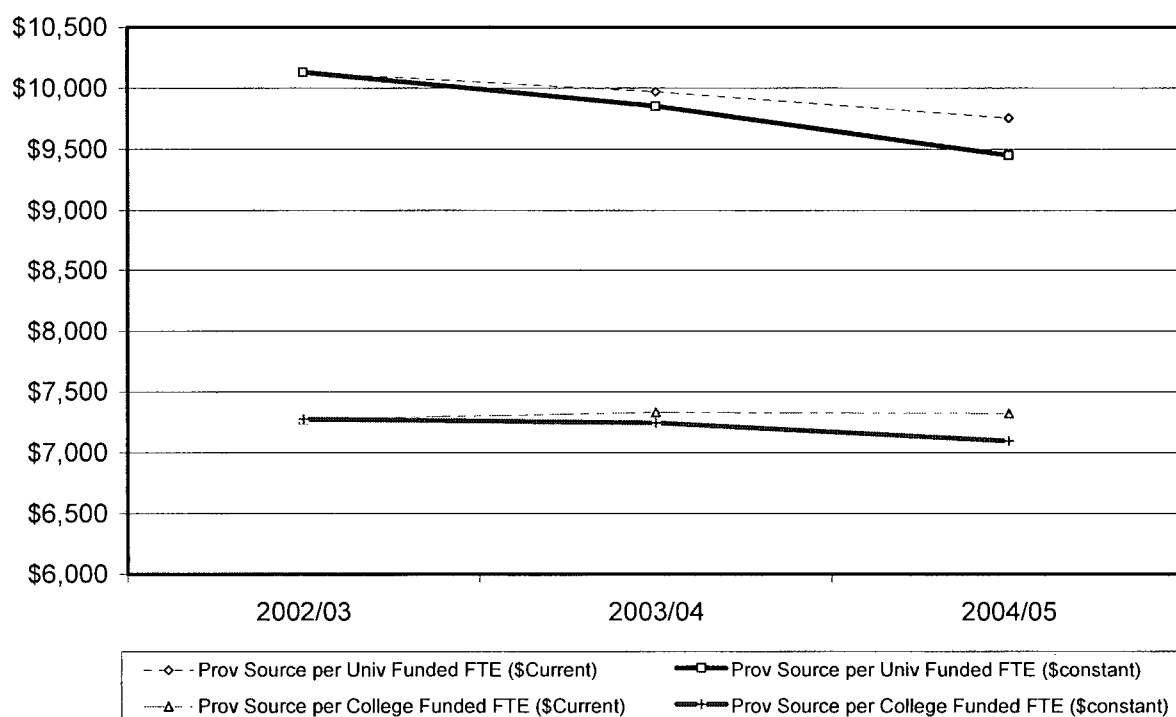
Figure 5.6: Operating Grants from the Province in Constant Dollars (2002/03 – 2004/05).



Source: BC Ministry of Advanced Education.

Figure 5.7 indicates the provincial grants per student FTE for both colleges and universities in both current and constant dollars. During the first three years of the Liberal regime, the provincial grant per funded FTE remained lower than the 2001/02 level for universities as a result of FTE enrolment increasing faster than the provincial grant increase. For colleges, however, the provincial grant per FTE was higher than the 2001/02 level, except for 2004/05. As a result, the provincial funding per FTE for universities and colleges narrowed from approximately \$3,200 in 2001/02 to \$2,400 in 2004/05 (in constant dollars).

Figure 5.7: Operating Grants from the Province per Full-Time Equivalent Student (2002/03 – 2004/05).



Source: BC Ministry of Advanced Education.

While the Liberal government's plan to increase postsecondary education seats has been applauded, the concern of some within the sector is that seats have not been properly funded. Based on 2003/04 to 2006/07 expenditure plans, the Federation of Postsecondary Educators of BC (2004) estimates that the college system alone requires close to \$25 million more annually for its per FTE funding to return to 2001/02 levels.

Impacts on Postsecondary Education Access

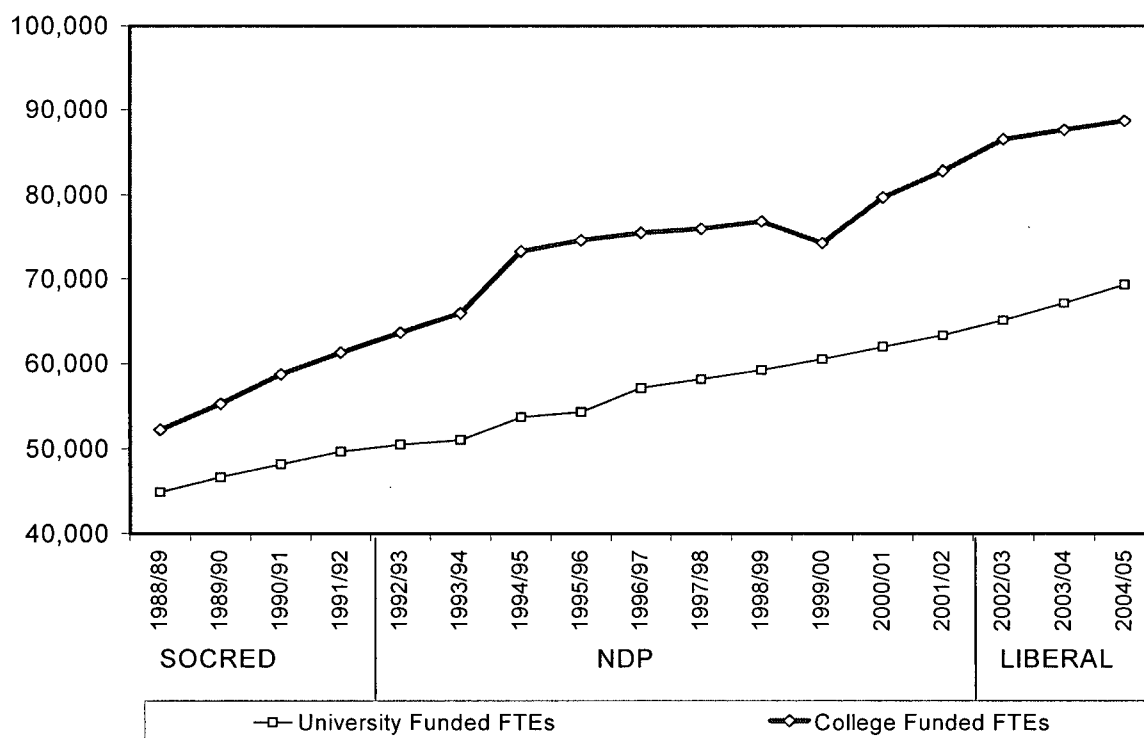
We will now look at some performance outcomes such as enrolment, participation, tuition fees, student financial assistance, research and development, costs of postsecondary education, and system design. This examination is made without presuming that trends and

outcomes are the direct result of the educational access and funding policies discussed above. The performance outcomes discussion is limited by what quantitative data are publicly available.

Enrolment

Figure 5.8 indicates the full-time student enrolment of university and college students from 1988/89 to 2003/04. During the Socred administration, college enrolment (funded FTEs) was growing faster than university enrolment owing to the expansion of regional colleges through *Access for All*. Between 1988/89 and 1991/92, university-funded FTEs increased from approximately 44,910 to 49,700, or by 11 per cent, while college funded FTEs increased from approximately 53,200 to 61,300, or by 17 per cent. As previously shown, provincial operating grants and total operating expenditures of the college sector grew more rapidly than the university sector during this period.

Figure 5.8: Full-Time Equivalent University and College Enrolments (1988/89 – 2003/04).



Source: BC Ministry of Advanced Education.

The rate of increase for funded FTEs was also faster for the college sector than the university sector during the NDP administration. During the first two years of Liberal rule, the rate of increase for funded FTEs in the university sector was slightly higher than for the college sector. Table 5.8 details more clearly the enrolment and percentage increases by sector from 1985/86 to 2002/03. Between 1991/92 and 2001/02, funded FTE enrolment increased from approximately 49,700 to 63,300, or by 28 per cent, while full-time college enrolment increased from approximately 61,300 to 82,800, or by 38 per cent. College enrolment grew more rapidly than university enrolment because of NDP programs that emphasized skills development. Between 2001/02 and 2003/04, university funded FTE enrolment increased from approximately 63,300 to 67,100, or by 6 per cent. College-funded FTE enrolment grew from approximately 82,800 to 87,600, or by 5.8 per cent. The growth in both the college and university sectors was a result of the Liberals' promise to add 25,000 seats by 2010.

The proposed increase constitutes a 17 per cent increase from 2002/03—an average yearly increase of 2.4 per cent or 3,571 seats per year. The Ministry of Advanced Education projects that BC's age 18 – 29 student population will grow by 24,291, or 3.7 per cent, between 2002 and 2005, for an average increase of 8,163 per year (British Columbia, 2004b). If the system were to meet its 45.5 per cent participation rate target by 2005/06, the approximate annual seat increase would have needed to increase by approximately 2.5 per cent starting in 2002/03. However, Wattamaniuk (2005) points out that while there is an overall 18 – 29 cohort population increase, there is in fact a decline in the numbers of 18 – 21 year olds. Hence, in the absence of initiatives including those to increase transition of Grade 12 students to postsecondary education or to increase participation of 24 – 29 year olds, and provide improved student financial aid, an under-utilization of the expanded seats could result. Improved economic

conditions with employment opportunities for the 18 – 29 age cohort can also exacerbate seat under-utilization.

Table 5.8: College and University FTE Enrolment Increases.

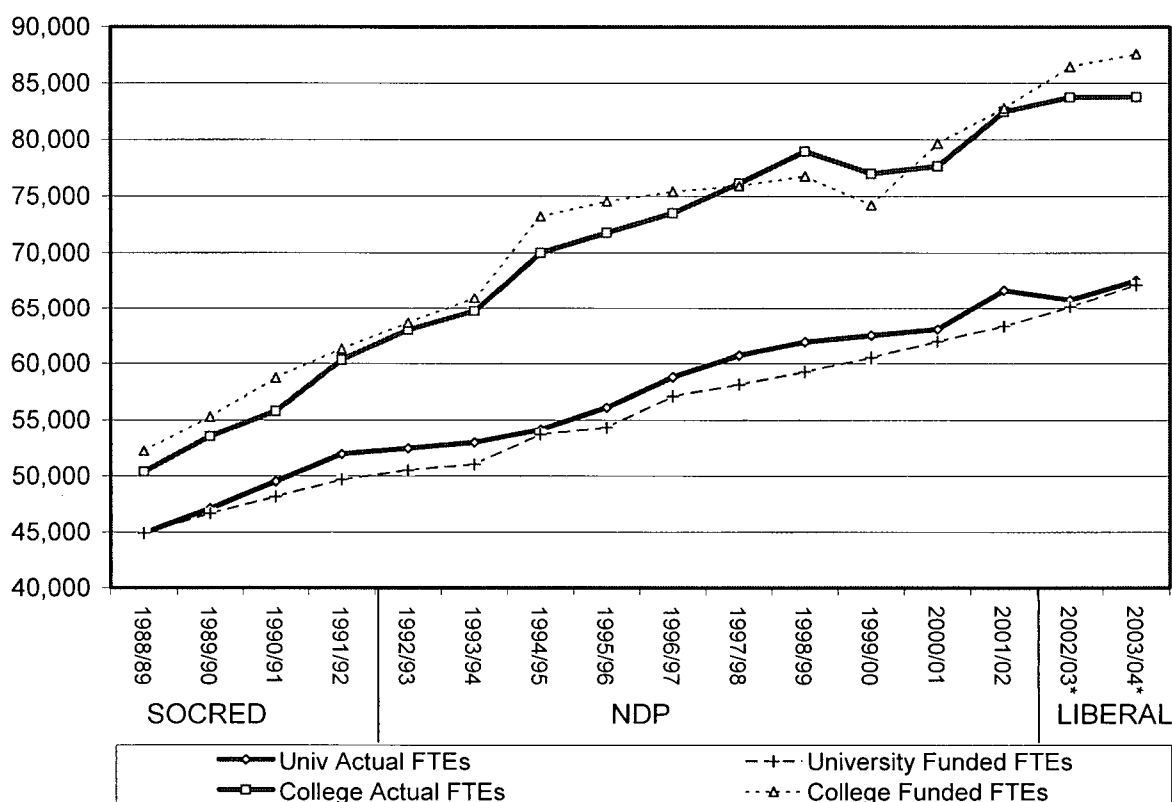
Government	Funded FTE College		Funded FTE University	
	Enrolment Change	Increase	Enrolment Change	Increase
Socred (1988/89 - 1991/92)	9,055	17.3%	4,751	10.6%
NDP (1991/92 - 2001/02)	21,488	35.1%	13,662	27.5%
Liberal (2001/02 - 2004/05)	5,839	7.1%	5,990	9.5%

Source: BC Ministry of Advanced Education.

Figure 5.9 compares the provincially funded FTEs against the actual enrolment FTEs in both the university and college system from 1989/90 to 2003/04. The pattern suggests a healthy demand or utilization of university seats throughout this period. However, the pattern observed for the colleges suggests an under-utilization of provincially funded seats during this period, with the exception of 1997/98 to 2000/01 when actual FTEs exceeded funded FTEs. Tuition fees were frozen during this time and this could have contributed to higher enrolment in the college sector. When tuition fees started to rise in 2002/03, actual FTE enrolment in college again fell below funded FTE enrolment. It appears that lifting the tuition freeze also affected university FTE utilization. If this is true, then tuition freeze policy is arguably an effective public policy instrument to increase enrolment. However, the freeze led to a series of adverse unintended consequences including an escalation in the grade point average for admission to universities, difficulty for college students in transferring to university and instead of benefiting the working class, benefited students from middle and upper-middle classes (Fisher et al, 2005).¹⁹⁷

¹⁹⁷ Interview finding recorded in Fisher, Lee, MacIvor, Meredith and Rubenson (2005), Draft Policy Narrative – April 2005. *The Development of a Postsecondary Education System in British Columbia: Transformation and Change*.

Figure 5.9: Funded and Actual FTEs (1989/90 – 2003/04).



Source: BC Ministry of Advanced Education.

Table 5.9 indicates that the utilization rates for funded FTEs (actual FTEs/funded FTEs) for the university sector are consistently above 100 per cent whereas the utilization rates for colleges are quite frequently below this number, with the exception of the years 1997/98 to 2001/02. In 2003/04, student enrolment declined in ten of twenty-two institutions while overall enrolment numbers across the postsecondary education system increased. The Federation of Postsecondary Educators of BC (2004) speculates that the low enrolment at colleges is the result of a combination of government under-funding, rapidly rising tuition fees and the elimination of BC first year grants. The FPSE also argues that students are more likely to participate in postsecondary education if they can study closer to home and hence government should revisit its current funding regime. FPSE's argument suggests that a student's living expenses are an

important factor in his or her access to postsecondary education, and this notion appears to be supported by Frenette's study (Frenette, 2003).¹⁹⁸

Table 5.9: Funded versus Actual FTEs for Universities and Colleges (1988/89 – 2001/02).

Year	Univ Actual FTEs	University Funded FTEs	Utilization	College Actual FTEs	College Funded FTEs	Utilization
1988/89	44,905	44,905	100%	50,350	52,226	96%
1989/90	47,113	46,653	101%	53,532	55,281	97%
1990/91	49,482	48,170	103%	55,787	58,737	95%
1991/92	51,934	49,656	105%	60,320	61,281	98%
1992/93	52,454	50,506	104%	62,995	63,629	99%
1993/94	52,988	51,019	104%	64,735	65,925	98%
1994/95	54,139	53,726	101%	69,990	73,198	96%
1995/96	56,098	54,316	103%	71,761	74,529	96%
1996/97	58,791	57,132	103%	73,496	75,405	97%
1997/98	60,709	58,163	104%	76,122	75,898	100%
1998/99	61,905	59,263	104%	78,963	76,772	103%
1999/00	62,490	60,503	103%	76,990	74,185	104%
2000/01	63,033	61,969	102%	77,650	79,673	97%
2001/02	66,624	63,318	105%	82,445	82,769	100%
2002/03*	65,766	65,097	101%	83,741	86,448	97%
2003/04*	67,504	67,135	101%	83,768	87,564	96%

* Total University Actual FTEs not available. Figures are the sum of FTEs for UBC, SFU and UVIC and do not include UNBC and RRU.

Source: Ministry of Advanced Education.

First Year Intakes and Turnaways

It is logical to assume that a more accessible postsecondary education system would mean a higher rate of first year intake and a lower rate of turning away qualified applicants. Available data do not provide a conclusive answer to the question of whether postsecondary education has become more accessible in terms of an increase in the number of intakes. Furthermore these data would not indicate accessibility to colleges with first- and second-year university courses. Table 5.10 indicates the numbers of BC high school applicants to BC universities from 1997/98 to 2004/05. Since 1995, the percentage of high school graduates who apply to a BC university has been between 30 and 34 per cent. The percentage of high school graduates who apply, are admitted, and register as students has been between 17 and 20 per cent. The percentage of successful high school applicants who actually register has been between 52

¹⁹⁸ Statistics Canada's study, *Access to College and University: Does Distance Matter* (2004) found that where there is no college within commuting distance, only 13 per cent of high school graduates from middle income families and 9 per cent of graduates from lower income families attend college.

and 60 per cent. The turnaway rate for qualified applicants has been between 8 and 17 per cent. There is no clear pattern except that since 2001, the percentage of high school graduates who apply has dropped to 30 per cent, and the percentage of those who apply and qualify has increased from 84 per cent in the fall of 1997 to 92 per cent in the fall of 2004.

Table 5.10: BC High School Applicants (Fall 1995 – Fall 2004).

Year	High School Graduates	High School Applicants	% High School Graduates Apply	% High School Applicants Qualified	% High School Graduates Registered	% High School Applicants Registered	Turnaways of Qualified Applicants	% Qualified Applicants Turnaway
1995	31,660	10,683	34		20	60		
1996	33,535	11,011	33		19	59		
1997	34,730	11,650	34	84	20	59	749	8
1998	37,465	12,006	32	85	17	54	1,307	13
1999	39,012	12,806	33	83	17	52	1,620	15
2000	40,941	13,439	33	83	17	53	1,488	13
2001	41,843	12,878	31	90	18	59	1,642	14
2002	42,983	12,939	30	90	17	56	1,830	16
2003	43,985	13,233	30	92	17	56	2,106	17
2004	42,000	12,393	30	92	17	58	1,474	13

Source: Simon Fraser University Office of Analytical Studies.

The percentage of high school registrants within the total first year undergraduate intake varies by year and by university, and is not consistently recorded. At Simon Fraser University, high school graduates constituted 34 per cent of new students in the fall of 2004. At the University of British Columbia, the percentage of high school graduates among new registrants varied from 59 per cent to 66 per cent between 1989/90 and 1998/99. The other registrants were college transfers, university transfers and mature students.

University Entrance Average Marks

Another indicator of accessibility is the entrance mark, or cut-off mark, used by BC universities to determine eligibility for university entry. The lower the cut-off mark, the easier or more accessible university entry is for students. Available data suggests that the average grade of secondary school registrants crept up during the 1990s and early 2000s but has decreased for

the Fall 2005 intake. For UBC alone, the grade point average for admission increased from 1986/87 to 1998/99 as follows: Engineering from 73 per cent to 82 per cent; Arts from 66 per cent to 75 per cent; and Science from 66 per cent to 82 per cent. In 1993, the cut-off point for admission into Arts and Science programs at UBC, SFU and UVic was a grade point average of 3 to 3.39 (out of 4), or approximately 75 per cent, for direct entry. Table 5.11 shows that the Fall 2004 average grade was higher compared with previous years' average grades for university acceptance. Also, the average acceptance grade for each university is different. However, for the Fall 2005 intake, UVic announced that its cut-off point has now returned to 75 per cent, which is consistent with the Liberal government's commitment to ensure access for students with a B+ (75 per cent) average. The declining numbers of 18 – 21 year olds in BC and the expansion of university seats could result in a decline of university transfer students at colleges in BC.

Table 5.11: Admission Targets and Cut-off Points for New Entry Students (Fall 2004).

Admission-Type	Faculty	UBC			SFU			UMC		UNBC		FRU	
		Target	Out-off (%)	Out-off (Pt)	Target	Out-off (%)	Out-off (Pt)	Target	Out-off (%)	Out-off (%)	Out-off (Pt)	Target	Out-off (%)
Direct Entry BC High School	Arts	1769	82		1825	77		678	80	65			
	Science	1250	88		550	78		384	80	65			
Transfers to Year 2	Arts	472		2.90	790		2.50	344		2.00			
	Science	300		2.40	60		2.70	61		2.00			
Transfers to Year 3	Arts	455		3.00			2.35					140	72
	Science	220		2.00								30	72
Other Students	Arts				940			637				140	
	Science				120			180				20	

Source: TUPC Table 2.1

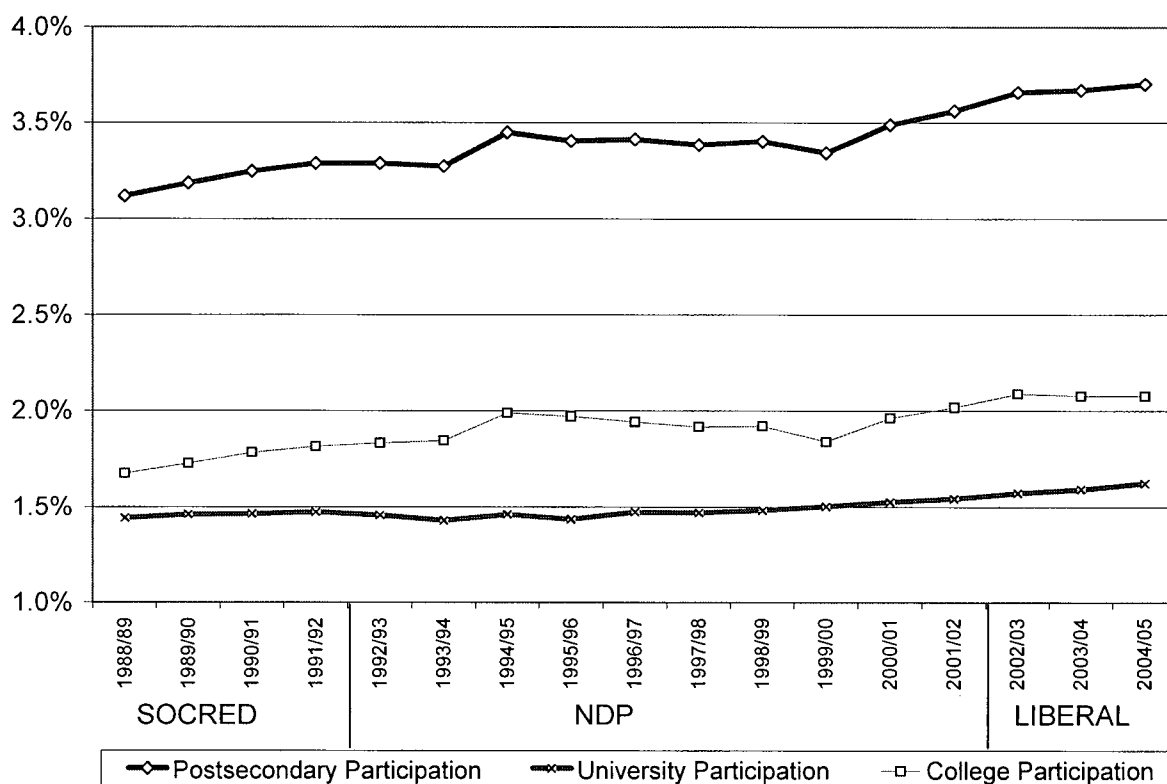
Postsecondary Participation

Figure 5.10 shows the participation rate by funded full-time equivalent (FTE) in British Columbia from 1988/89 to 2004/05.¹⁹⁹ Overall, it has risen from 3.1 per cent in 1988/89 to 3.7 per cent in 2004/05. Between 1988/89 and 1991/92, university participation increased from 3.1 per cent to 3.3 per cent of the total population while college participation increased from

¹⁹⁹ The participation rate here pertains only to participation in publicly funded postsecondary institutions and does not include enrolment at private institutions. Enrolment at private institutions has the potential to play a greater role in determining the participation rate as a result of the *Degree Authorization Act*, 2002.

1.7 per cent to 1.8 per cent. This period coincided with Social Credit's *Access for All* program, which emphasized literacy. Unlike Ontario, where the participation rate for university is higher than for colleges, the participation rate for BC colleges is higher than the rate for universities.

Figure 5.10: Participation Rate in British Columbia (1988/89 – 2004/05).²⁰⁰



Sources: Statistics Canada (for population data) and Ministry of Advanced Education (for FTEs).

During the NDP administration, the postsecondary FTE participation rate increased from 3.3 per cent to 3.6 per cent. Much of this increase can be attributed to participation increases in the college sector. College participation rose from 1.8 per cent to 2.0 per cent between 1991/92 and 2001/02, whereas university participation remained at 1.5 per cent during the same period. The college participation rate fell, however, from 2.0 per cent in 1995/96 to 1.9 per cent in 1996/97 and 1998/99, and to 1.8 per cent in 1999/00. This drop was the result of funding

²⁰⁰ Participation rate is calculated by dividing the sum of full-time equivalent (FTE) college and university enrolment by the population of BC. Statistics Canada enrolment data for college full-time enrolment is not available for 2000/01 and onward. The FTE student enrolment data is from the Ministry of Advanced Education.

constraints that greatly affected the college sector because of its dependence on provincial grants as its primary source of funding. During the Liberal regime, the overall participation rate rose to 3.7 per cent in 2002/03 and 2003/04. The participation rates of the university and college sectors also increased during this period to 1.6 per cent and 2.1 per cent, respectively.

Understandably, it is important to ensure that not only do people who qualify for access to postsecondary education obtain access but also that there is access for under-represented groups including First Nations, ethnic minorities and persons with disabilities. Unfortunately data are not available to show a breakdown of participation by these groups. As for participation by gender, male participation in all university programs (full-time, part-time, undergraduate, graduate, and continuing programs) has decreased from 50 per cent in 1984/85 to 43 per cent in 2004/05 (TUPC, 2004). For the college sector, females comprised 54 per cent of the college student population in 2000/01. However, gender differences in participation vary by program areas.²⁰¹

Regarding the relationship between family income and participation, Statistics Canada (2004b) found that 83 per cent of 18 – 24 year olds with family incomes of \$80,000 or more participated in postsecondary education. About two-thirds of youth with family incomes of \$55,000 to \$80,000 participated, and just over half participated when family earnings were less than \$55,000. Unless policy changes are made to address student debt load and tuition costs, participation of students from lower income groups—although it has been increasing over the

²⁰¹ For example, for the college sector, females continued to outnumber males in certain programs such as Nursing (88 per cent female); Other Health Related Programs (87 per cent female); Education (84 per cent female); Business and Management (64 per cent female); Visual, Performing and Fine Arts (62 per cent female); Legal, Social and Home Economics programs (61 per cent female); and Arts and Science (60 per cent female). Males outnumber females in: Mechanical and related programs (94 per cent male); Construction (89 per cent male); Engineering, Electrical and Electronics (88 per cent male) and Computer and Information Services (74 per cent male).

last ten years—will increase at a lower rate than participation of students from higher income families (Statistics Canada, 2004a).

A British Columbia Public College Sector Performance Report (British Columbia, 2002d) indicated that between 1990 and 2000, rates of postsecondary participation increased from 27.3 per cent to 37.7 per cent for 18 – 24 year olds, and had been at the national average since 1998. Postsecondary participation rates for 25 – 29 year olds have shown a more dramatic increase, increasing from 8.2 per cent to 13.9 per cent, the highest rate in Canada for this age group.²⁰² The 2005/06 – 2007/08 Ministry of Advanced Education Service Plan (British Columbia, 2005b) indicates a participation rate for 18 – 29 year olds of 44.5 per cent.²⁰³ The performance target is to increase this rate by 1 per cent for 2005/06 to 2007/08.

Tuition fees

Table 5.12 indicates average tuition fees at universities, colleges and institutes in British Columbia from 1992/93 to 1996/97. Average university tuition fees were in the \$2,000 range, college tuition fees were in the low \$1,000 range, and institute tuition fees were in the high \$1,000 range.

Given that tuition fees were lower at colleges, attendance at a college for part of a student's four-year degree program offered a lower total tuition cost alternative. The lowest amount of accumulated average tuition fees was paid by students who completed their first two years at a college and their final two years at a university college, followed by students who completed all four years at a university college. Tuition fees were highest for students who

²⁰² The *British Columbia Public College Sector Performance Report 2000* (British Columbia, 2002d) also indicates that although adults of all ages use colleges and universities to meet their diverse educational needs, it is those aged 20 - 29 that use the system most heavily. In Canada as a whole, the percentage of the population aged 20 - 29 decreased by 0.5 per cent from 1995 to 2000. In British Columbia, however, the percentage of the population in this age group increased by 0.5 per cent. The number of people aged 20 – 29 in BC was expected to grow by 10.1 per cent between 2000 and 2006.

²⁰³ The measure has been operationally redefined from previous years. Consequently, its results are comparable with previous years.

completed their baccalaureate degree by completing all four years at a university (British Columbia, 2002d).

Table 5.12: Average Tuition Fees for Universities, Colleges and Institutes (1992/93 -1996/97).

Year	Universities Actual \$	Universities Constant \$	Colleges Actual \$	Colleges Constant \$	Institutes Actual \$	Institutes Constant \$
1992/93	1,830	2,158	955	1,126	1,524	1,797
1993/94	2,040	2,332	1,052	1,203	1,665	1,903
1994/95	2,179	2,444	1,145	1,284	1,811	2,031
1995/96	2,280	2,505	1,254	1,378	1,899	2,087
1996/97	2,280	2,487	1,254	1,368	1,899	2,071

Source: Ministry of Advanced Education, BC Public College Sector Performance Report, 2000.

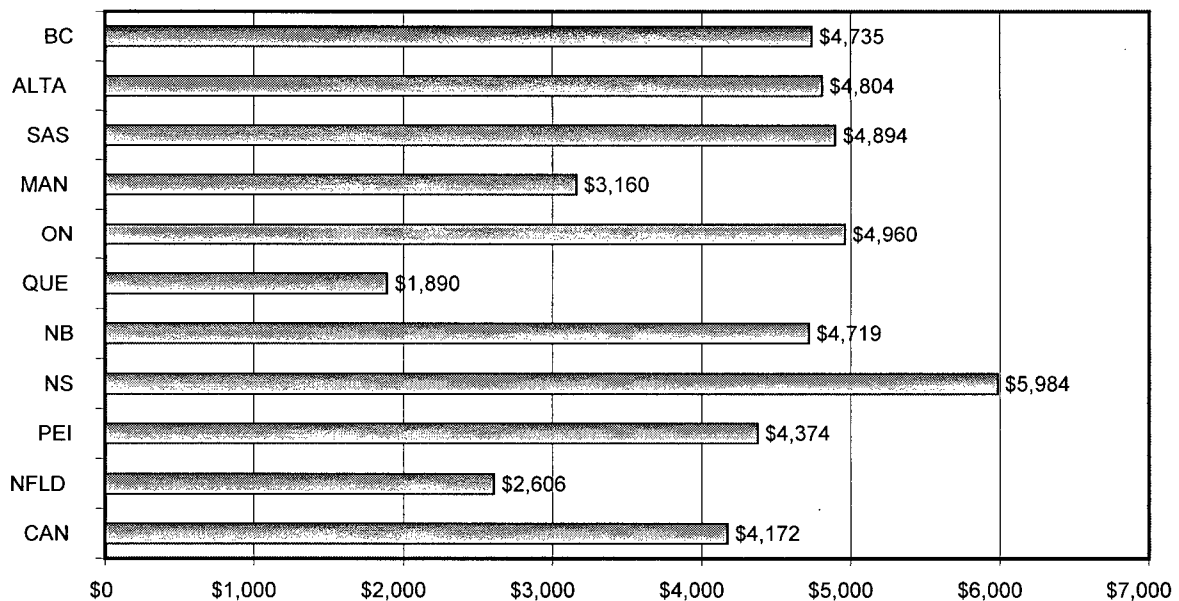
However, there is evidence that the average debt of college transfer students (\$20,465) is much higher compared to the average debt of students who enter university directly (\$14,931) (BC Council on Admissions and Transfer, 2003). The BC Council on Admissions and Transfer (2003) found that 27 per cent of college transfer students accrued \$20,000 of debt or more, compared to 11 per cent of direct entrants. The study was based on the class of 1996, when BC grants were in place and tuition fees for both college and university were substantially lower. Nonetheless, this suggests that direct entrants to universities do not rely as much on government student loans as do transfer students. One plausible explanation for this is that direct entrants on average come from wealthier families and/or have access to alternative funding sources like scholarships or bursaries.

When the NDP government levied the tuition fee freeze, fees were frozen at 1995/96 levels from 1996/97 to 2002/03. As a result, BC had the third lowest undergraduate university tuition fees in 2002/03 compared to other Canadian provinces. The Canadian average was estimated at \$3,738 while BC's average was \$3,165, after Quebec (\$1,851) and Newfoundland (\$2,729). During 1989/90 and 2003/04, tuition fees as a percentage of average total income in BC rose from 7 per cent to 12 per cent. By 2003/04, BC's average undergraduate tuition fees

were \$4,098, just a little above the Canadian average of \$4,018. That year, BC ranked fourth lowest among provinces after Quebec (\$1,865), Newfoundland (\$2,606) and Manitoba (\$3,155). The highest was Nova Scotia, where the average undergraduate tuition fee was \$5,556.²⁰⁴

Figure 5.11 indicates the average undergraduate tuition fees by provinces in 2004/05. BC's average undergraduate tuition fees have risen to \$4,735, or \$562 above the Canadian average, ranking BC the fifth highest among provinces. Between 1990/91 and 2004/05, the average Canadian undergraduate tuition fees more than doubled from \$1,464 to \$4,172 (Statistics Canada, 2004a).

Figure 5.11: Average Undergraduate Tuition Fees by Province (2004/05).



Source: Statistics Canada, The Daily, Thursday September 2, 2004.

Table 5.13 indicates the percentage of tuition fees collected by colleges and universities from 1985/86 to 2001/02 that went toward expenditures (operating and total). In 1985/86, tuition fees contributed \$28 million to BC colleges, making up 15 per cent of total college operating

²⁰⁴ Nova Scotia's average undergraduate tuition fee was pushed up by Acadia's inclusion of the Acadia Advantage tuition fee. Excluding Acadia, the figure would be lower but still higher than the rest of the country.

expenditures. In the same year, tuition fees contributed \$70 million to BC universities, comprising 14 per cent of total university operating expenditures. By 2001/02, tuition fees contributed \$65 million to BC colleges (19 per cent of college operating expenditures) and \$360 million to BC universities (20 per cent of university operating expenditures). The increase is not very significant because of the tuition freeze. Unfortunately, data are not yet available for the years immediately after the freeze ended. The Ministry of Advanced Education estimated that students took on 28 per cent of the total cost of postsecondary education in 2004/05, whereas the province contributed 72 per cent.

Table 5.13: Per Cent Tuition Fees to Operating and Total Expenditures of Colleges and Universities (1985/86 – 2001/02).

	% College Fees/College Op Exp	% College Fees/College Total Exp	% University Fees/University Op Exp	% University Fees/University Total Exp
1985/86	15	12	14	11
1986/87	15	12	14	12
1987/88	16	12	15	12
1988/89	14	12	16	11
1989/90	17	13	16	12
1990/91	16	12	15	11
1991/92	16	11	16	12
1992/93	17	12	16	12
1993/94	18	12	17	12
1994/95	19	13	19	13
1995/96	19	13	19	14
1996/97	21	14	19	15
1997/98	20	13	20	17
1998/99	21	13	21	17
1999/00	21	12	21	18
2000/01	20	11	20	16
2001/02	19	11	20	17

Source: Statistics Canada, CANSIM Table 478-0004 and 478-0007.

In 2003/04, postsecondary institutions raised \$66 million more in tuition fees than they did in 2002/03. Tuition fees constituted 80 per cent of all new revenue for institutions that year. They also grew from 20 per cent of institution revenues in 2002/03 to 24 per cent of revenues in 2003/04 (FPSE, 2004).

Student Financial Assistance

Students today use a variety of financial sources such as earnings from employment, savings, non-repayable contributions or loans from parents, scholarships, and government student loans to fund their postsecondary education. Nationally, 56 per cent of 18 – 24 year-olds who had taken some postsecondary education found other means to fund their studies and never applied for a government student loan (Statistics Canada, 2003).²⁰⁵ In 2001/02, the average financial need for a postsecondary student was estimated at \$9,740 for an eight-month academic year. Full-time university students tended to spend more during the academic year, spending \$11,200 on average compared to \$9,330 by college students and \$4,550 by CEGEP students²⁰⁶ (Statistics Canada, 2003).

There are two different forms of student aid, loans (which are repayable) and grants (which do not have to be repaid).²⁰⁷ The BC Student Financial Assistance program had both components up to 2004/05. Table 5.14 shows the average total student financial assistance and loan award per BC student from 1994/95 to 1999/2000. Average total student financial aid, which includes grants, was \$7,935 in 1999/2000. In 1999/2000, 32,256 full-time college students received government student loans, up from 29,528 in 1998/99. On average, the combined BC and Canada loan amount per student who received a loan was \$4,774 in 1999/2000, down from \$5,556 in 1998/99. This decrease was a result of a change in policy

²⁰⁵ See Barr-Telford et al (2003), based on Postsecondary Education Participation Survey conducted in February and March 2002.

²⁰⁶ Full-time university students spent more than college students both for educational and non-educational items. The median amount spent by them on tuition, fees, books and supplies was about \$5,000 compared with \$3,100 for college students. The spending gap between full-time university and college students, however, was smaller for non-educational items. The median spent on rent, food, telephone and other non-educational expenses was \$6,200 for university students and \$5,480 for college students (Statistics Canada, 2003)

²⁰⁷ The loan is interest free while students are in school. According to Finnie, Laporte, and Lascelles (2004), there are three arguments which favour loans over grants: 1) government spending will go much further when it is put into loans rather than grants because the money will be repaid and recycled; 2) given that students benefit from the schooling which the loans made possible, they should repay it; and 3) loans ensure that the beneficiaries obtain the financial means to repay the loan. Loans are generally subsidized but certain situations warrant the subsidy.

allowing eligible students to receive grants for four years rather than just the first two years of postsecondary studies. The result of this policy change was that some students in their third and fourth years of study were eligible to receive part of their financial aid in the form of grants, thereby reducing the loan portion of their total student aid. Prior to the change, all financial aid for this group would have been offered in the form of loans.

Table 5.14: Average Total Aid and Average Annual Loan Awards.

Year	Average Total Aid (\$Current)	Average Total Aid (\$2002/03)	Average Annual Loan Awards (\$Current)	Average Annual Loan Awards (\$2002/03)
1994/95	6,289	7,337	4,424	5,161
1995/96	6,415	7,326	4,655	5,316
1996/97	7,535	8,467	5,253	5,903
1997/98	7,603	8,409	5,358	5,926
1998/99	7,947	8,708	5,558	6,090
1999/00	7,935	8,545	4,774	5,141

Source: Ministry of Advanced Education.

The BC grant in 2003/04 met needs over \$125 per week, to a maximum of \$3,740 for students without children and \$9,180 for those with children. For example, if a single student's assessed need was \$12,576 with \$4,000 in assessed resources, the BC loan would be \$3,430 over and above the Canada Student Loan of \$5,610, for total student aid of \$8,576. For a single parent with one child who had needs assessed at \$14,688 and resources of \$4,000, the BC loan would be \$4,250, the BC grant would be \$4,828 and the Canada loan would be \$5,610, for a total of \$14,688. During Budget 2004/05 the Liberal government announced the elimination of the BC grant pending the completion of a redesign to a reward program. The 2000 *National Graduate Survey* indicates that the average government debt owed by BC college and university baccalaureate students upon graduation was \$11,400 and \$20,100, respectively (Statistics Canada, 2004c).

Published research by the Canadian Association of University Teachers (CAUT, 2003; 2005) found that the impact of dramatic increases in tuition fees and minimal growth in wages and family income over the recent past are making it difficult for Canadians to pursue a postsecondary education.

Research and Development

The Premier's Technology Council First Quarterly Report (2001) indicates that the importance of the technology industry to the provincial economy of BC is demonstrated by its superior performance and growth compared to every other sector in BC. With 7,800 companies and 61,000 employees in 2000, the BC high-tech industry is already a significant player in the BC economy. At an achievable annual growth rate of 10 per cent, the high-tech industry is anticipated to become the most significant industrial sector in the province within the next 5 - 10 years. The Council has identified life sciences, fuel cell, new media and wireless industries as sectors in which BC has considerable strength and potential.

Engineers and computer scientists are a driving force behind the high-tech sector. They provide a highly specialized form of labour that is integral to the development of new and more efficient productive processes. The number of graduates per 100,000 persons aged 15 years and older with baccalaureate degrees in these areas demonstrates the likely presence of engineers and computer scientists in a high-tech economy. Between 1990 and 2000, BC graduated far fewer students per 100,000 persons with bachelor degrees in Engineering than did other leading high-tech provinces.²⁰⁸ On the positive side, during the 1999 and 2000, BC's rate of new graduates was boosted by more than 50 per cent, while all other high-tech provinces saw increases of 12 to 16 per cent. With respect to these indicators, British Columbia continues to be below the

²⁰⁸ These provinces are Quebec, Ontario and Alberta.

Canadian average. Quebec and Ontario lead the pack, in first and second place respectively. The number of BC graduates per 100,000 persons with a bachelors degree in Computer Science remains below the Canadian average. However, the long-term trend on this indicator is positive. The ratio has been rising and, in 2000, BC passed Alberta to rank third among the four high-tech provinces. Ontario ranks at the top for this indicator (BC Stats, 2003).

University faculty members are at the forefront of research given that a key purpose of universities is to conduct "primary" research. Some of this primary research could lead to future applied research that may have the potential for commercialization.²⁰⁹ Universities developed industry liaison offices across Canada in the mid-1980s.²¹⁰ These offices work with industry to spin-off technology developed at universities into successful companies. One indicator of universities' research productivity is university technology licenses. These licenses allow an institution to "spin-off" the commercial aspect of a researcher's discovery, which can generate income. The income per license offers an indication of the commercial success of the research. Queen's University now leads all other universities with a gross income of nearly \$5.5 million from technology licences in 2000. The University of Alberta, which was the leader in 1999, fell to fourth place behind the University of Toronto. UBC saw its income from technology licensing increase by over 200 per cent to \$2.8 million in 2000, boosting it to second place behind Queen's.

Table 5.15 indicates gross domestic expenditure on natural science and engineering research by different sectors including the federal government, the provincial government, the higher education sector itself, and business enterprises. Unlike Ontario, where the federal government is the largest funder of research by the higher education sector, in BC the higher

²⁰⁹ One example is the Human Genome Project, which mapped out the entire genetic structure of the human being.

²¹⁰ The University of Toronto office opened in 1980, UBC's University-Industry Liaison Office (UILO) opened in 1985, and the University of Alberta office opened in 1987.

education sector has been the largest funder with the federal government in second place.

During the 1990s, provincial funding for higher education sector research trailed in fourth place behind funding from business, and only caught up in 2002. There were large fluctuations in yearly funding levels from all sectors.

Table 5.15: Natural Science and Engineering R&D Expenditures Spent on the Higher Education Sector by Funders (1985 – 2002).

Year/(\$Current)	Federal Government (\$M)	Provincial Government (\$M)	Higher Education (\$M)	Business (\$M)
1985	44	5	28	5
1986	52	5	20	5
1987	56	6	21	6
1988	59	8	100	7
1989	62	11	104	9
1990	86	14	92	12
1991	96	17	99	14
1992	97	15	107	18
1993	95	15	96	23
1994	98	13	108	26
1995	89	14	121	30
1996	80	19	119	30
1997	78	21	126	35
1998	85	18	139	31
1999	92	21	156	42
2000	106	22	168	51
2001	136	28	187	50
2002	175	60	226	60

Source: Statistics Canada

According to a joint BC Statistics and Ministry of Competition, Science and Enterprise report (BC Statistics, 2003) BC's ratio of higher education performance of R&D to GDP was 0.39 per cent, which was good for last place among provinces in 2000. In that same year, BC's ratio of total domestic expenditures on R&D to GDP was 1.2 per cent, ranking fourth among provinces with Manitoba, and following Quebec, Ontario and Nova Scotia (PCEIP, 2003). The University Presidents' Council has commended the Liberal government on its recent research investments but urges that continued support must be at least maintained, if not improved (TUPC, 2004).

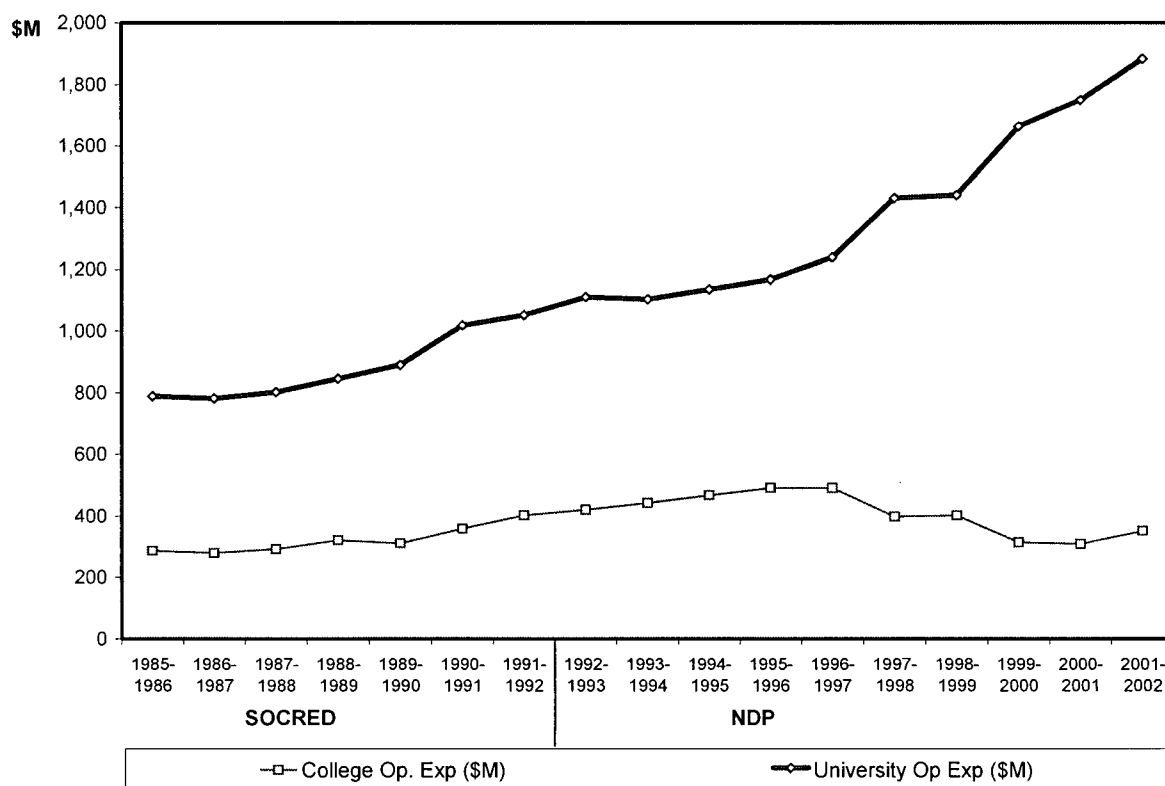
A March 2000 survey found that research at all British Columbia universities has resulted in the creation of approximately 200 spin-off companies: 113 from UBC, 63 from SFU and 25 from UVic. As at March 31, 2003, 55 UBC spin-off companies were listed as active, 10 were listed as having been acquired by or merged with another company, 10 were listed as being in the early stages of development, and 37 were listed as closed or inactive. Successful spin-off companies from UBC include: QLT Inc., which has commercialized two innovative therapies (including Visudyne therapy for macular degeneration); ARC Pharmaceutical Inc., which focuses on therapies for inflammatory diseases and cancer; Westport Innovations Inc., which has developed technology allowing diesel engines to operate on natural gas; and BioMarin Pharmaceuticals Inc., which focuses on the development of enzyme therapies for life threatening diseases.

Cost of Postsecondary Education

Comparing 1985/86 and 2001/02, the overall costs for colleges (operating costs) have increased more slowly than those of universities. According to Statistics Canada data, universities' operating costs have increased by 139 per cent while colleges' operating costs have increased by only 23 per cent (in constant dollars). Figure 5.12 shows operating costs in constant dollars for colleges and universities and the annual rate of change. Operating costs for universities were 2.8 times higher than for colleges in 1985/86. In 2001/02 however, university operating costs were 5.4 times higher. During the NDP's first term, operating expenditures for universities were approximately 2.4 times higher than for colleges, increasing to 3.6 times higher during the latter half of the NDP's second term. Annual fluctuations in operating expenditures for colleges and universities follow a somewhat similar pattern, except for the period 1996/97 to 2000/01, when annual rate changes were completely reversed owing to the creation of university

colleges and the way that Statistics Canada splits up the postsecondary system into degree and non-degree operating expenditures.

Figure 5.12: Operating Expenditures of Colleges and Universities in Constant Dollars (1985/86 – 2001/02).



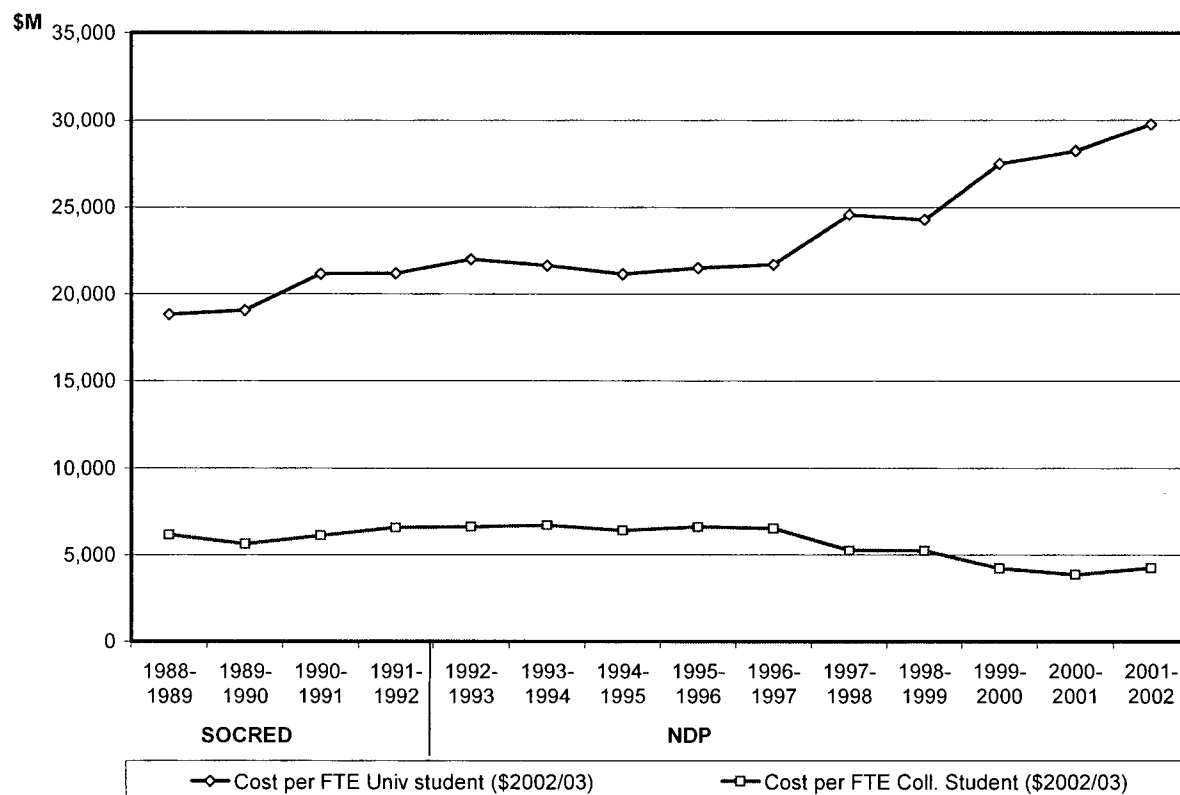
Source: Statistics Canada. CANSIM Tables 478-0004 and 478-0007.

On a per FTE student basis, operating costs for colleges have decreased while costs for universities have increased (in constant dollars). Figure 5.13 indicates the cost per FTE for colleges and universities between 1988/89 and 1996/97. Data beyond 1996/97 are not considered for analysis because of inability to match operating expenditures with the corresponding FTEs.²¹¹ It shows that the cost per FTE for colleges decreased from approximately \$6,150 to \$6,593, or by 7 per cent, while the cost per FTE for universities

²¹¹ Statistics Canada data for operating expenditures categorize university colleges under universities. Corresponding university colleges' FTEs are not available.

increased from approximately \$18,800 to \$21,677, or by 15 per cent, between 1988/89 and 1996/97 (in 2002/03 dollars).

Figure 5.13: University and College Operating Expenditures per FTE in Constant Dollars (1988/89- 2001/02).

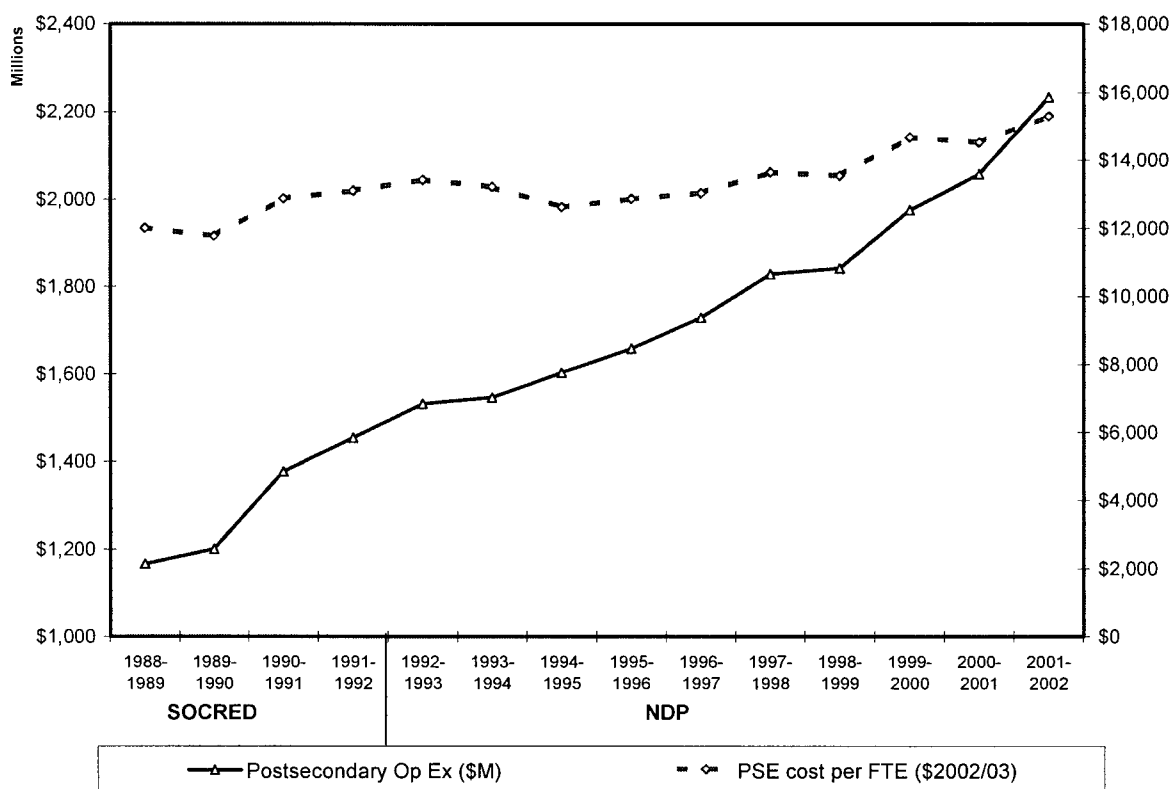


Sources: Statistics Canada, CANSIM Tables 478-0004 and 478-0007 for expenditures and Ministry of Advanced Education for FTEs.

Figure 5.14 shows postsecondary operating expenditures and postsecondary expenditures on a per FTE basis from 1988/89 to 2001/02. Overall, postsecondary operating expenditures increased from \$1.2 billion in 1988/89 to \$2.2 billion in 2001/02, an increase of 83 per cent. The greatest yearly increase in operating expenditures occurred in 1990/91—at the end of the Socred administration—at 15 per cent, which was followed by a 9 per cent increase at the end of the NDP years. The federal transfer payment reductions of 1996/97 and 1997/98 did not cause a decrease in overall postsecondary operating expenditures. The NDP freeze on tuition fee increases may have checked the growth of operating expenditures, but did not cause them to

decrease either. Postsecondary operating expenditures per FTE have also increased. Between 1988/90 and 2001/02 they increased by 27 per cent, from \$12,010 per FTE to \$15,290 per FTE.

Figure 5.14: Postsecondary Operating Expenditures in Constant Dollars (1988/89 – 2001/02).



Sources: Statistics Canada, CANSIM Tables 478-0004 and 478-0007 for expenditures and Ministry of Advanced Education for FTEs.

Unlike Ontario, the rising costs of postsecondary education in BC have not been substantially passed on to students. In the case of colleges, the growth of costs has been restrained and one wonders about the impact of this on the quality of postsecondary education. As for universities, costs in BC have continued to grow faster than in Ontario because of relatively better provincial funding support. In the late 1970s and early 1980s, the BC government funded over 80 per cent of operating costs of public postsecondary institutions. This

level of support, however, has not been sustained for a number of reasons including competing demands for health services, K – 12 education and other social services.

Table 5.16 indicates the percentage of provincial and federal grants to operating expenditures of colleges and universities from 1985/86 to 2001/02. In 2001/02, provincial grants constituted 74 per cent of operating expenditures for colleges and 53 per cent for universities, compared to 1985/86 when they constituted 80 per cent and 61 per cent, respectively. In 2002/03 dollars, the provincial grant per FTE was approximately \$12,000 for universities and \$7,000 for colleges in 1985/86, compared to \$10,500 for universities and \$7,300 for colleges in 2001/02.²¹² Federal grants to universities have slightly decreased, from 13 per cent in 1985/86 to 11 per cent in 2001/02.²¹³

Table 5.16: Provincial and Federal Grants as Percentage of Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).

	% Fed grant/ College op	% Prov grant/ College Op	% Fed grant/ Univ op	% Prov grant/ Univ Op
1985/86	0	80	13	61
1986/87	0	79	15	63
1987/88	0	79	15	63
1988/89	0	81	15	61
1989/90	0	80	14	62
1990/91	0	80	16	60
1991/92	0	78	16	60
1992/93	0	76	15	59
1993/94	0	76	15	59
1994/95	0	77	14	60
1995/96	0	77	11	57
1996/97	0	71	10	54
1997/98	0	72	9	55
1998/99	0	70	10	54
1999/00	0	71	9	54
2000/01	0	74	9	54
2001/02	0	74	11	53

Source: Statistics Canada. CANSIM Tables 478-0004 and 478-0007.

²¹² FPSE (2004) reports that the proportion of institutional revenues from the provincial government declined from 58 per cent in 2002 to 56 per cent in 2003, and finally to 53 per cent in 2004.

²¹³ The 1985/86 provincial grant data is based on CANSIM whereas the 2001/02 data is based on ministry data which covers 1990/91 and onwards. The 1990/91 and 1991/92 data from both sources were close.

Since 1996, postsecondary institutions have had to rely more and more on private sources of funding, including bequests, donations, non-government grants, ancillary revenues, investment income and borrowings. Table 5.17 indicates that revenue from other sources for colleges increased from 5 per cent in 1985/86 to 7 per cent in 2001/02, and from 11 per cent to 17 per cent for universities over the same period. In terms of total university income (based on data from Canadian Association of University Business Officers (CAUBO)), other sources increased from 21 per cent to 29 per cent, or from \$119 million to \$630 million in current dollar terms. Total income includes not only operating income but also capital income, including land endowments and ancillary enterprises.

Table 5.17: Other Sources as Per Cent of Operating Expenditures (1985/86 – 2001/02).

	% Other sources/College op	% Other sources/Univ Op
1985/86	5	21
1986/87	6	22
1987/88	5	22
1988/89	5	20
1989/90	3	22
1990/91	4	21
1991/92	5	20
1992/93	7	21
1993/94	6	22
1994/95	4	24
1995/96	4	25
1996/97	8	28
1997/98	8	28
1998/99	9	27
1999/00	8	31
2000/01	7	30
2001/02	7	29

Source: Statistics Canada. CANSIM Tables 478-0004 and 478-0007.

As in Ontario during the Tory administration, the BC Liberals have emphasized the importance of market principles in the postsecondary education system. These include allowing private institutions to grant degrees, deregulating, increasing private or industry partnerships, reducing the size of government, investing in research and development, and providing degree-

granting opportunities to private institutions to meet market demands. The Liberals' approach has allowed the creep of market principles into the postsecondary sector, which has traditionally been primarily a public domain.

System Design

In 1985/86, the Province of British Columbia had three publicly funded universities that offered a wide range of courses in undergraduate, graduate and professional programs. In addition, as part of the postsecondary education system, the province had a non-university sector, which offered academic, technical, vocational, career and artistic programs through fifteen community colleges, five institutes, and the Open Learning Agency. In just under 20 years, British Columbia has expanded its postsecondary education system to include seven universities, three university colleges, twelve colleges and five institutes.

This expansion did not occur under a coherent long-term plan. Rather, it occurred under policy direction provided by three political parties, each having different ideas about the role of government, but the common understanding that postsecondary education is important to economic growth. Of the seven universities, four were established during the last 15 years. The University of Northern British Columbia was established in 1991/92 by the Socred government; Royal Roads University in 1995/96 (and British Columbia Technical University in 1997/98, which was subsequently closed down by the Liberals in 2002/03) by the NDP government; and UBC Okanagan in 2004/05 and Thompson Rivers University in 2005/06 by the Liberal government. Universities established after UNBC have not been modelled after traditional universities, but are special purpose institutions with specific mandates to meet local, community, and labour market needs.

The NDP government utilized the concept of university colleges with the long-term idea that they would eventually become universities. Two of these universities were initiated under the Liberal government, but with distinct models of governance. For example, Okanagan University College, instead of evolving into the University of the Okanagan, was dismantled and made partly into the UBC at the Okanagan, and partly into the new Okanagan College. At the college level, there has been little change, except for the addition of Okanagan College.

Like the Tory government in Ontario, the BC Liberals have lifted the prohibition of private degree-granting institutions through the passage of the *Degree Authorization Act*, 2002. Trinity Western University and Sea to Sky University are the only private universities authorized to confer degrees through privately sponsored bills, the former in 1974 and the latter in 2002.²¹⁴ As of March 31, 2005, several other private institutions, including for-profit ones, have been permitted to offer degree programs under the *Degree Authorization Act*. Examples include Canada West University, Sprott Shaw and the University of Phoenix.²¹⁵

It remains to be seen what the landscape of postsecondary education in BC will look like in the future, that is whether there will be more private than public institutions; whether the university model in BC will move toward those of California; whether BC will maintain its original model of regional colleges feeding students into universities or continue to create more hybrid and special purpose institutions like Ontario. Although some BC regional colleges have

²¹⁴ Introduced as a private bill, the *Sea to Sky University Act*, 2002 ushered in BC's first privately funded and privately governed secular university, a project spearheaded by ex-UBC President David Strangway. Trinity Western University is a Christian university established by the Evangelical Free Churches of America and it operated its first class in 1962.

²¹⁵ In its 2003 submission to the Select Standing Committee on Finance and Government Services, the College Institute Educators Association of BC (CIEA) now known as the Federation of Postsecondary Educators of BC (FPSE) criticized the government for its lack of vision as follows: "The emphasis on expansion of the private educational sector represents a failed vision on the part of this government. Private education will not meet the real needs in terms of demand for quality and transferability and in terms of what students can afford. The sector lacks accountability to the public despite receiving significant public subsidies both in terms of student assistance funding and direct grants from the BC government" (FPSE, 2003, p.7). It argued that there are issues of quality and cost for students in private institutions. Full-time students in private institutions borrow more money and do not have anywhere near the same outcomes in terms of ability to repay their student loans.

recently been experiencing low enrolment problems, 81 per cent of British Columbians polled in 2004 still believe that it is important for every major community to have a university or college, as these institutions play a major role in the local community (Ipsos Reid, 2004). However the college feeder system may become harder to justify as more and more of them fail to meet their enrolment targets. In fall 2004, the university transfer enrolment of colleges and university colleges in the Vancouver region dropped significantly because of universities' increased capacity to accommodate first-year students as a result of seat expansion.

The roles of colleges and universities need to be reviewed and defined. BC Statistics data suggest that between 2003/04 and 2009/10, there will be a 2.8 per cent drop in the age 18 – 21 population but an 11.5 per cent increase in the age 22 – 24 population. As the supply of seats continues to grow with the 25,000 new seats initiative and given the shrinking age 18 – 21 population, universities could be pressured to lower their grade admission cut-off and admit Grade 12 graduates who would otherwise have enrolled in a college had the competition for university entry been stiffer. This could result in higher drop-out rates because universities do not have the structures and services to support lower performing students. An alternative is for the universities to focus on magistral and doctoral programs for the 22-24 age cohort.

Summary of Key Findings

This section will summarize the key findings in this chapter related to British Columbia. It covers the impact of the policy environment on BC's postsecondary access policies, the policy trends associated with key policies, the key factors impacting postsecondary education funding policies, and postsecondary education outcomes.

Like Ontario, from the mid-1980s to the present, successive governments in BC have emphasized accessibility to postsecondary education. The first key factor that influenced

governments' postsecondary access policies is the perception that a strong relationship exists between an educated population and economic wealth. The Socred government focused on literacy, believing that a critical mass of educated people would help to transform BC into a prosperous industrial economy. The role of education in economic prosperity subsequently evolved such that, by the time the NDP came to power in 1991, the new government subscribed to the notions that an educated workforce would enable BC to compete globally and that education should be strongly linked with the requirements of the economy. The Liberal government also targeted accessibility to programs where there were labour shortages and emphasized innovation as the key to economic success. The second key factor influencing access policy is public consensus for increased access to postsecondary education. Primary concerns identified during public consultations focused on northern and rural access during the Socred government, on relevance and the requirements of the labour market during the NDP, and on high tuition costs and the shortage of tradespersons during the Liberal mandate.

Similar to Ontario, successive governments in BC, focused on three areas in order to increase access: increasing seat capacity and transferability, enhancing affordability to students, and promoting research and development. The approach to addressing these areas differed with each administration. In the area of seat capacity and transferability, the Socred government focused on establishing regional institutions to provide literacy, adult basic education, and university transfer programs to local communities. The NDP government probably made more policy changes than the Socred government. It focused on ensuring the relevance of postsecondary education to meet the needs of employers by allowing colleges to grant degrees and reform their structures of governance, and by involving stakeholders from labour and industry for planning purposes. It also focused on improving credit transfer and portability, and

instituted prior learning assessment so that college admissions could be based on non-formal education. The Liberal government focused on increasing seat capacity by targeting seat growth in public postsecondary institutions in areas with labour shortages, by enhancing on-line learning, and by allowing private institutions to deliver degree programs.

In the area of affordability, the Socred's main focus was on providing financial assistance to students who would otherwise be hindered by financial barriers to access postsecondary education. Undergraduate tuition fees were the second lowest in Canada during the freeze levied by the NDP government. The Liberal government lifted the tuition fee freeze, but owing to public pressure, it has since announced its decision to cap future tuition fee increases at the rate of inflation starting in 2005/06. The Liberal government has also redesigned the BC student grant program to provide incentives to students to complete their respective degrees, diplomas, or certificates. However, no new funding has been provided for this initiative.

In the area of research and development, the interests of successive governments are fuelled by the belief that in the new economy, BC must be on the leading edge of high technology if it is to thrive. The Socred government initiated a fund to finance industry-based applied research and development in order to promote economic diversification and industrial competitiveness in BC. The NDP government established a Premier's Council on Science and Technology and continued funding the former Science Council of BC (which was created by the Socred government) to move BC into a high technology economy. It also provided tax incentives in the form of the Scientific Research and Developmental Tax Credit, which has since been extended by the Liberal government. The Liberal government also established a Premier's Technology Council and replaced the Science Council with the new BC Innovation Council to accelerate and expand science and technology-based development. In addition, the Liberal

government has committed significant funding to well-known research agencies in BC and has created new trust funds to fund research and the building of research infrastructure.

Policy trends observed for seat expansion in Ontario are also present in BC. These include: 1) blurring of degree-granting status as the delineation between colleges and universities also blurs; 2) sharing of authority to deliver degree programs by universities with colleges and, in a few cases, private institutions; 3) convergence of college and university programs; 4) emphasis on programs to meet labour requirements including medical, nursing, computer science and engineering programs; 5) emergence of hybrid institutions; and 6) use of private institutions to enhance accessibility to postsecondary institutions. In addition, mixed structural models (including the California model), development of special purpose universities, and renewed utilization of on-line learning are all trends that have occurred in BC.

In the area of affordability, recent policy trends include the regulation of tuition fees to lower the costs of postsecondary education for students. Unlike Ontario, there has been no recent initiative to enhance student financial assistance, except to redesign the grant program to reduce costs and to provide students with an incentive to complete their programs as early as possible. Funding for scholarships that leverages private funding is also limited. Current policy trends in the area of research and development include: 1) the use of tax incentives, albeit limited in number; 2) an emphasis on innovation and commercialization; 3) the provision of funding for research agencies such as Genome BC and the Michael Smith Foundation to attract leading edge researchers to BC and to train new ones; and 4) the promotion of research and development by certain colleges and in BC's rural areas.

Unlike Ontario, postsecondary funding in BC has been increasing since 1985. However, the provincial grant per FTE has declined because provincial funding has not kept up with

student enrolment increases. As well, the provincial funding level for the college and institute system caught up with the funding level for the university sector in 2000/01. A number of key factors have influenced funding decisions in BC. Economic conditions were a primary influence. Both the Socred and NDP governments announced major postsecondary education initiatives when economic conditions were relatively good. The Liberal government, in spite of public demand for increased funding for postsecondary education, has announced small, if any, funding increases, primarily because of constraints in its fiscal plan. Another factor is the perception that postsecondary education can be delivered more efficiently. This was particularly true during the NDP regime when the provincial grant per FTE declined significantly. A third factor was the reduction in federal CHST transfer payments in 1996/97 and 1997/98, which provided an excuse for offering minimal increases while other provinces such as Ontario significantly cut their provincial grants to postsecondary education. Other factors include competing government priorities and political ideology.

With respect to provincial funding as a percentage of operating costs, it was 61 per cent for universities and 81 per cent for colleges in 1985/86. By 2001/02, provincial grants accounted for only 53 per cent of university operating expenditures and 74 per cent of college operating expenditures. Notwithstanding this decrease, spending for postsecondary education as a percentage of total provincial spending increased from 6.4 per cent in 1986/87 to 7.6 per cent in 2003/04. Unlike in Ontario, the costs of postsecondary education were not substantially passed on to students through significant tuition fee increases (a result of the tuition fee freeze in place until 2001/02). The decrease in provincial grants has been compensated by increases in revenues from other sources including private donations, non-government grants, and investment income. Like Ontario, colleges in BC rely more heavily on provincial grants than universities.

During 1985/86 and 2004/05, college enrolment outgrew university enrolment primarily as a result of NDP policies emphasizing skill development and authorizing colleges to offer degree programs. College enrolment grew most rapidly during the NDP administration at 35 per cent, while university enrolment grew by 28 per cent. College enrolment during the Socred and Liberal administrations grew at 17 per cent and 7 per cent, respectively. University enrolment grew by 11 per cent during the Socred administration and by 10 per cent during the Liberal administration.

Overall, accessibility to postsecondary education does not appear to have decreased. As demonstrated by the FTE utilization data, overall accessibility to colleges has not been an issue in BC. The data related to accessibility to universities is not conclusive but there is some indication that there could be an improvement in access to university starting in 2005/06, as a result of 25,000 new seats announced by the Liberal government. One potential problem is that excess university seats could aggravate the under-utilization of college seats in BC if the distribution of new seats is not better coordinated in future years and if student demand continues to gravitate toward university education rather than skills training.

The postsecondary participation rate in BC has improved overall. Unlike Ontario, the participation rate for colleges is higher than for universities given that there are more college seats. During the Socred administration, the participation rate for universities increased more rapidly than for colleges, whereas the reverse was true during the NDP years because of government policies that emphasized the college sector. During the first Liberal term, the participate rate for universities and colleges increased at the same rate.

Average college tuition fees are lower than average university tuition fees. Prior to the tuition fee freeze in 1996/97, tuition fees in BC were increasing annually by less than \$200.

When the tuition fee freeze was lifted in 2002/03, average fees skyrocketed so much that by 2003/04, BC's average undergraduate tuition fees ranked fifth highest among Canadian provinces. As a percentage of average total income, tuition fees have risen from 7 per cent in 1989/90 to 12 per cent in 2003/04. The BC student loan program has not raised its loan threshold to cover sufficiently increases to fees and living expenses. As a result, students are often relying on more than one source of financial assistance.

In spite of years of emphasis on research and development, this area is still in its infancy compared to Ontario and Quebec. This is because of a lack of sufficient funding from the province. Nonetheless, efforts have paid off in some quarters, and today BC is home to a significant number of high-tech companies and biotech research agencies.

The next chapter compares Ontario and British Columbia.

CHAPTER SIX: COMPARISON OF ONTARIO AND BRITISH COLUMBIA

This chapter summarizes and compares findings for Ontario and British Columbia with respect to the following research questions: 1) how does the policy environment influence postsecondary education access policies? 2) what policy trends are associated with government priorities of seat expansion, affordability, and research and development? 3) what is the relationship between government's postsecondary funding policies and the economic environment? and 4) how do policies affect provincial postsecondary funding, enrolment, participation, tuition fees, and investment in research and development? This chapter also discusses observations concerning the landscape of postsecondary education, the implications of federal government policies, the perceived role of education, vocationalism, system planning and managerial accountability, postsecondary education cost trends, and alternative sources of funding. The period compared includes 1988/89 to 2001/02, although the discussion includes earlier as well as more recent developments, if they are relevant.

Key Access Policies and the Policy Environment

Key postsecondary access policies are substantially similar in Ontario and British Columbia, and typically involve increasing capacity, affordability, and research and development. The scope and approach of the policies, however, may differ because different policy environments shape them. Key factors examined within the policy environment include historical, social, political and economic factors. The impacts of the economic environment or of fiscal realities on policy timing and scope are the subjects of discussion in the next section.

Expansion of Seats and Institutions and Related Key Factors

Generally speaking, accessibility to postsecondary education has been expanded by increasing seat capacity in existing public postsecondary institutions and/or by creating new seats by establishing new public or private postsecondary institutions. The key driving forces behind seat capacity policies have been a strong public demand for more seats, human capital theory, and policy discussions that have linked education to economic prosperity.

On the basis of percentage increases, the expansion of college seats exceeded that of university seats. Table 6.1 shows the Full-Time Equivalent (FTE) growth from 1988/89 to 2003/04 by sector. The growth in college FTEs was faster than university FTEs, with 66 per cent and 49 per cent for college FTEs in BC and Ontario compared to 46 per cent and 33 per cent for university FTEs respectively. This raises the question: was there a shift toward vocationalism and skills over the last 15 years? The expansion of college seats in both provinces can be partially explained by adding career/vocational seats for retraining displaced workers (the displacement occurred as a result of restructuring in the workplace in both provinces during the 1990s). As well, in BC, it can be explained by the expansion of university transfer seats in colleges. Overall, the shift was neither toward vocationalism nor toward classic liberal academic programs, but rather an integration of both. This shift is the direct result of both governments' efforts to make postsecondary education more responsive to economic and industry/labour needs. This argument is supported by government policy trends including the establishment of hybrid institutions and the convergence of specific programs that were offered at both universities and colleges at different competency levels.

Table 6.1: FTE Growth in BC and Ontario (1988/89 – 2002/03).

	BC	Ontario	ON/BC
Increase in College FTEs (#)	33,391	58,025	1.74
% Increase in College FTEs	66	49	
Increase in University FTEs (#)	20,861	77,237	3.70
% Increase in University FTEs	46	33	
Increase in PSE FTEs (#)	54,252	135,262	2.49
% Increase in PSE FTEs	57	38	

The emergence of hybrid institutions signifies the movement away from a bipolar binary system of universities with academic and degree-granting authority and of colleges with non-degree and vocational programs. While this emergence has occurred in both BC and Ontario, these hybrid institutions are different because of other factors peculiar to their respective policy environments.

One of these factors is the historical setting of postsecondary education. As can be expected, historical rationalities and decisions impact current practices. Hybrid-type institutions in BC include degree-granting institutes and university colleges, as well as special purpose universities. Historically, the regionally based college system in BC was intended to improve literacy and equity of access. The presence of regional colleges feeding into universities would allow British Columbians to pursue their first two years of postsecondary education close to home. Approximately 25 years later, the Socred government, taking the advice of the Provincial Access Committee (PAC), converted four of these colleges that were located in densely populated areas into university colleges and granted them the authority to offer degree programs in partnerships with one of the three established BC universities. Unlike Ontario, college and university programs are well-articulated today because PAC had the foresight to recognize the need for the establishment of a council of admissions and transfer.

Another key factor that furthered the development of hybrid institutions in BC was the NDP government's dissatisfaction with the responsiveness of university programs to the needs of the workplace. As well, university seats were more expensive to fund than college seats. Under *Skills Now!*, the BC NDP government expanded university colleges by allowing them to grant academic degrees and expanded institutes by allowing them to grant applied degrees. There was also lobbying by the presidents of relevant institutions who saw that becoming a university was a natural progression for university colleges. While permitted to offer specific degree-granting programs, university colleges continued to also offer vocational, technical and trades training. In addition, the BC NDP government created two hybrid universities: Royal Roads University (RRU) and the former Technical University of British Columbia (which was eventually dismantled by the BC Liberal government). RRU was specifically designed, in consultation with an advisory panel and the federal government, to be flexible and responsive to labour market needs and, unlike traditional universities, to have an inter-disciplinary and applied focus. To meet its objectives, the traditional bicameral structure was cast aside in favour of one in which the powers of the Board of Governors and Senate were vested in the President or Chief Executive Officer. Provincial funding was intended to be at a reduced level with a greater proportion of funding generated through cost-recovery programs and industry partnerships.

In Ontario, the establishment of new hybrid institutions in the late 1990s and early 2000s was based on a different set of historical, social and political factors. One of the key factors peculiar to Ontario was the historical decision in the mid-1960s to create a parallel system of colleges that did not have university transfer programs.

Despite lobbying from the Colleges of Applied Arts and Technology (CAAT) for degree-granting powers, the Ontario Liberal government maintained the status quo, which posed a

challenge to the transfer of credits between the two sectors and hindered the pursuit of lifelong learning. Eventually, the Ontario NDP government—under the guise of conferring innovative credentials—changed Nipissing College and Ryerson Polytechnic Institute to Nipissing University and Ryerson Polytechnic University after conducting a feasibility study. The subsequent Progressive Conservative government followed the NDP's lead, conferring degree-granting status on the Ontario College of Art and Design, creating a second polytechnic university (the Ontario Institute of Technology), and establishing three new Institutes of Technology and Advanced Learning that could grant applied degrees and work to meet labour market requirements.

Apart from the trend of expansion of hybrid institutions, the second access policy trend in both provinces is the program convergence of traditional university and college programs. This trend is facilitated by the targeting of seat expansion to undergraduate programs in computer science, engineering, technology, nursing and medicine. With the exception of the medical program (which is regarded as a graduate program), these seat-targeted programs are being offered at both colleges and universities. While university programs have traditionally had an academic focus, universities now prepare their graduates for the workplace through programs with practical work experience as well as applied and professional programs (Fisher & Rubenson, 1998). Conversely, colleges offer programs in the same disciplines and have expanded beyond a purely vocational focus to include more academic components. The result is a convergence or new blending of college and university programs. The key factors responsible for this convergence are government requirements that programs adequately prepare students for the globalized, knowledge-based labour market and workplace restructuring that requires employees to have even more sophisticated skills and knowledge.

Consequently, the previous demarcation between degree-academic and non-degree-vocational programs is becoming obsolete. Colleges and universities will probably find a new demarcation within the spectrum of skill and knowledge to define the appropriate levels for college versus university education. Literature suggests that policy trends in containing costs and enhancing productivity include expanding non-university sectors (including shorter and labour-focused curricula taught by non-research staff) and applying technology such as on-line distance learning. The creation of the new Thompson Rivers University by the BC Liberal government in 2005 suggests that BC is heading in this direction. One potential outcome could be the further disintegration of the binary postsecondary education system that currently exists.

Another emerging access policy trend in both BC and Ontario is the use of private institutions to increase degree program access. Historically both private and public institutions, could not grant a degree unless authorized by legislation to do so. However, factors including continuous public demand for access, reduced fiscal capacity, and the election of a right-wing government provided the window of opportunity to destabilize the monopoly over degree-granting held by publicly funded institutions in BC and Ontario. Through the *Degree Authorization Act*, 2003 in BC and the *Postsecondary Education Choices and Excellence Act*, 2000 in Ontario, the BC Liberals and the Ontario Progressive Conservatives made it possible for private institutions to grant degrees if they met the criteria and standards developed by a degree-granting board. The decision to open up degree-granting was consistent with market principles. However, like many other decisions of the BC Liberal and Ontario Progressive Conservative governments, not all stakeholders were consulted on this decision.²¹⁶

²¹⁶ The policy making process in both provinces has varied with different administrations. Generally speaking, the Liberal and NDP governments in Ontario, like the Socred and NDP governments in BC, have used a broad and consultative process involving postsecondary and other sectors. However, the Tory government in Ontario and the

Yet another trend in access policy is equity of access. When designing access policies, governments in both provinces have generally considered equity of access to varying degrees. The type of equity concerns and policy initiatives varied with the context and priorities of the governing parties. In the mid-1980s, the concerns of the BC Social Democrats and the Ontario Progressive Liberals involved geographic and financial barriers. These initiatives included the expansion of institutions and student financial assistance.

The BC and Ontario NDP governments focused their equity of access programs on students from low-income families and minority groups. As left modernizers, they believed in developing talent regardless of socioeconomic status and ethnicity. Thus, the BC NDP's concern for the low participation rate of Aboriginal students led to the establishment of two publicly funded colleges controlled by aboriginals. Consistent with New Right governments' sense of duty to value the well-being of individuals and maintain the strength of communities, the Ontario PCs began in 1998 (after the economy had started to thrive) to fund programs that supported students with learning disabilities. However, the BC Liberals have yet to provide additional funding to support students with learning disabilities at the postsecondary level. One explanation for this could be their priority to balance the budget over the four years of its first term. There may be more emphasis on this issue during the Liberals' second term, given that one of their strategic goals declared in the 2005 election campaign was to "build the best system of support in Canada for persons with disabilities, special needs, children at risk and seniors" (BC Liberal Party, 2005).

Liberal government in BC have moved away from consultation with the postsecondary education sector toward using business or industry groups instead.

Tuition fees, Student Assistance and Related Key Factors

To be accessible, postsecondary education must also be affordable. To ensure affordability, government policies must include the regulation of tuition fees and the provision of student financial assistance. BC's tuition fee policies have for the most part been different from those of Ontario.

Historically, Ontario has regulated tuition fees by incorporating them into the provincial funding formula for postsecondary institutions. As a result of the reduction in operating grants that were made in response to economic and fiscal pressures, successive governments in Ontario have allowed tuition fee levels to creep upwards.²¹⁷ One key factor contributing to the dramatic creep in tuition fees is the election of the Progressive Conservative government. The Ontario Tory government thought it was appropriate for students to pay up to 35 per cent of postsecondary education costs. Taking the perspective that fees should be charged based on earning capacity; the Tories deregulated fees for certain graduate and professional programs including business/commerce, dentistry, law, optometry, pharmacy and veterinary medicine. Because of these exorbitant fees, these programs are not affordable anymore for the average student from a low-income family. There has been much lobbying for tuition fee increases to be curtailed, if not lowered, and the McGuinty Liberal government has committed to reviewing this issue. The fiscal reality is that if tuition fees are reduced, someone else will have to bear the costs. If costs continue to rise, federal or provincial governments, private individuals, parents, employers, industry, labour, or the students themselves will be expected to contribute more money to the postsecondary education system.

²¹⁷ The percentages of tuition fee revenue to college and university operating expenditures were: between 14 per cent and 17 per cent during the Liberal administration; between 20 per cent and 23 per cent during the NDP administration, and around the 30 per cent range during the Tory administration.

In BC, prior to the NDP's six-year tuition fee freeze, there was no written or formal tuition policy for domestic students. There was, however, a written policy in place that allowed institutions to charge international students cost-recovery fees (hence international students were an additional source of revenue) as well as an informal policy to provide tuition-free graduate programs in order to encourage students to enter graduate studies. Institutions in BC set tuition fees for domestic students in consultation with the ministry responsible, and the general rule was to keep these fees below or close to the national average. Prior to the freeze, average undergraduate tuition fees in BC were above the national average. During the tuition fee freeze and until 2002/03, tuition fees were lower than Ontario and the national average. One unintended outcome was that the freeze caused institutions to suffer financial hardship leading to the delivery of minimum levels of core education services.²¹⁸

Within two years of the lifting of the tuition fee freeze by the BC Liberal government, BC undergraduate tuition fees were again above the national average. College utilization rates that had increased during the tuition freeze dropped immediately, but university utilization was unaffected. Skyrocketing tuition fee levels and the resulting public criticism have caused the BC Liberals to rethink their policy so that starting in 2005/06, tuition increases will be capped at the inflation rate. As in Ontario, tuition fees for certain graduate and professional programs including dentistry, medicine and law have increased to such a high level that equity of access to these programs is seriously jeopardized.

Another government policy that ensures affordability is the student loan program. Generally, in both provinces, student loans are based on financial need and have two components, the Canada Student Loan Program (or CSLP, which was initiated by the federal

²¹⁸ It has not been investigated whether the freeze actually led to access for those who otherwise would not have pursued an education because of costs.

government in 1964) and the provincial loan and/or grant program (that includes loan remissions and supplements the CSLP). Federal funding for CLSP has increased by only 27 per cent from \$525 million in 1990/91 to \$667 million in 2002/03, in constant dollars (Junor & Usher, 2004). Apart from important changes in 1994/95 and 2000, there have been few other changes made to the CLSP program. This is likely because initiating discussions for change opens a Pandora's Box of other issues—especially funding levels, which is an issue that both levels of government prefer left alone. Instead of increasing CLSP funding, the federal government established the Canada Millennium Scholarship Foundation in 1998, which would assist students in lowering their loan debt by offering them merit-based funding.

The effectiveness of the student loan program is questionable for at least two reasons. First, the current amount of student assistance is inadequate and forces students to find other sources of funding. One of these sources is employment, which can prolong the time it takes to complete a degree, increase the dropout rate or have a negative effect on student performance. The 2001/02 average CLSP loan amount hardly pays for average undergraduate university tuition fees, let alone living, accommodation and book expenses. Current loan amounts stand at \$4,571 for university and \$4,045 for college in Ontario, and \$4,741 for university and \$4,563 for college in BC. In 2003/04, only 30 per cent of students reported relying on government loans or bursaries compared to 31 per cent in 2002/03; 64 per cent on parent/family/spouse compared to 49 per cent the previous year; and 40 per cent on personal savings compared to 34 per cent in 2002/03 (CAUT, 2005).

Secondly, even if the loan amounts were increased, students will graduate with even larger student debts unless the loans are forgiven or Millennium Scholarships are increased or a new repayment scheme is established. Student debts for those who have them are already

approximately \$11,000 to \$15,000 for college students and \$20,000 – \$22,000 for university students (Allen & Vaillancourt, 2005). A large debt burden is itself a potential deterrent to the pursuit of postsecondary education.

Provincial funding for student loan programs has remained relatively flat despite significant increases in tuition fees, student enrolment and cost of living expenses. The *Rae Report* (Rae, 2005) recommends deregulating tuition fees but increasing student assistance to low income students as a more effective mechanism to ensure equity of access. Underlying this approach is the acceptance that students should pay a high proportion of the costs, but students unable to afford these costs will receive subsidies based on needs assessments. In response to the Rae recommendations, the McGuinty Liberals announced in their 2005 budget a plan to double the 2004/05 OSAP base funding by 2009/10. New funding will total \$358 million by 2009/10 and a first installment of \$192 million in new funding will be provided in 2005/06.²¹⁹ The actions of the Ontario Liberal government could put pressure on the BC Liberal government to improve financial assistance for BC students. Only in 2004/05, with the initial objective of reducing government spending, did the BC Liberals replace the BC grant program with a loan remission program without increasing the provincial funding level for student financial assistance.

Finally, another policy trend is the establishment of matching grant programs to encourage the raising of private funds to provide students with grant money. For example, the Tory government established the Ontario Student Opportunities Trust Fund (OSOTF) in 1996. This option is widely used by governments of all political stripes in BC and Ontario, but the

²¹⁹ In addition, the McGuinty Liberal government announced its intention to work with the federal government to expand eligibility for student loans and increase Ontario weekly loan amounts from \$110 to \$140 for single students. It will also establish a new Millennium-Ontario Access Grant to enhance access for low-income students so that 16,000 eligible first year students will receive grants of up to \$3,000.

OSOTF is probably the largest program of its kind. The effectiveness of this policy depends on the willingness of private individuals and corporations to invest in human capital development. Such individuals and corporations are fewer and harder to find in less affluent provinces.

Research and Development and Related Key Factors

Government policy concerning research and development has been included in this discussion because, while R&D policy is not access policy per se, it is very closely related to accessibility and affordability. First, R&D is one effective mechanism by which an institution, if successful, can distinguish itself from others, gain recognition, status, prestige, and attract the best minds to its campus (not to mention attracting large donations, endowments, and industry partnerships). Secondly, R&D policies directly involve postsecondary institutions and the need to develop talented individuals to sustain ongoing innovation and economic prosperity. Thirdly, successful R&D can lead to commercial spin-offs that bring additional revenue to institutions for more research and development, as well as access for research students.

One key factor affecting R & D policies is the underlying assumption of governments, regardless of political ideology, that R&D and innovation lead to job creation and economic growth. Government policies have therefore aimed at encouraging not so much basic or pure research that emphasizes knowledge advancement, but market-driven research emphasizing innovation and commercialization. The federal government has been instrumental in funding research, and over the years has been pouring millions of dollars into various kinds of research. The federal 2005 Budget Speech announced more investment in research:

To help build the kind of productive economy that will expand opportunity, create good-paying jobs and improve living standards for all, in both urban and rural Canada, we need to continue investing in new ideas and innovation—and in the people who will produce them. To this end, we have invested more than \$11 billion over the past eight years. This has fostered a world-class research environment in Canada, including universities that are among the best on the planet—with top-notch faculty and the most modern equipment.

We have also invested in commercialization, and we have improved access to the venture capital that is so essential to ensuring that Canadians reap the fruits of Canadian research. To sustain the important momentum created by our science-based investments, to develop the enabling technologies of tomorrow, and to maintain our lead in publicly funded research among all G-7 countries, this budget provides an additional \$1 billion. This will include increased funding for our granting councils and for the indirect costs of research at postsecondary institutions (Canada, 2005, p. 14).

Another key factor driving market-oriented research is the willingness of provincial governments to make money available to universities for matching federal funding. For example, the Tory government instituted programs such as the Ontario Research Performance Fund (\$30 million) and the R&D Challenge Fund (\$3 billion over ten years) to leverage federal funding while enabling universities to seek out industry-research partnerships. In order to provide industry with the necessary incentives to participate, tax credits were established for contributors from this sector. The Tory government in Ontario also focused on leveraging federal dollars for research infrastructure through the Ontario Innovation Fund (\$500 million) and the SuperBuild Growth Fund. The BC initiatives were modest in comparison. The BC Liberal government followed the lead of the Ontario Tories and established two funds, namely, the Leading Edge Endowment Fund (\$45 million) to leverage non-government funding and the BC Knowledge Development Fund (\$34 million) to leverage federal Canada Innovation Fund investment. It also established the Scientific Research and Experimental Tax Credit.

Another factor is the willingness of provincial universities to participate in federally funded programs. The University Presidents Council in BC lobbied the provincial government for more funding to leverage federal dollars for research and to build research capacity. In one of its reports, it writes:

If universities are to play a full role in doing our part to help position our province for excellence for the remainder of this decade and beyond – a role our universities believe we must play – essential conditions will require:

- Increased research and development investment with the objective of securing at least 15-20% share of the available federal funding.
- Ongoing financial support of the BCKDF, which allows British Columbia's universities to engage opportunities available through the Canada Foundation for Innovation.
- The Province should provide annual funding support at the same level for every new Canada Graduate Scholar that BC universities can bring to the province. This new fund would be an essential element if BC were to be competitive with other provinces who will be aggressively pursuing the best and the brightest students through the \$105M Federal Graduate Scholarships (TUPC, 2003, p. 13).

To date, provincial R&D funding has focused on leveraging federal dollars and, as such, federal policy has been a strong influence on provincial policies in this area. By setting up federal funding on a matching basis, the federal government has had success at persuading provincial governments to fund market-driven research in order to be eligible for federal contributions. By further requiring universities to form industry partnerships, the federal government has succeeded in influencing university research relying on government funding to focus on market needs and commercialization.

Rae (2005) points out that breakthroughs in discoveries and innovation in Ontario are the by-products of basic university research, and cautions against neglecting basic research. One remedy would be for federal granting councils to ensure that they are approving basic research proposals that only advance knowledge so that there is equal emphasis given to both basic and market-driven research. Unfortunately, starting in 2004/05, granting councils are expected to triple their annual investments in programs directly supporting commercialization over three years. As well, institutions have been directed to use the increased funding for indirect costs of research to enhance the commercialization of research recoveries (CFHSS, 2004).

In 2002/03, federal government funding for social sciences and humanities was approximately \$116 million while funding for natural sciences and engineering, including medical and health research, totaled over \$1 billion (CAUT, 2005). Federal funding for social

sciences and humanities constitute approximately ten per cent of total research funding through federal granting agencies. Of the \$3.8 billion in new funding for granting councils committed since 1998/99, only 12 per cent of these funds have been directed to the Social Sciences and Humanities Research Council (SSHRC).²²⁰

The Canadian Federation for the Humanities and Social Sciences makes the point that research in humanities and social sciences is not only essential for the creation of a vibrant, civil society but also for the creation of economic wealth. The Federation has urged, and rightly, that the federal government “broaden the current concepts of innovation and commercialization to encompass the human sciences and the notion of knowledge transfer to ensure that we build a nation of citizens, not just consumers” (CFHSS, 2004 p. 11). As well, it has urged that the federal government doubles the current base budget of the SSHRC to eliminate the research disparity among the granting councils. It explains the value of research in this area as follows:

Research in the humanities and social sciences underpins our economy, our institutions, our public policy, our international relations, our imaginative and intellectual cultures. It helps to shape how we govern ourselves, administer our laws, develop our ethics, educate our children, manage our resources, build an economy that is both rugged and resilient, make and market our products, create equality for our citizens, deal with complex issues of security in our new international environment, and imaginatively create our distinctly Canadian identities. (CFHSS, 2004 p.11)

Funding Policies and the Economic Environment

This section will begin with an overview and comparison of postsecondary education funding levels in BC and Ontario. Thereafter, this section will discuss the relationship between government postsecondary funding and the economic and fiscal environment. The discussion

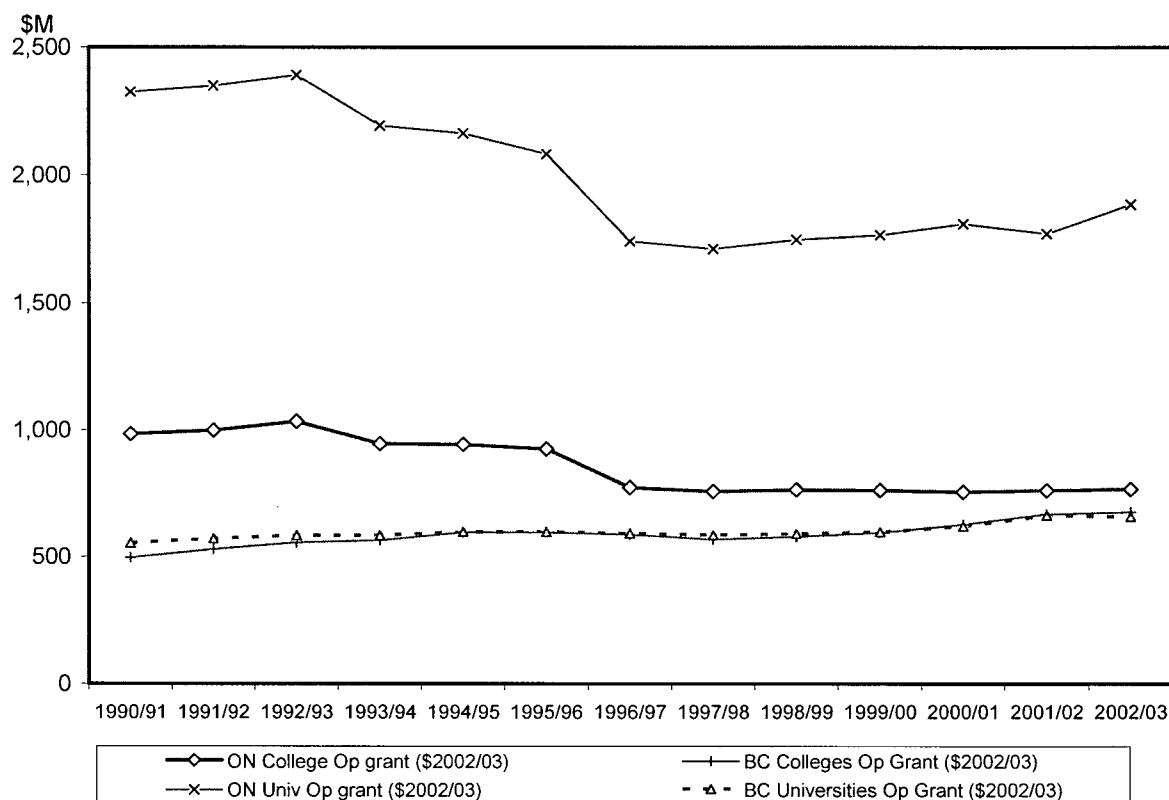
²²⁰ In 2005/06 the total budget of the SSHRC is \$292 million. It spends 39% of it on research, 18% on Canada Research Chairs, 17% on Canada Graduate Scholarships, 13% on other fellowships and awards, 6% on Initiative on the New Economy; 4% on Networks of Centres of Excellence, and 3% on dissemination. Areas covered by research in humanities and social science are real life issues, including the economy, education, health care, the environment, immigration, globalization, language, ethics, peace, security, human rights, law, poverty, mass communication, politics, literature, addiction, pop culture, sexuality, religion, Aboriginal rights, the past, our future.

will focus on the impacts of economic growth, federal transfer payments, and competing government priorities on funding policies.

Based on data provided by the BC Ministry of Advanced Education, the Council of Ontario Universities (COU), and the Ontario Association of Colleges of Applied Arts and Technology (ACAATO), provincial operating funding has been significantly larger in Ontario than in BC. Figure 6.1 indicates the provincial grants to colleges and universities from 1990/91 to 2002/03, in constant dollars. Between 1990/91 and 2002/03, Ontario provincial grants decreased by approximately 17 per cent for universities and 22 per cent for colleges. On the other hand, provincial grants in BC increased by 19 per cent for universities and 37 per cent for colleges during this period. The gap in provincial operating grants to colleges between Ontario and BC decreased from \$489 million in 1990/91 to \$89 million in 2002/03. Similarly, the gap for university funding grew slightly smaller, albeit Ontario's funding to universities was still over a billion dollars higher than BC's in 2002/03.

Provincial funding for colleges caught up with funding for universities in BC after 2000/01. By 2002/03, funding for universities in BC was only 49 per cent of total provincial funding, with universities providing 41 per cent of total FTE enrolment. The Ontario government's funding for universities that year was at 77 per cent while university enrolment was 63 per cent of total FTE enrolment.

Figure 6.1: Provincial Operating Grants of Colleges and Universities (1990/91 – 2002/03).²²¹

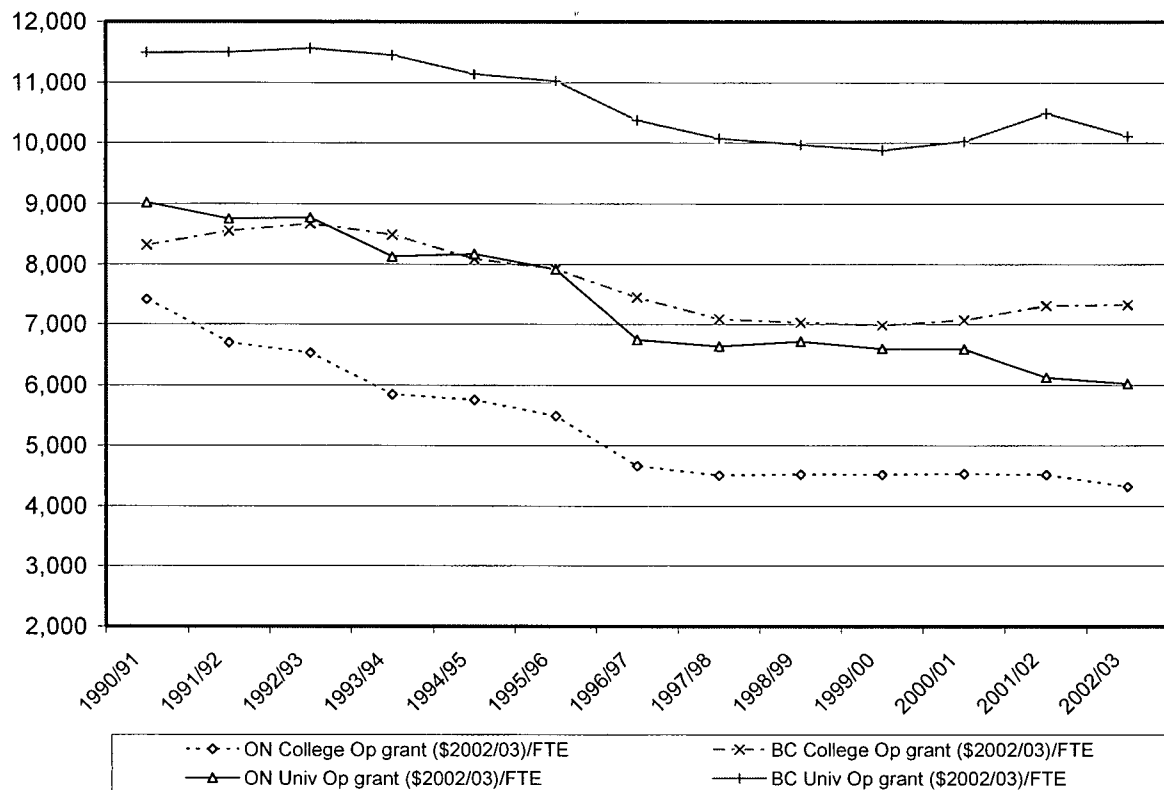


Source: BC Ministry of Advanced Education, COU and ACAATO.

On an FTE basis, the operating grant for colleges and universities in BC is higher than in Ontario. Figure 6.2 indicates the provincial operating grant based on FTEs for colleges and universities in Ontario and BC from 1990/91 to 2002/03, in constant dollars. In Ontario, the university grant per FTE decreased from approximately \$9,000 in 1990/91 to \$6,000 in 2002/03, a decrease of approximately 33 per cent. In BC, the university grant per FTE was well over \$11,500 in the early 1990s, and experienced a decrease of 12 per cent to approximately \$10,100 in 2002/03.

²²¹ College in the BC context includes colleges, institutes and university colleges.

Figure 6.2: Provincial Operating Grant per FTE by College and University (1990/91 – 2002/03).



Source: BC Ministry of Advanced Education, COU and ACAATO.

In Ontario, the college grant per FTE decreased by 42 per cent from \$7,400 to \$4,300 during the same period. College grant per FTE in BC decreased from \$8,300 to \$7,300, a decline of approximately 12 per cent. By 2002/03, BC grants per FTE for colleges and universities were respectively 170 per cent and 168 per cent higher compared to Ontario.

During 1985/86 and 2003/04, three different political parties governed both provinces. Regardless of political ideology, access to postsecondary education was a government priority in all cases primarily because of its instrumental role in economic prosperity. Nonetheless, it was not always protected from funding reductions. The next section discusses provincial funding trends and their relationships with dominant factors within the policy environment.

Provincial Funding Pattern and Prevailing Major Factors

There appears to be no consistent relationship between funding patterns and economic conditions. This suggests that while economic growth is one of the key factors in funding decisions, it can be overridden by other factors such as government priorities, competing programs, and federal-provincial relations. Table 6.2 indicates the percentage change in economic growth and in grants to colleges and universities in Ontario from 1987/88 and 2002/03.

Table 6.2: Per Cent Change in College and University Provincial Grants and Economic Growth in Ontario (1987/88 – 2002/03).

Year	ON College Grant YTY Change (%)	ON University Grant YTY Change (%)	ON GDP Growth (%)
1987/88	0	4	4.5
1988/89	2	3	6.7
1989/90	1	3	2.2
1990/91	5	4	-3.0
1991/92	2	1	-3.2
1992/93	3	2	1.1
1993/94	-9	-8	1.1
1994/95	0	-1	4.7
1995/96	-2	-4	3.3
1996/97	-16	-16	1.1
1997/98	-2	-2	4.5
1998/99	1	2	4.8
1999/00	0	1	7.5
2000/01	-1	2	5.6
2001/02	1	-2	1.8
2002/03	1	6	3.6

Source: COU, ACAATO and Ontario Ministry of Finance.

For Ontario, one of the dominant factors affecting funding trends is political ideology, or the government's strategic direction. Two occurrences support this contention. The first is a postsecondary funding increase in 1991/92 that took place in spite of an economic recession. Based on its ideology and its belief in Keynesian economic theory, the NDP government resolved to spend itself out of the recession. It was not until 1993/94 that the NDP government

decided to restrain its spending. That year, funding for postsecondary education was substantially reduced even though federal transfer payments for postsecondary education were increased.

The second occurrence was in 1996/97, when the Ontario Tory government drastically reduced funding for postsecondary education. A number of other contributing factors for reduced funding were also present. The first was poor economic growth in that year. The second was the federal government's decision in 1996/97 to reduce federal transfer payments to provinces. As Table 6.3 indicates, the federal payment to Ontario in 1996/97 (in constant dollars) was just marginally higher than in 1995/96. The 1995/96 transfer payment was designated only for postsecondary education, but the 1996/97 payment was also designated for health and social programs as well as postsecondary education. Probably the most dominant factor affecting funding trends was the Progressive Conservative (PC) government's Common Sense Revolution, which included priorities such as balancing the budget and making the government efficient and effective.²²²

²²² Unlike in Ontario, the 1996/87 federal transfer reductions did not play a key role in postsecondary funding decisions in BC. The NDP government made a decision to protect funding for postsecondary education in spite of minimal economic growth in 1996/87, but the decision was probably a strategic one. The decision made the implementation of a tuition fee freeze (consistent with its priority, Guarantee for Youth) without compensation for loss of fee revenue more palatable to institutions.

Table 6.3: Federal Transfer Payments for Postsecondary Education (1993/94 – 2001/02).

Year	ON Federal Transfers (\$M Current)	ON Federal Transfers (\$M Constant)	Change (%)	BC Federal Transfers (\$M Current)	BC Federal Transfers (\$M Constant)	Change (%)
1993/94	3,642	4,257	7	1,282	1,499	4
1994/95	3,526	4,114	-3	1,221	1,425	-5
1995/96	3,542	4,045	-2	1,234	1,409	-1
1996/97	3,728	4,189	4	1,356	1,524	8
1997/98	4,181	4,624	10	1,611	1,782	17
1998/99	3,680	4,032	-13	1,732	1,898	7
1999/00	5,432	5,850	45	2,602	2,802	48
2000/01	5,287	5,543	-5	2,552	2,676	-5
2001/02	5,719	5,847	5	2,343	2,395	-10

Source: Statistics Canada, Provincial Economic Accounts.

Notes:

1993/94 - 1995/96 figures include Canada Assistance Plan and PostSecondary Education Grants.

1996/97 - 2001/02 figures are Canada Health and Social Transfer for health, postsecondary education and social services.

Unlike in Ontario, provincial grants for postsecondary education in BC do not appear to have been heavily influenced by federal funding patterns. For example, operating grants to universities and colleges were not significantly affected when federal transfer payments were drastically reduced in 1996/97 and 1997/98. Generally speaking, economic conditions in BC tended to be a key factor in funding decisions. Table 6.4 indicates the percentage change in economic growth and in grants to colleges and universities in British Columbia from 1987/88 and 2002/03. Major postsecondary education initiatives were announced consistently when economic conditions were relatively good, as was the case with *Access Now!* in 1988 and *Skills Now!* in 1994. Again, funding increases in 2000/01 coincided with reasonably healthy economic growth that year.

As shown in Ontario, other factors can override economic considerations. In 2001/02, the BC NDP government provided a healthy funding increase to postsecondary education despite a near recession. Other factors present included a pending election and wage increases under collective bargaining agreements. Also, despite improvements in economic conditions during the BC Liberals' first term, the postsecondary funding level was maintained at a relatively flat level with little or no funding increase. The dominant factor was the government's

determination to balance the provincial budget by 2004/05. In order to achieve this goal, funding for priority programs was kept relatively flat while other programs were cut by up to 30 per cent over three years.

Table 6.4: Per Cent Change in College and University Provincial Grants and Economic Growth in BC (1987/88 – 2002/03).

Year	BC College Grant YTY Change (%)	BC University Grant YTY Change (%)	BC GDP Growth (%)
1987/88	6	2	4.6
1988/89	12	3	4.0
1989/90	-4	6	3.0
1990/91	16	12	2.5
1991/92	7	3	-0.5
1992/93	5	2	2.4
1993/94	2	0	3.2
1994/95	6	3	4.3
1995/96	0	0	2.7
1996/97	-1	-1	0.5
1997/98	-3	-1	2.0
1998/99	2	1	-0.5
1999/00	3	1	1.4
2000/01	6	4	3.4
2001/02	7	7	-0.2
2002/03	1	-1	2.4

Source: BC Ministries of Advanced Education and Finance.

Another key factor affecting policy trends is competing government priorities, which can have a significant impact in times when public demands for fiscal responsibility and lower taxes run high. Without the will to raise taxes significantly, governments have had to make trade-offs in spending in order to reduce budget deficits (if not to balance budgets) in the absence of revenue windfalls from unexpectedly high export commodity prices. Table 6.5 indicates the percentage of selected program spending to total provincial spending at the Consolidated Revenue Fund (CRF) level. The most notable spending increase was for health care programs.

Spending for health has significantly increased in both provinces and now consumes over 40 per cent of total provincial spending in both provinces.²²³

Table 6.5: Per Cent Spending of Postsecondary, K – 12, Health and other Social Services Programs to Total Provincial Spending at the CRF level in BC and Ontario (1986/87 – 2003/04).

Year	BC PSE (%)	BC K-12 (%)	BCHealth (%)	BC SocSer (%)	ON PSE (%)	ON K-12 (%)	ON Health (%)	ON SocSer (%)
1986/87	6.4	12.3	28.6	15.4	6.7	11.2	31.8	9.9
1987/88	7.8	13.4	31.1	13.6	6.7	12.3	32.2	10.3
1988/89	7.3	16.7	33.1	11.8	6.5	12.0	32.8	11.2
1989/90	7.4	16.5	31.9	11.9	6.4	11.9	33.2	12.0
1990/91	7.4	19.8	31.5	11.2	6.4	12.3	33.8	12.9
1991/92	7.5	19.9	32.6	12.0		19.6	36.8	17.0
1992/93	7.2	20.0	33.0	13.2		18.5	34.6	16.9
1993/94	7.1	19.3	32.6	14.9		19.3	35.1	17.8
1994/95	7.9	19.3	32.7	13.9		17.1	33.7	18.2
1995/96	8.1	19.8	32.9	13.8		17.2	33.9	17.1
1996/97		28.2	33.7	12.6	6.9	9.6	34.9	15.9
1997/98	8.1	20.2	35.7	14.9	5.8	10.6	35.5	15.2
1998/99	8.1	20.8	35.3	14.5	5.9	13.1	34.2	14.4
1999/00	8.3	20.7	36.7	14.4	5.8	13.9	35.5	13.5
2000/01	8.5	20.3	37.1	15.8	5.7	13.6	37.3	12.7
2001/02	7.9	19.7	38.0	16.7	5.5	13.8	38.3	12.6
2002/03	7.4	19.0	40.0	13.1	5.5	14.0	40.1	12.3
2003/04	7.6	19.4	40.8	11.5	5.9	14.7	40.5	12.2

Note: The percentages are combined for postsecondary education and K – 12 in BC in 1996/97 and in Ontario in 1991/92 up to 1995/96 because these portfolios were combined under one ministry. For public reporting purposes, spending was also combined in the relevant years.

Source: BC and Ontario Ministry of Finance.

In summary, funding policies have tended to be influenced by a variety of different factors including economic conditions and government's economic, fiscal and ideological preferences. As a result, funding decisions are reactive to fiscal realities and short-term government priorities instead of being proactive and consistent with a set of long-term goals for postsecondary education.

²²³ Other priority programs competing for public resources include K – 12 education and other social services. Spending for K – 12 education has been increasing at a faster rate than postsecondary education despite decreasing K – 12 enrolment. K – 12 education spending in Ontario has not increased as quickly as it has in BC. Spending for other social services like income and housing assistance and other programs for children and families increased characteristically under the NDP governments in both provinces but decreased under the BC Liberal and Ontario PC governments.

Impacts on Postsecondary Education and Trends

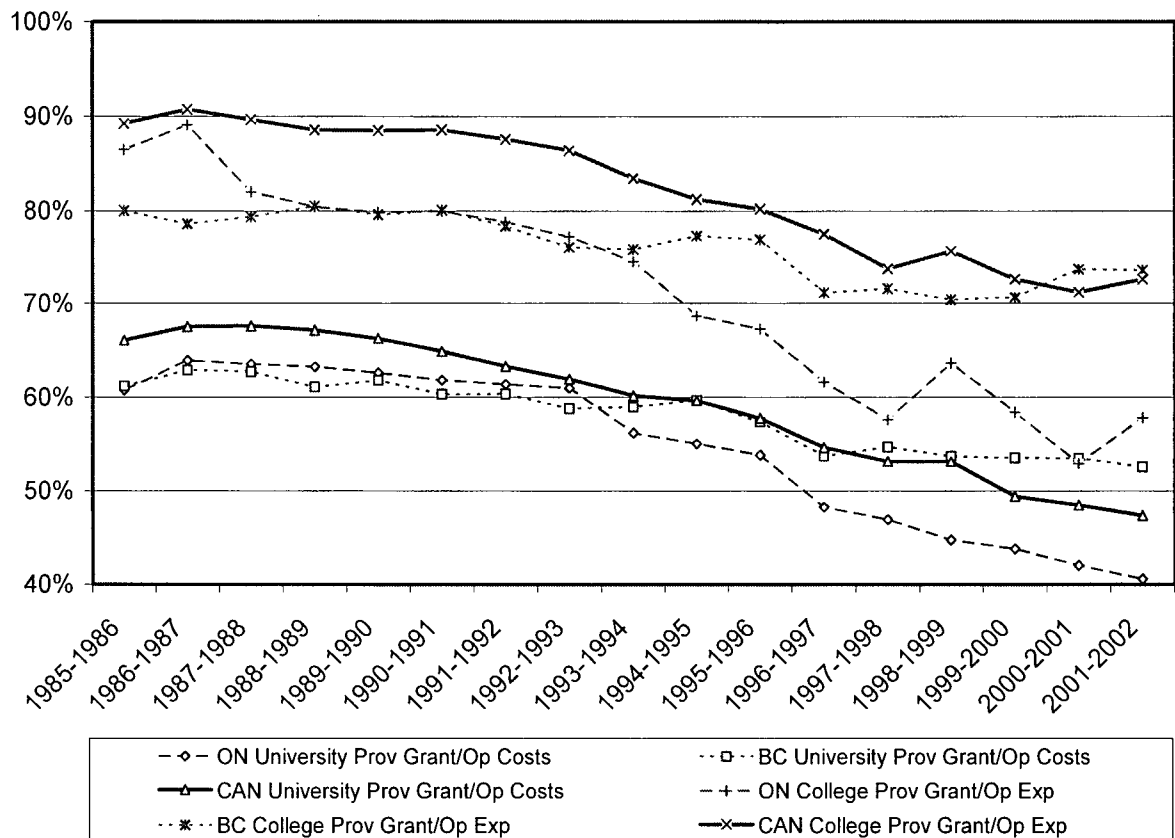
This section compares the policy impacts on postsecondary education in Ontario and British Columbia. The impacts and trends include provincial funding, enrolment, participation, tuition fee changes and outcomes of research and development policies. Included in this section are discussions of alternative sources of funding and the rising costs of postsecondary education.

Provincial Funding

In spite of increasing BC provincial grants, the percentage contribution of the provincial grant to the operating expenditures of colleges and universities is declining. Figure 6.3 indicates percentages of provincial grant to operating expenditures for Ontario and BC, based on Statistics Canada data. The BC provincial grant to operating expenditures of universities was at 61 per cent in 1985/86 but decreased to 53 per cent in 2001/02, six points above the Canadian average and twelve points higher than Ontario. Ontario provincial grants accounted for 61 per cent of university operating costs in 1985/86 and by 2001/02 these accounted for only 41 per cent. The Canadian average was 66 per cent in 1985/86, which decreased gradually over the years to 47 per cent in 2001/02.

Colleges traditionally rely more heavily than universities on public funding and show higher percentages of provincial grant to operating expenditures. In Ontario, provincial grants covered 86 per cent of colleges' operating expenditures in 1985/86, but only covered 58 per cent by 2001/02. For BC, provincial grants to colleges covered 74 per cent of operating expenditures in 2001/02, approximately the same as the Canadian average of 73 per cent and significantly higher than Ontario. Colleges in Ontario have become less reliant on provincial funding than colleges in BC in more recent years.

Figure 6.3: Per Cent Provincial Grant to Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).



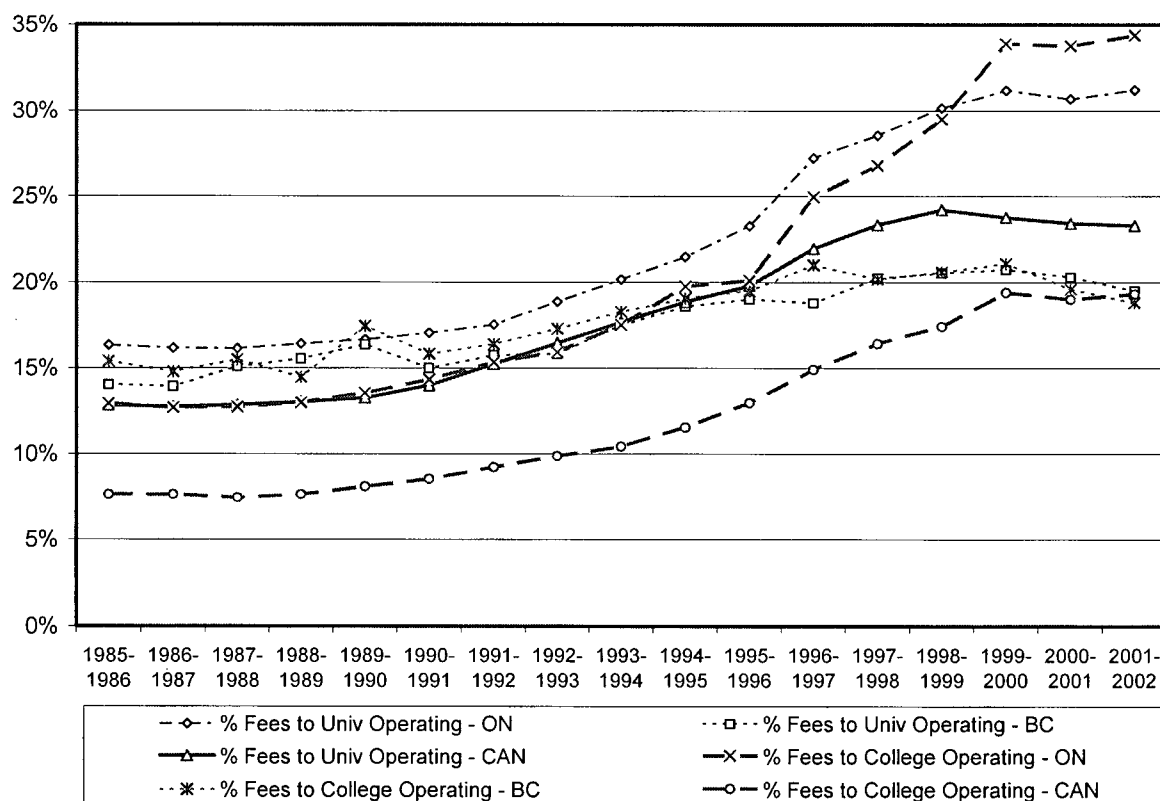
Source: Statistics Canada. CANSIM Tables 478-0004 and 478-0007.

The decrease in provincial grants in Ontario has been compensated somewhat by increases from other revenue sources, namely tuition revenue and “other” revenues (donations, endowments, investment income, sales of products and services). In recent years, tuition fee revenue has been covering an increasing proportion of university operating costs. This represents a shift of postsecondary costs from the taxpayer to the individual student. Some would argue that this shift is justified by the private benefits offered by postsecondary education.

Figure 6.4 indicates the percentage of tuition fee revenues to operating costs in Ontario and BC. By 2001/02, tuition fee revenues in Ontario constituted 31 per cent of university operating expenditures and 34 per cent of college operating expenditures, up 15 and 13

percentage points respectively from 1985/86. In BC, the increase in tuition fee revenue was only six and five percentage points for universities and colleges respectively. As a result of the NDP tuition fee freeze, BC students were paying a smaller portion of postsecondary education costs than their counterparts in Ontario. In 2001/02 the Canadian average was at 23 per cent and 20 per cent for universities and colleges respectively.

Figure 6.4: Per Cent Tuition Fee Revenue to Operating Expenditures of Universities and Colleges (1985/86 – 2001/02).

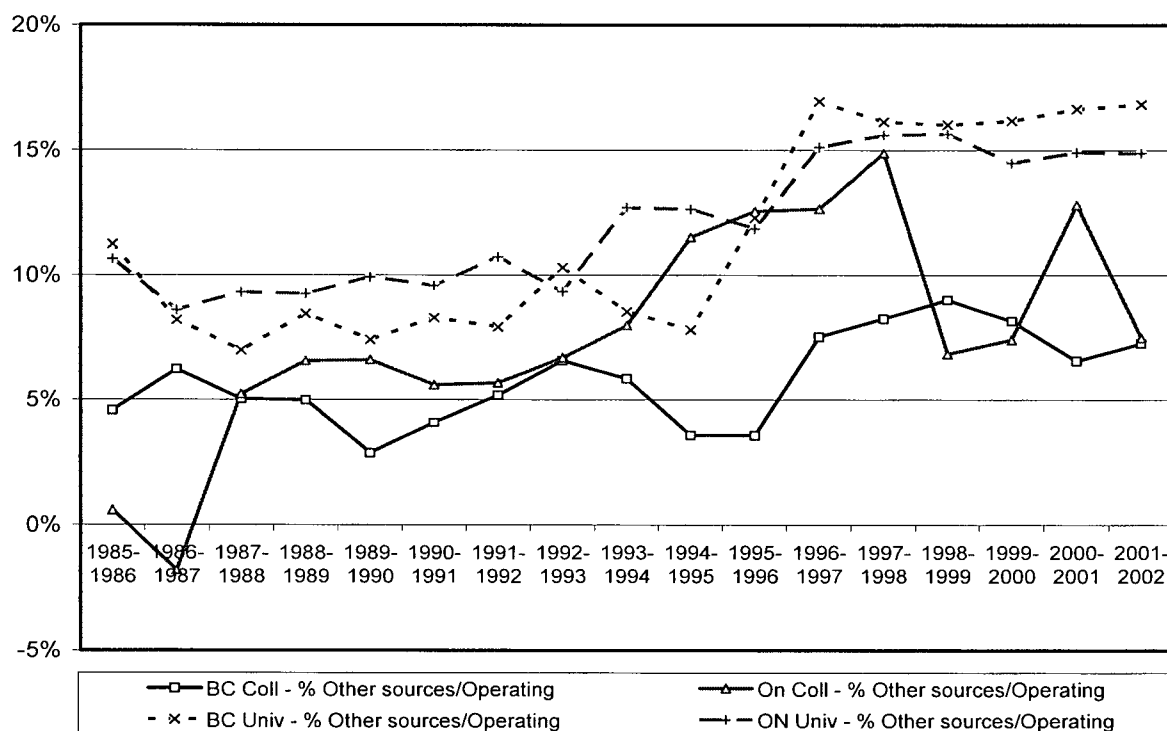


Source: Statistics Canada. CAMSIM Tables 478-0004 and 478-0007.

Colleges and universities increasingly relied on other revenues to fund the gap between provincial funding and their operating expenditures. Figure 6.5 indicates other sources of revenue as a percentage of operating expenditures for BC and Ontario colleges and universities

between 1985/86 and 2001/02. In 1985/86, other sources²²⁴ constituted 5 per cent of operating expenditures for colleges in BC and 1 per cent of operating expenditures for colleges in Ontario.²²⁵ This percentage rose to 7 per cent for both provinces in 2001/02. In the case of universities, other revenues constituted 11 per cent of operating expenditures in 1985/86 in both provinces, increasing to 17 per cent in BC and 15 per cent in Ontario in 2001/02.

Figure 6.5: Per Cent Other Source Revenues to Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).



Source: Statistics Canada, CANSIM Tables 478-0004 and 478-0007.

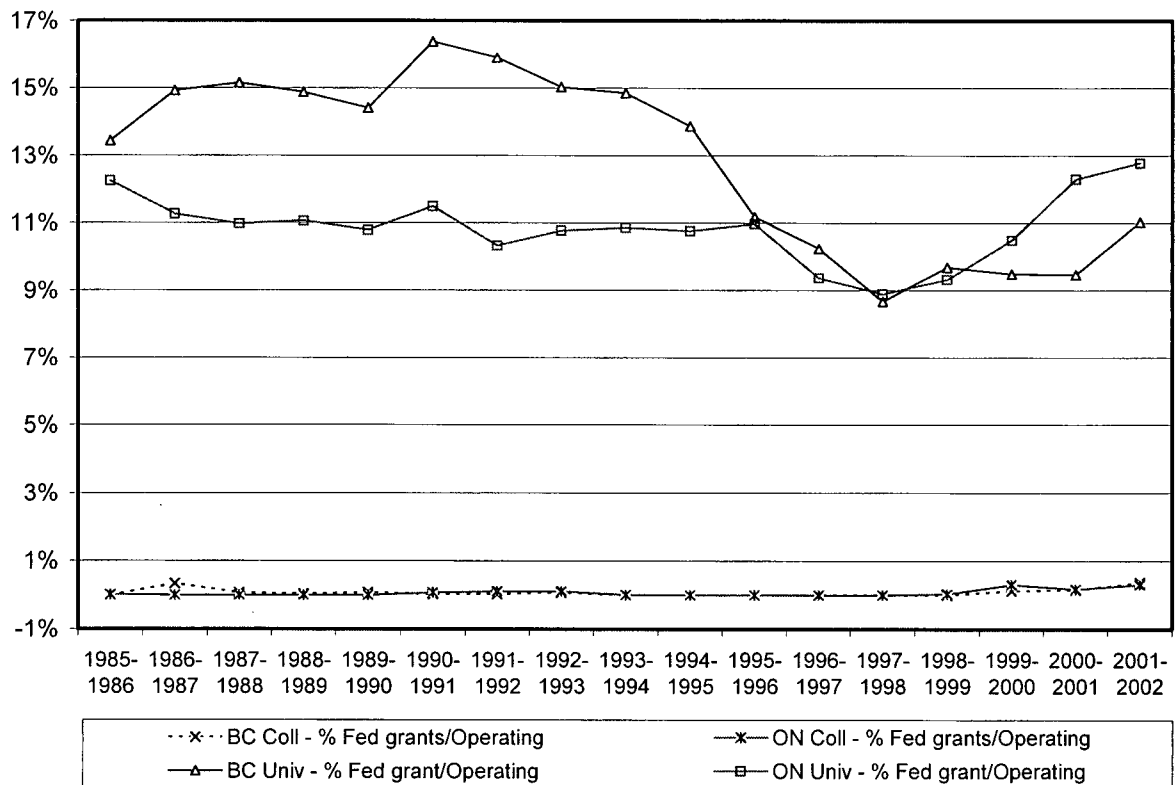
Unlike tuition and other sources, federal grants as a percentage of operating expenditures for colleges and universities did not significantly change between 1985/86 and 2001/02. Figure 6.6 indicates federal grant as a percentage of operating expenditures for BC and Ontario colleges

²²⁴ For universities, other sources of revenue include bequests, individuals, business enterprises, foundations, non-profit organizations, non-government and grant organizations, investments, sales of services, sales of products, and income from rentals, library fines, and sales of fixed assets. For colleges, other sources of income include bequests, donations, non-government grants, investment income, auxiliary enterprises (gross), borrowings, and miscellaneous.

²²⁵ The Ontario colleges 'other sources' of revenue are volatile. They were well over \$100,000 between 1994/95 and 1997/98, and fluctuated between \$70,000 and \$165,000 between 1998/99 and 2001/02.

and universities between 1985/86 and 2001/02. Primarily federal research councils awarded the federal grants, and therefore colleges received very little, if any, of this funding. The percentage of federal grants to university operating expenditures was 13 per cent in BC and 12 per cent in Ontario for 1985/86, and 11 per cent in BC and 13 per cent in Ontario for 2001/02. Consistent with the federal government's measures of fiscal restraint, there was a significant decrease in the percentage of federal research dollars to universities in the mid- to late-1990s, particularly to Ontario universities.

Figure 6.6: Per Cent Federal Grant to Operating Expenditures of Colleges and Universities (1985/86 – 2001/02).

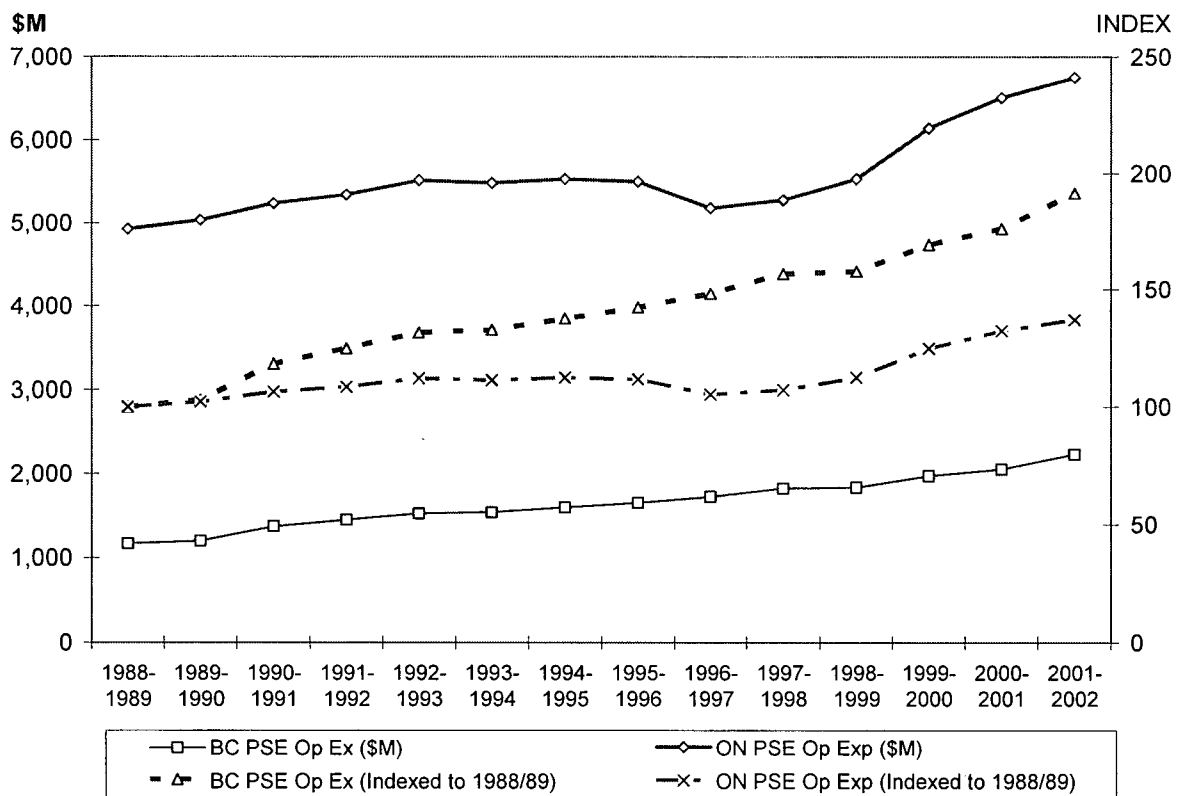


Source: Statistics Canada CANSIM Tables 478-0004 and 478-0007.

The operating expenditures for postsecondary education in both provinces increased between 1988/89 and 2001/02. Figure 6.7 indicates the operating expenditures for postsecondary

education in BC and Ontario from 1988/89 to 2001/02, in constant 2002/03 dollars.²²⁶ While operating expenditures in BC increased annually, operating expenditures in Ontario had a more interesting pattern. Operating expenditures increased gradually from 1988/89 to 1991/92, but during the subsequent NDP regime, they remained relatively flat (except for an increase in 1991/92). Between 1996/97 and 1998/99, levels remained below the 1995/96 level, primarily because of federal transfer reductions and the PC government's political platform. It was only in 1999/2000 that levels again increased, reflecting the Tory government's targeted funding increases to postsecondary education.

Figure 6.7: Operating Expenditures of Postsecondary Education in BC and Ontario (1988/89 – 2001/02).



Source: Statistics Canada, CANSIM Tables 478-0004 and 478-0007.

²²⁶ Operating expenditures include the costs of instruction such as faculty, staff, libraries and administration. It also includes sponsored research costs of universities.

The operating expenditures for postsecondary education in BC increased from \$1.2 billion in 1988/89 to \$2.2 billion, or by 91 per cent, in 2001/02, while those in Ontario increased from \$4.9 billion to \$6.7 billion, or by 37 per cent, during the same period (in 2002/03 dollars). The increase is not only a result of increased enrolment but also increased cost on a per FTE basis. As Johnstone (1993, p. 9) explains:

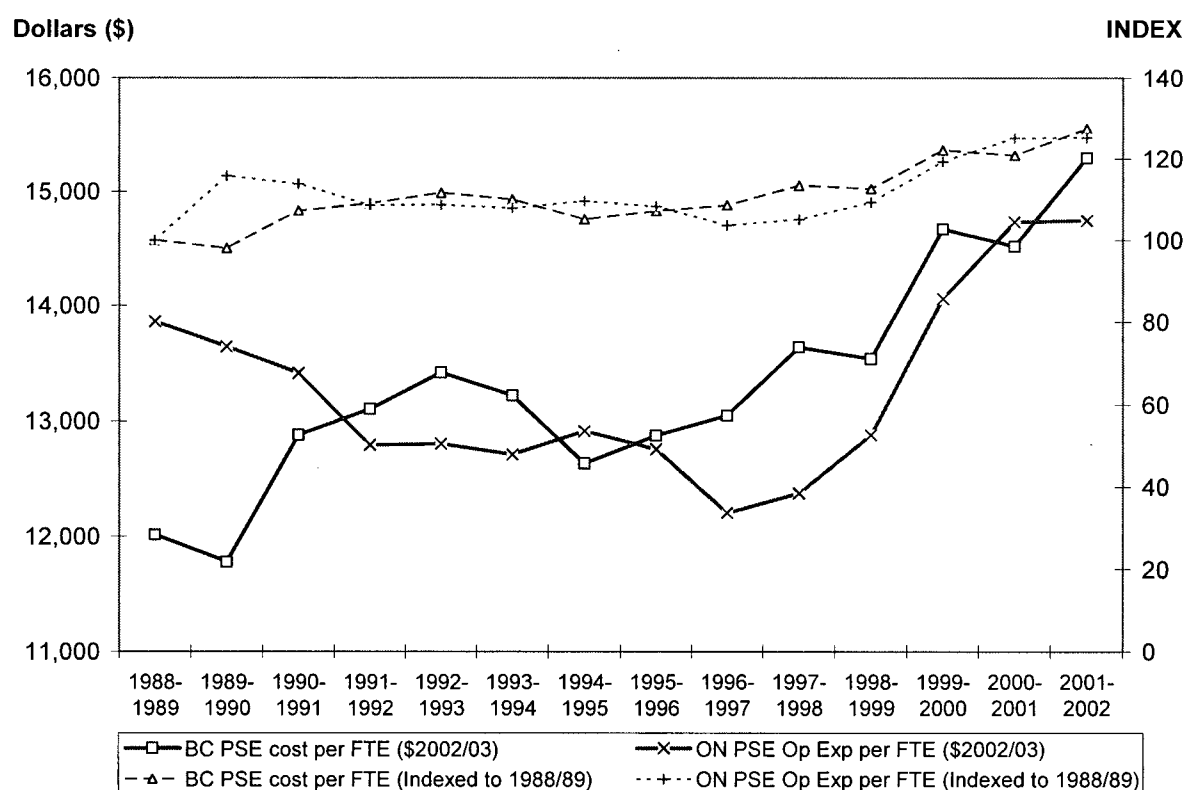
Unit costs, for example, tend to rise at rates generally mirroring the rates of increase of wages and salaries of the faculty and staff, reflecting the general absence in higher education (as in most of the service sector of the economy) of the kind of sustained productivity increases characteristic of the goods-producing sectors of most national economies. Non-labour costs peculiar to the enterprise of higher education, such as library acquisitions and scientific equipment, tend also to rise at rates that are above the average cost increases generally. But this means that the unit costs of higher education – assuming only a “steady state” of teaching loads, student/staff ratios, and accessibility of academic equipment – will tend always to rise at rates in excess of the average increase in costs: that is, faster than the rate of inflation. If the sheer volume of students or degree programs, or research expectations is also increasing, the rate of increase of total expenditures, at least the pressure for increased expenditures, will rise inexorably and pervasively. Obviously, this means that the revenue sources, mainly from taxes and/or tuition fees, must rise at the same high rate as costs – or else higher education must suffer cutbacks either in total number of staff or in relative wage and salary increases or, in capital and equipment.

The postsecondary operating expenditures per FTE in BC and Ontario increased at similar rates between 1988/89 and 2001/02. Overall, the postsecondary operating cost per FTE in BC increased from \$12,013 to \$15,293 between 1988/89 and 2001/02, and in Ontario from \$13,861 to \$14,744 throughout the same period. If a lower cost per FTE is an indication of cost-efficiency, that Ontario appears to be more cost-efficient. However, it may be that the lower FTE cost in this case is a mere reflection of a system that is inadequately funded. Further study involving the relative performance of both provinces would be necessary to come to a conclusion.

Figure 6.8 indicates the operating expenditures per FTE in the two provinces. The operating expenditure per FTE in Ontario was primarily declining between 1988/89 and 1996/97,

increasing between 1997/98 and 2000/01, and then flattening between 2000/01 and 2001/02. It ranged from its lowest point of \$12,220 in 1996/97 (as a result of federal transfer cuts) to its highest point of \$14,744 in 2001/02 (because of new investments by the Tory government). On the other hand, the operating expenditure per FTE in BC was primarily increasing between 1988/89 and 2001/02, except for the period between 1992/93 and 1997/98. The lowest operating expenditure per FTE in BC was \$11,770 in 1989/90 (owing to a high enrolment increase) and the highest was \$15,293 in 2001/02, the year of a provincial election (because of new investments). The average per FTE cost over the period was \$13,331 for BC and \$13,277 for Ontario.

Figure 6.8: Postsecondary Operating Expenditures per FTE in BC and Ontario (1988/89 – 2001/02).



Sources: Statistics Canada. CANSIM Tables 478-0004 and 478-0007; COU and ACAATO for Ontario university and college FTEs; and BC Ministry of Advanced Education for BC university and college FTEs.

The funding issues in postsecondary education today are not limited to the funding gap between postsecondary education requirements and provincial grants. Other interrelated issues

include how beneficiaries (e.g. students, employers) and traditional contributors (all taxpayers through provincial and federal grants and parents through tuition and donors) should share postsecondary education costs, and how the outputs or products of postsecondary education can be produced with fewer and cheaper inputs and resources.²²⁷

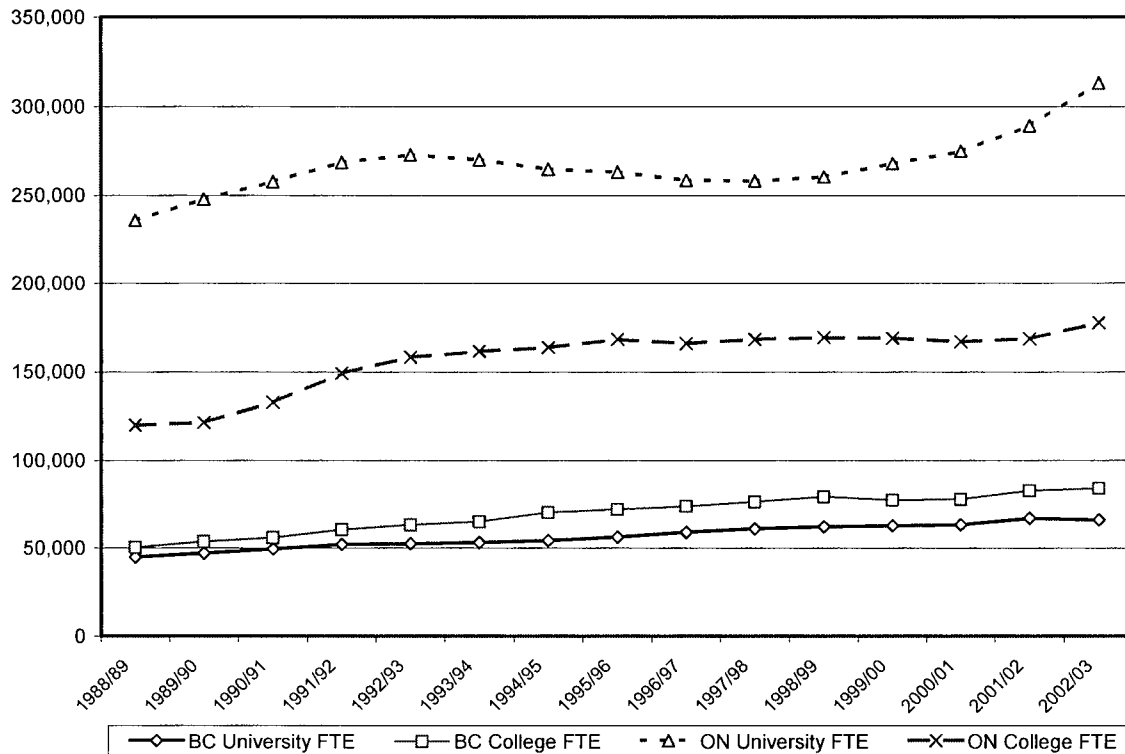
Enrolment

Overall, Ontario's postsecondary enrolment is more than three times larger than BC's. Enrolment in Ontario's universities is approximately five times larger and enrolment in colleges is approximately twice as large as BC. Ontario has more university FTEs than college FTEs, whereas the reverse is true of BC. On average, over the period from 1988/89 to 2002/03, for every one college FTE, there were 1.7 university FTEs in Ontario. In BC however, for every one university FTE, there were 1.2 college FTEs. Overall postsecondary enrolment grew at a faster rate in BC than in Ontario during this period.

Figure 6.9 indicates university and college enrolments in both provinces from 1988/89 to 2002/03. While enrolment has shown positive overall growth, there were times when both provinces experienced negative growth. From 1988/89 to 2002/03, BC's university and college enrolments increased by 46 per cent and 66 per cent respectively. In comparison, Ontario's university and college enrolment increased by 33 per cent and 49 per cent respectively over the same period.

²²⁷ Costs associated with student living are not included.

Figure 6.9: University and College FTE Enrolments (1988/89 – 2002/03).



Source: COU, ACAATO, BC Ministry of Advanced Education, and TUPC.

Table 6.6 shows the year-to-year percentage growth in university and college FTE enrolment from 1988/89 to 2002/03. During that period, BC experienced negative growth on two occasions. The first was in 1999/2000, when the college sector experienced a negative FTE growth of 2 per cent. The FTE decline occurred despite a third straight year of frozen tuition fees. Colleges were also experiencing financial hardships as a result of the tuition fee freeze. The other incident occurred in 2002/03, when FTEs in the university sector declined by 1 per cent—arguably because of skyrocketing tuition fees resulting from the Liberal government’s decision to lift the tuition fee freeze as well as a declining Grade 12 cohort. Periods of significant FTE enrolment in both the university and college sectors coincide with the years of *Access for All* (during the Socred administration) and *Skills Now!* (during the NDP administration), and in 2001/02, as a result of the NDP’s 2001 election budget.

Table 6.6: Year-to-Year Per Cent Change in University and College FTE Enrolment (1989/90 – 2002/03).

Year	BC University FTE	BC College FTE	ON University FTE	ON College FTE
1989/90	5%	6%	5%	1%
1990/91	5%	4%	4%	9%
1991/92	5%	8%	4%	12%
1992/93	1%	4%	2%	6%
1993/94	1%	3%	-1%	2%
1994/95	2%	8%	-2%	1%
1995/96	4%	3%	-1%	3%
1996/97	5%	2%	-2%	-1%
1997/98	3%	4%	0%	1%
1998/99	2%	4%	1%	1%
1999/00	1%	-2%	3%	0%
2000/01	1%	1%	3%	-1%
2001/02	6%	6%	5%	1%
2002/03	-1%	2%	8%	5%

Source: BC Ministry of Advanced Education, COU and ACAATO.

In Ontario, negative university enrolment occurred between 1993/94 and 1996/97, coinciding with years of budget restraint under the Ontario NDP's Social Contract and the Tories' Commonsense Revolution. The largest FTE enrolment increase occurred in 2002/03, when the Tory government initiated targeted investments in postsecondary education partly in preparation for the double cohort.

Given that the trend in postsecondary enrolment has been an upward one, has postsecondary education become more accessible? Available data suggest that there has been minimal, if any, improvement in accessibility to a university from Grade 12 since 1994. This conclusion is based on two separate sets of data. The first set is the percentage of high school applicants who were accepted and registered at a university between 1994/95 and 2003/04. The data suggest that the level of accessibility to university by BC high school graduates has decreased from 60 per cent in 1994/95 to 58 per cent in 2003/04. As for Ontario, the level of accessibility has been more or less been maintained, at 67 per cent in 1994/95 and 68 per cent in 2003/04 (albeit it was at 71 per cent during the first four years of the Tory mandate). The data

only relate to high school graduates who apply for university acceptance. Approximately 50 per cent of Ontario high school graduates apply to university, whereas only 33 per cent of BC high school graduates apply. At least two factors explain the difference in the application rate. The first is the higher number of university spaces in Ontario, which increases the probability of acceptance and hence the likelihood of application to a university. The second is that BC high school graduates have an alternative option, that is to register in a university transfer program at a local college so that they can save money by living at home. Data for the college sector are not available to test this assumption.

Table 6.7 indicates that the percentage of registrants to applicants in BC was in the low 50 per cent range between 1997/98 and 1999/2000 (during the uncompensated tuition fee freeze years), but has been in the high 50 per cent range since 2000/01. The data suggest that, as a result of the tuition fee freeze and the lack of compensation for losses in revenue, universities experienced financial constraints that limited their capacity to accept unfunded enrolment. This observation suggests that to increase access, a tuition fee freeze is effective only if accompanied by compensating funding increases to postsecondary institutions. Otherwise, institutions have limited capacity even though the freeze makes postsecondary education more affordable for students.

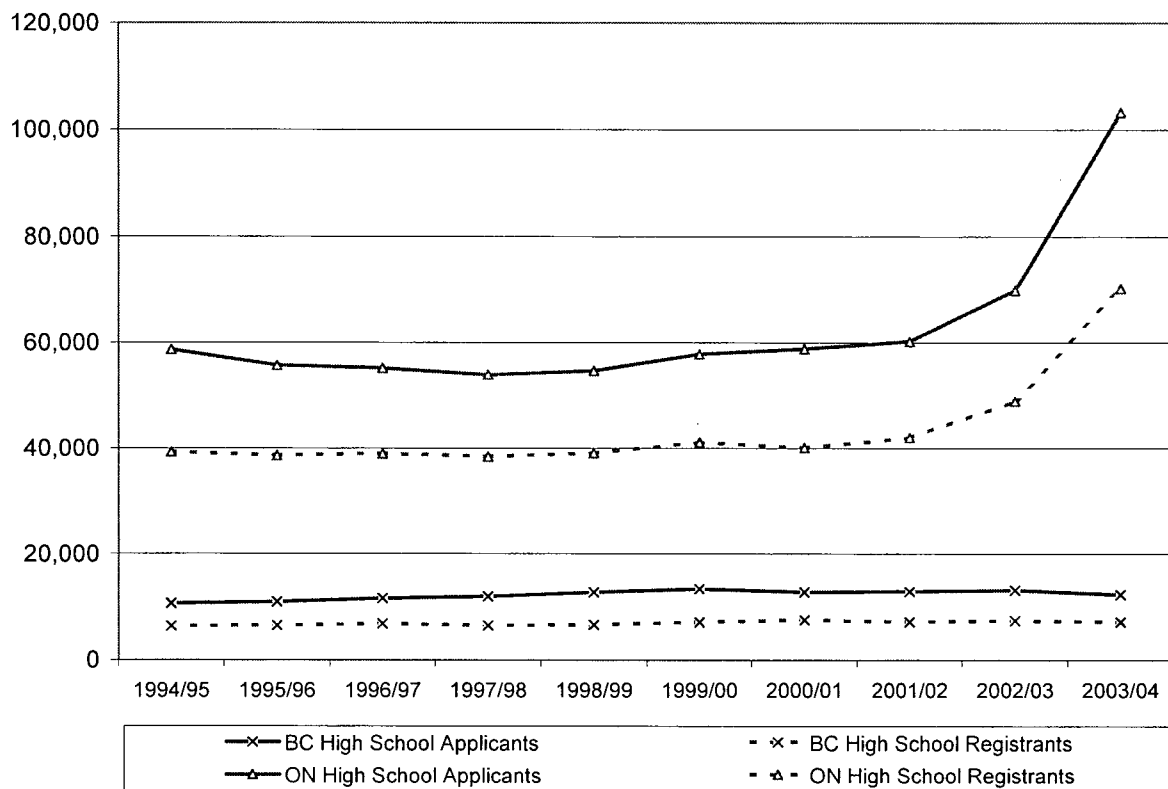
Table 6.7: High School Applicants and Registrants in BC and Ontario (1994/95 – 2003/04).

Year	% BC High School Registrants/ Applicants	% ON High School Registrants/ Applicants	ON/BC High School Applicants	On/BC High School Registrants
1994/95	60	67	5.49	6.13
1995/96	59	69	5.06	5.95
1996/97	59	71	4.74	5.71
1997/98	54	71	4.50	5.90
1998/99	52	71	4.27	5.89
1999/00	53	71	4.30	5.76
2000/01	59	68	4.57	5.31
2001/02	56	70	4.65	5.83
2002/03	56	70	5.28	6.59
2003/04	58	68	8.33	9.76

Source: COU Application Statistics and Simon Fraser University Office of Analytical Studies.

Figure 6.10 indicates the number of high school applicants and registrants in BC and Ontario from 1994/95 to 2003/04. While the number of high school applicants and registrants in BC remained relatively stable during this period, there was a significant increase in the number of both high school applicants and registrants in 2003/04 as a result of Ontario's double cohort. In spite of the double cohort, the percentage of registrants to applicants has not decreased significantly. This suggests that seat capacity expansion has more or less kept up with the significant increase in high school graduates, maintaining a level of accessibility similar to levels in previous years.

Figure 6.10: Number of High School Applicants and Registrants (1994/95 – 2003/04).

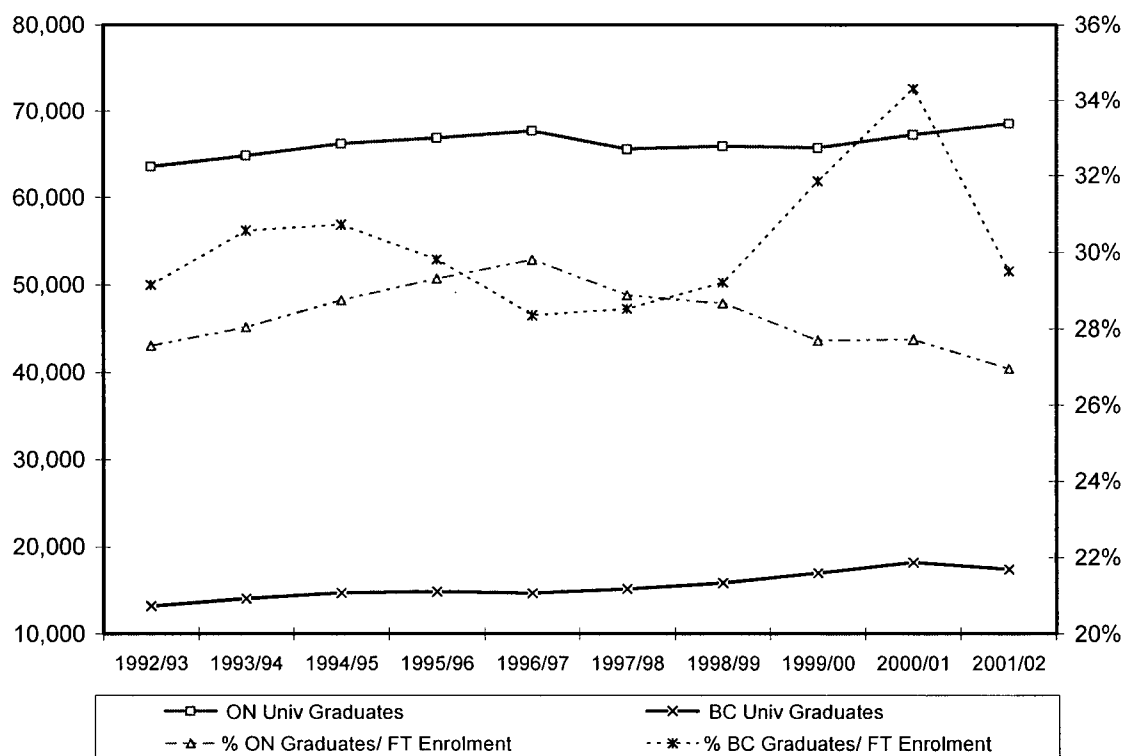


Sources: COU Application Statistics and Simon Fraser University Office of Analytical Studies.

The second set of data is the average university entrance grade. In Ontario, the average entrance grade has been increasing and will probably remain high until the double cohort passes through the system. In 2003/04, the average university entrance grade was 82 per cent, compared to 77 per cent in 1989/90. In BC, the cut-off grade is the nearest proxy to the average university entrance grade and it varies by institution, year and program. The University of British Columbia used its highest cut-off grade of 88 per cent for fall 2004 admission to its Science program, compared to the cut-off grade of 59 - 66 per cent it used from 1989/90 to 1998/99. The increase in entrance and cut-off grades could be an indication of grade inflation, given that the percentage of high school graduates has been relatively constant despite the increase in grade levels required for entry.

Figure 6.11 indicates the number of university graduates and the percentage of these graduates to the number of full-time students. The figure shows that the percentage of graduates in Ontario has been relatively stable. On the other hand, BC's percentage of graduates to enrolment is slightly higher than Ontario's, peaking in 2000/01. One plausible explanation is that the applications for university entry in 1996/97 and 1997/98 were highly competitive as a result of student applicants from other provinces being lured to BC by lower tuition fees. As a result, graduation improved because of more academically inclined or competitive students. Unfortunately there are no data to back up this explanation. With regard to the college sector, Statistics Canada data available from 1992/93 to 1999/2000 indicate a higher graduation rate for Ontario than for BC. The average is 14 per cent in BC and approximately 24 per cent in Ontario.

Figure 6.11: Number of Graduates and Full-time Enrolment at Universities in BC and Ontario (1992/93 – 2001/02).



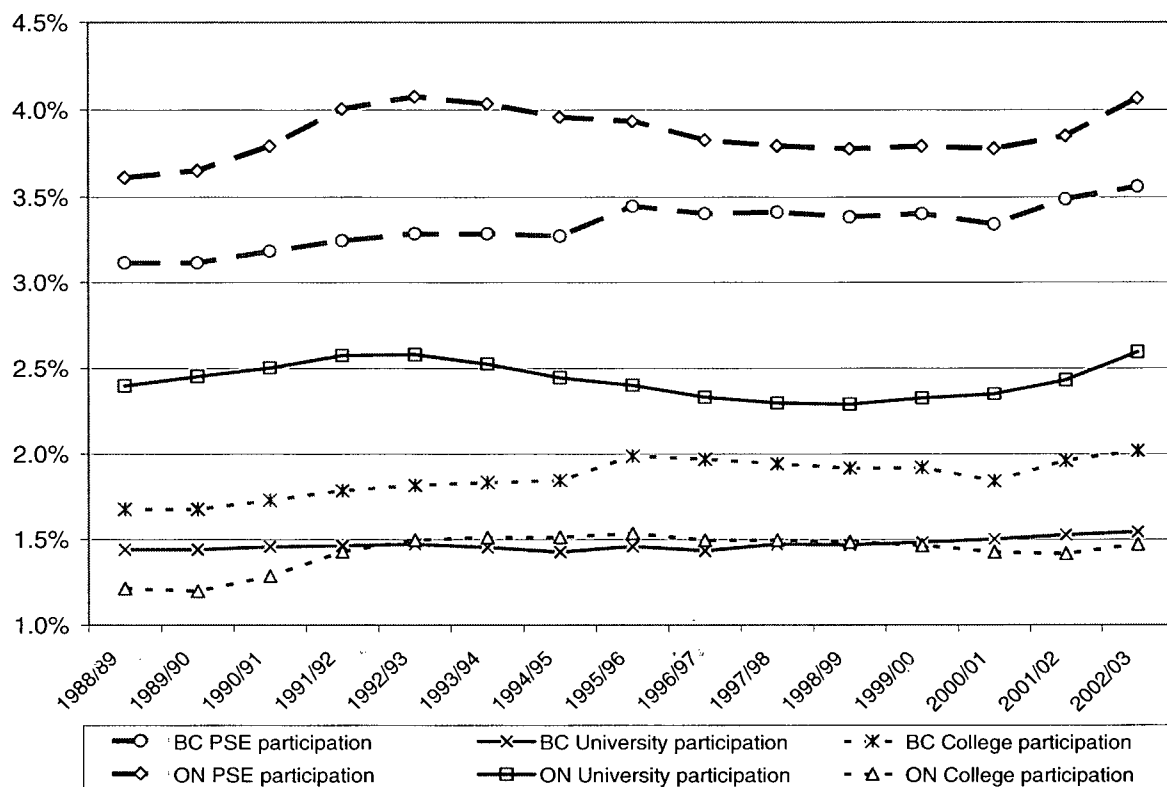
Source: Statistics Canada.

Participation Rate

Neither of the provinces has grappled head-on with the question of what is the appropriate proportion of each age group that should participate in postsecondary education. However, both provinces monitor participation rates (albeit the age cohort is different for each province), and have implemented strategies to increase their current rates. British Columbia has set a target for the 18 – 29 year old cohort of 45.5 per cent for 2005/06, up 1 per cent from its 2003/04 baseline of 44.5 per cent. Similarly, Ontario has identified increasing participation in postsecondary education as one of its key priorities. However, no target has yet been identified. For 2002/03, Ontario's participation rate was 24.9 per cent for its population aged 18 – 24 (COU, 2005).

Figure 6.12 indicates the postsecondary, university and college participation rates in BC and Ontario between 1988/89 and 2002/03. On a total population basis, Ontario has a higher postsecondary education participation rate than BC. While the postsecondary participation rate in BC has been on a slow but steady increase, the rate in Ontario has had an upward pattern, followed by a downward, and then another upward pattern (like a laterally inverted "S" on its side). The rate was higher during the NDP administration than during the early years of the Tory regime because of a number of factors including high tuition fees and good job opportunities. Given the higher university participation in Ontario, the overall postsecondary participation rate closely follows the university participation rate. In BC however, the university participation rate has been more stable and consistently lower than the university participation rate in Ontario.

Figure 6.12: Participation Rates – Total Population (1988/89 – 2002/03).



Source: COU, ACAATO, BC Ministry of Advanced Education, TUPC and Statistics Canada.

On the other hand, the college participation rate in BC is higher than in Ontario. The larger number of seats in colleges and institutes than in universities explains the higher participation rate at the college level. However approximately a quarter of those seats are university transfer seats. Arguably these university transfer seats can be treated as university seats and if so treated, then the university participation rate would be equal to, if not slightly higher than, the college participation rate. The current distribution of seats between the university system and the college and institute system is the result of a combination of factors including availability of federal funding to establish colleges, government policy to create a system of regional colleges that offer university transfer, a successful transfer of credits system,

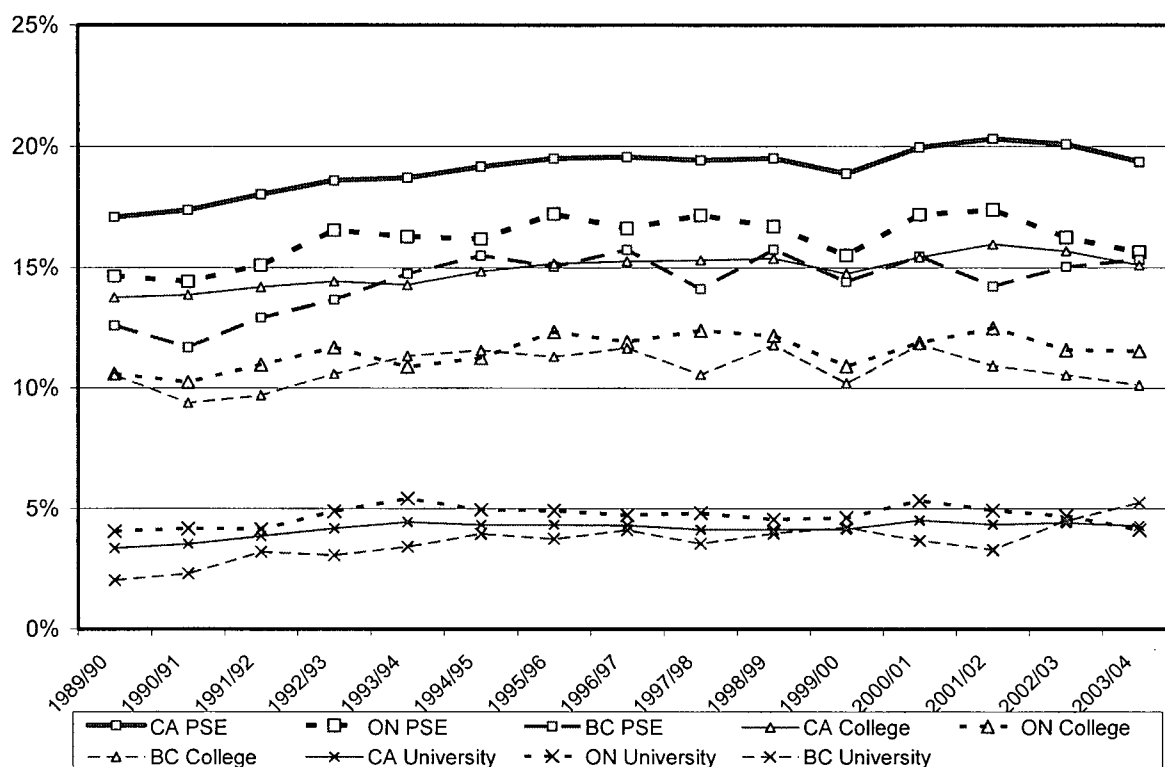
per student costs of college seats, and the emphasis of skills and development during the NDP administration.

There appears to be a higher demand for university programs from students in both provinces. The college participation rate in Ontario rose during the NDP regime, peaking in 1995/96. It slowly decreased during the Tory years, but began to increase again in 2002/03. Similarly in BC, college participation peaked in 1995/96, also during an NDP regime. It slowly decreased during the second NDP term (during 1997/98 and 2000/01), and turned upward starting in 2001/02.

Figure 6.13 indicates the postsecondary, university and college participation rates in BC and Ontario between 1988/89 and 2002/03 for the population age 15 – 24. The postsecondary participation rate for 15 – 24 year olds is higher than the participation rate for the total population.²²⁸ Based on Labour Force Survey data, the college participation rates in Ontario and BC for this age group are both below the Canadian average. The university participation rate in Ontario has been above the Canadian average, while in BC it has been below the national average for most years during this period except in 1999/2000, 2002/03 and 2003/04. The postsecondary participation rate (college and university combined) in BC increased slightly from 13 per cent to 15 per cent between 1989/90 and 2003/04, and from 13 per cent to 16 per cent in Ontario during the same period.

²²⁸ This participation rate is estimated by dividing the number of individuals in the 15 – 24 population cohort with a postsecondary certificate or diploma and university degree by the number of individuals in the age cohort.

Figure 6.13: Participation Rate - Population 15 – 24 years (1989/90 – 2003/04).



Source: Statistics Canada Labour Force Survey, CANSIM Table 282-0004.

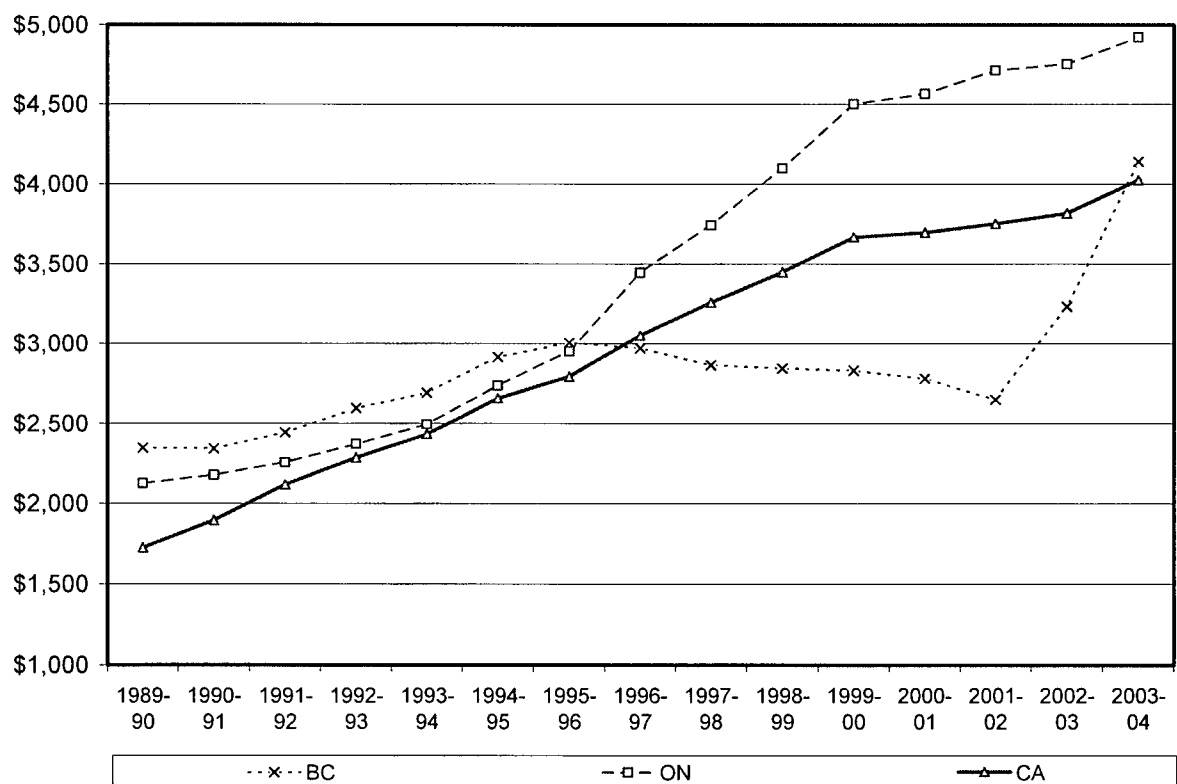
BC's increase in overall postsecondary participation was higher than in Ontario owing to an increase in university participation in BC, which grew from 2 per cent in 1989/90 to 5 per cent in 2003/04. College participation in BC decreased slightly from 11 per cent in 1989/90 to 10 per cent in 2003/04. In Ontario, postsecondary participation increased slightly because of a slight increase in college participation, from 14 per cent in 1989/90 to 15 per cent in 2003/04. Unlike in BC, university participation in Ontario remained relatively stable from 1989/90 to 2003/04.

Tuition Fees

As a result of increases in postsecondary operating costs and the lack of corresponding increases in government funding, institutions across the country have had to rely on alternative

funding sources, including tuition fee revenues.²²⁹ Ontario and BC are no exceptions. Figure 6.14 indicates the university undergraduate tuition fee rates for Ontario and BC during 1989/90 and 2003/04, in 2003 dollars. Tuition fee rates in Ontario increased from \$2,120 in 1989/90 to \$4,920 in 2003/04—an increase of 132 per cent. The rate increase in BC has been lower, from \$2,340 in 1989/90 to \$4,140 in 2003/04—an increase of 77 per cent (as a result of the NDP government's six-year tuition freeze from 1996/97 to 2001/02).

Figure 6.14: University Tuition Rates in BC and Ontario in Constant Dollars (1989/90 – 2003/04).



Source: Statistics Canada's Annual Tuition and Additional Fee Survey.

Before the tuition freeze, tuition rates in BC were above the Canadian average. However, starting in 1996/97 rates in BC fell below the Canadian average. Within two years of the lifting

²²⁹ These costs were the result of several factors including volume increases, rising salary costs and inflation.

of the freeze, the rate caught up with the national average. Conversely, tuition fees in Ontario skyrocketed in 1996/97 when the Tory government dramatically reduced provincial funding.

The affordability of a university undergraduate program for students is questionable.

Table 6.8 compares the percentage of undergraduate tuition fees to average family income from 1989/90 to 2002/03, in constant dollars. In 1989/90, the tuition to average income ratio was 5 per cent and 4 per cent in BC and Ontario respectively. By 2002/03, it had increased to 9 per cent in BC and 12 per cent in Ontario.

Table 6.8: Per Cent Tuition to Average Income in BC and Ontario (1989/90 – 2002/03).

	BC Tuition (\$2003)	BC Av Income (\$2003)	BC Tuition/ Av Income (%)	ON Tuition (\$2003)	ON Av Income (\$2003)	ON Tuition/ Av Income (%)
1989/90	2,344	34,400	7%	2,122	37,600	6%
1990/91	2,340	34,100	7%	2,174	36,600	6%
1991/92	2,442	33,200	7%	2,254	35,900	6%
1992/93	2,595	34,400	8%	2,369	35,700	7%
1993/94	2,693	33,700	8%	2,495	36,200	7%
1994/95	2,914	34,100	9%	2,737	36,300	8%
1995/96	3,005	34,600	9%	2,952	36,400	8%
1996/97	2,969	34,800	9%	3,447	37,100	9%
1997/98	2,863	34,800	8%	3,743	37,600	10%
1998/99	2,844	34,900	8%	4,100	39,000	11%
1999/00	2,830	35,100	8%	4,502	40,000	11%
2000/01	2,780	35,400	8%	4,564	41,300	11%
2001/02	2,651	35,700	7%	4,713	40,900	12%
2002/03	3,235	36,600	9%	4,753	40,900	12%
2003/04	4,140	35,500	12%	4,923	40,400	12%

Sources: Statistics Canada CANSIM Table 202-0101 and Junor and Usher (2004).

Research and Development

Investment in research and development is largely acknowledged as one of the major indicators of a region's innovative capacity. Table 9 indicates the ratio of gross expenditures on research and development in natural science and engineering for Ontario and BC. On average, federal expenditures on research and development carried out by Ontario postsecondary institutions were approximately 3.3 times higher than those in BC. The Ontario government invests 5.7 times more in research at Ontario institutions than the BC government invests in

research at BC institutions. Ontario's higher education and business sectors also spent approximately four times more on research at Ontario institutions than BC's higher education and business sectors spent on research at BC institutions.

Table 6.9: Ratio of Ontario to BC Gross Domestic Expenditures on Research (1985/86 – 2002/03).

Year	ON/BC - Federal government	ON/BC - Provincial government	ON/BC - Higher Education	ON/BC - Business
1985	2.76	4.41	3.92	3.66
1986	3.48	7.09	6.43	3.81
1987	3.43	5.82	6.42	4.11
1988	3.61	5.97	2.99	4.68
1989	3.66	5.78	3.27	4.07
1990	2.88	5.26	3.86	3.85
1991	2.70	4.67	3.89	3.31
1992	2.79	5.49	3.86	3.03
1993	3.07	5.70	4.83	4.02
1994	2.93	6.99	4.30	3.79
1995	3.21	6.19	4.03	3.30
1996	3.41	4.26	4.05	4.27
1997	3.45	4.91	4.16	4.08
1998	3.39	5.53	4.12	5.27
1999	3.71	6.28	4.04	4.11
2000	4.08	8.15	4.48	4.49
2001	3.78	8.14	4.41	4.99
2002	3.44	4.10	4.23	4.75
Average	3.33	5.68	4.11	4.24

Source: Statistics Canada. CANSIM Table 358-0001

The review by Statistics Canada (2005) on the number of people employed in research and development indicates that Ontario had the highest concentration of R&D personnel in 2002 (46 per cent), followed by Quebec (31 per cent), BC (9 per cent), and Alberta (7 per cent). CAUT (2005) indicates that, in terms of federal research funding from all granting councils (including social sciences and humanities), Ontario captured 36.4 per cent of the \$1.1 billion in available federal funds for 2002/03. In the same year, BC and Alberta each captured 11.5 per cent, following Ontario and Quebec, which each captured 29.6 per cent.²³⁰ In terms of Canada

²³⁰ Unlike colleges in BC, colleges in Ontario have been playing a larger role in research, particularly in applied research. In its 2004 submission to the Rae review, ACAATO (2004) indicated that colleges have demonstrated their effectiveness at translating knowledge into new products and services, particularly for local small and medium sized enterprises, and are currently underutilized in this area. Accordingly, it urged the Ontario government to make

Foundation for Innovation (CFI) funding, again, Ontario captured 36.1 per cent of the \$1.9 billion in total CFI funding between June 1998 and November 2004, followed by Quebec with 29.5 per cent and BC with 11.4 per cent.

The most recent data indicate that Canada is in 14th place in GERD/GDP spending among OECD countries, lagging behind the United States, Japan and all other G7 countries except Italy. The federal goal is to have Canada move into 5th position by 2010. Data on national average per capita university-based research funding indicate that Ontario ranks third after Alberta and Quebec, while BC ranks seventh after Saskatchewan, Nova Scotia, and Manitoba (AUCC, 2003). In order to improve its performance, the BC government is working with the University Presidents' Council to develop a provincial research strategy to move BC into third place among provinces by 2010.

Concluding Remarks

In summary, governments in BC and Ontario have implemented postsecondary access policies that are consistent with the political, socio-cultural, historical and economic contexts existing at the time of their respective terms in office. Common factors influencing postsecondary education policies have included the perceived relationship between postsecondary education and national and provincial economic prosperity and public demand for postsecondary education that has been fuelled by the perceived relationship between postsecondary education and personal economic prosperity. Other factors have included the lack of a province-wide, long-term postsecondary strategy, which has resulted in decisions based on existing circumstances, and federal policies that have influenced the behaviour of provincial governments and postsecondary institutions.

available envelopes within provincial research funding and research infrastructure program budgets for colleges to engage in applied research and commercialization partnerships with small and medium sized enterprises.

An examination of trends relating to postsecondary education indicates that there are major policy issues that both the BC and Ontario governments have not seriously addressed. However, it should be noted that these issues are undoubtedly complex and difficult. The first major issue is the rising cost of postsecondary education combined with declining public resources. This leaves a growing gap to be funded by alternative sources which if not found can compromise the quality of postsecondary education or limit capacity and hence accessibility. The first major question is: how might the costs of postsecondary education be shared among beneficiaries? Funding sources could include public resources from taxpayers/governments, employers and the labour market, and students and their families. This issue is more acute in Ontario than in BC. In this regard, the *Rae Report* (Rae, 2005) has called on all stakeholders to do more in Ontario. The Task Force on Competitiveness, Productivity and Economic Progress (2004, pp. 53-56) has taken a similar strategy in asking government, business and individuals to invest more in postsecondary education, stating:

Time and again, our work over the past three years has pointed to the importance of postsecondary education to Ontario's competitiveness and prosperity. A well-functioning postsecondary education system produces the skills we require for innovation and flexibility. In addition, postsecondary institutions are the source of many breakthroughs in research and development...strengthening this element...will require all stakeholders in university education. The Ontario government needs to take the leadership role here in expanding its own support for postsecondary education...We encourage business leaders to facilitate upgrading of educational attainment by their employees...We encourage individuals to invest in themselves and their children...For adults this means considering opportunities to increase educational attainment. It also means encouraging their children to pursue higher education...for all Ontarians, especially alumni, this means contributing at an increased level to educational institution.

However, the issue is deeper than getting everyone to do a little more. As the saying goes, "whoever pays the piper calls the tune." Related questions include: 1) how might the funding/power be shared?; 2) how might employers do more than they currently do?; and 3) how might postsecondary education be affected by a change in the proportion of funding

sources? Slaughter and Leslie (1997) argue that while Canadian public policies have advanced academic capitalism, Canadian universities have succumbed to market pressures later than Australia, the United Kingdom and the United States because postsecondary education policy is less centralized in Canada than in these other countries.²³¹ Other reasons for the later onset of pressures to commercialize include the fewer opportunities for serious corporate involvement that exist in Canada, provincial funding for Canadian universities that has insulated them from market pressures, and the strong, decentralized unionization of Canadian faculties (Tudiver, 1999).

The second major question is: how might postsecondary institutions deliver their programs more cost-efficiently, cost-effectively and productively? This is relevant because no one is going to invest more in education if there is wastage that is real or perceived. At the same time, this question is at the centre of global practices of accountability and corporate managerialism. In terms of finding ways to reduce costs, policy trends indicate an increasing use of online distance education delivery. Athabasca University, which is based in Northern Alberta and provides its services exclusively on-line, has one of the fastest growing student enrolments in Ontario. Also, TVOntario and Contact North have articulation agreements with other institutions in Ontario so that credits earned by their students are transferable to other postsecondary institutions. BC's creation of the new Thompson Rivers University, which has responsibility for BC Campus and the Open University, may signify the BC Liberal government's intent to increase the use of on-line education to provide access cost-effectively. Related questions include how to ensure that quality is not compromised and that institutions design on-line courses in such a way as to compensate for the perceived disadvantages of on-line

²³¹ "Academic capitalism" refers to the phenomenon that is transforming academics into entrepreneurs seeking capital, revenue and profit.

learning, the key one being limitation of face-to-face dialogue and interaction between the student and the instructor and with other students. Quite often, institutions compensate for lack of face-to-face dialogue with voice-to-voice and on-line seminars. The use of emails is another means to facilitate student-instructor contact for on-line programs.

One dimension of corporate managerialism is increased performance and financial accountability, including the use of performance indicators and benchmarks. It does not appear that BC and Ontario have fully embraced this practice yet. While postsecondary institutions in both provinces have begun to operate like private corporations to some degree, their accountability to government is limited to an accountability framework for a limited range of performance requirements with heavy emphasis on financial soundness and enrolment targets. A more balanced scorecard approach with more emphasis on quality education is appropriate. In BC, starting in 2004/05, publicly funded postsecondary education institutions are included as part of the Government Reporting Entity for financial reporting.²³² This change has not been warmly embraced by BC universities because it requires more disclosure than previously required.

Another major issue relating to postsecondary education access is the design of postsecondary education in the coming years. The broad question is what is the appropriate design for postsecondary education in a global, knowledge-based economy? Given that costs are rising, dependence on private resources is increasing, research is becoming market-driven, institutions are more business-like, programs are more relevant to the workplace and on-line learning is increasing, what will the future system of learning and training look like? Green and

²³² BC's *Budget Transparency and Accountability Act* stipulates full compliance with generally accepted accounting principles (GAAP) by 2004/05. This means that BC's financial statements must include financial data on schools, universities, colleges and health authorities (SUCH) because these sectors fall under GAAP's criteria for inclusion. For example, does government appoint a majority of board members, and does government provide at least 50 per cent of funding?

Hayward (1997), as part of their discussion on transforming higher education, question whether current configurations of institutions are adequate and ask if consideration should be given to creating new postsecondary institutions with clearly differentiated missions. Skolnik (2004) believes that the environment in which universities and colleges operate is still significantly controlled by government regulation and, unless government is prepared to eliminate regulation and let market forces reshape postsecondary education, the structures of postsecondary education must be determined by public policy. The structural issues include the role of and balance between the university and college sectors. There appears to be a conspicuous lack of an integrated, comprehensive, long-term postsecondary goal or design. Without such a goal, decision-making has had no guiding framework and has tended to be based on the views of dominant groups at any given time.

The third major issue relating to postsecondary education access in Canada concerns an ongoing role for the federal government including funding of postsecondary education. In recognition of provincial jurisdiction over education, the federal government now provides federal transfer payments to provincial governments under the Canada Social Transfer program, and funds other postsecondary-related programs such as student assistance and research and development. Given that the federal government has increased its base funding for the Canada Health Transfer to restore federal funding to approximately 25 per cent of health care costs, is it not possible for the federal government to also increase the CST base for postsecondary and social programs? Another option is for the federal government to split the CST and create a dedicated transfer for postsecondary education. This option could be modeled after the Canada Health Transfer and could provide an opportunity for federal and provincial governments to

work together to set out a series of principles and goals to be achieved for postsecondary education including portability of credits and accessibility.

To date, federal-provincial relations have been focused primarily on transfer payments for health care, given that health is a top priority for all Canadians and has received a great deal of media attention. More importantly, however, there was controversy in the early 2000s between the federal government, which favoured a one-tier universal coverage for all medically necessary health services under the *Canada Health Act*, and a few provinces (in particular Alberta), which favoured private clinics or a two-tiered system of medical care. This controversy along with public outcry against the health care funding shortages left the federal government little choice but to increase funding for health care. In contrast, there has been no similar leverage of funding for postsecondary education. Nonetheless, given that the federal government once committed to fund 50 per cent of all postsecondary education costs, it may be worthwhile for the provinces to make an attempt to request more federal funding after building a strong case in support of higher federal transfer payments for postsecondary education. To date, however, the federal government has shown little taste for the initiation of a dedicated transfer. As postsecondary education appears high on the agenda of the Premiers currently, no doubt these discussions will continue.

The final chapter summarizes the key findings and the limitations of this study. It also offers recommendations for policy makers and for future research.

CHAPTER SEVEN: SUMMARY, LIMITATIONS AND RECOMMENDATIONS

The purpose of this thesis was to understand better the relationship between policy environments and key access policies including funding policies and the performance of postsecondary education in two Canadian provinces: Ontario and British Columbia. The main objective of this study is to understand what factors are driving the changes and how they influence access policies and observed policy trends. Included in this study is an examination of postsecondary education outcomes. However, there is no assertion of a causal relationship between the policy environment, policies and outcomes. The research questions guiding this study were:

1. What are the key postsecondary education access policies?
2. How does the policy environment influence postsecondary education access policies?
3. What policy trends are associated with the government priorities of seat expansion, affordability, and research and development?
4. What is the relationship between government's postsecondary funding policies and the economic environment?
5. How do key policies affect provincial postsecondary funding, enrolment, participation, tuition fees and investment in research and development?

This chapter contains a summary of key findings related to these research questions, suggests the limitations of the study, and offers recommendations for policy makers and for future research. It will conclude with brief remarks concerning the investigator's personal experience on integrating theory and practice during this intellectual journey.

Summary of Key Findings

The three key postsecondary education areas where provincial governments in BC and Ontario have intervened in, or influenced through, policies include: 1) increasing capacity through seat and institutional expansion; 2) enhancing affordability of postsecondary education to students through tuition fee regulation and student financial assistance including loans, loan remissions, grants, and scholarships; and 3) expanding research and development. While policies that concern these three areas have tended to be similar in BC and Ontario, the specific depth and timing of policies have differed between the two provinces owing to the specific local policy environment at any given time. Factors within the local environment that have affected policy, as well as the economic and fiscal environment, include the provincial history of postsecondary education; the socio-cultural values and expectations of the provincial population; policy discussions among dominant stakeholders; the political ideology of the governing party; and federalism and federal-provincial relations. Overall, policy environments in BC and Ontario are similar in many respects including socio-cultural values and expectations, governing parties, and the same federal government. Accordingly, there are many similar policy trends and issues in BC and Ontario.

Policies, Trends and Key Factors

There are five major policy trends related to increasing the capacity of postsecondary education. First, overall seat growth in the college sector has been faster than in the university sector. This trend is related to the second trend, which is a growing emphasis on programs meeting labour market requirements for knowledge and skills, and alleviating labour shortages. Thirdly, in meeting economic and labour demands, colleges, in particular, have evolved into hybrid institutions offering new applied degree programs. The result is a convergence of

traditional university and college programs that blurs the traditional demarcation of degree versus non-degree or vocational programs. Finally, given limited public resources, governments are shifting toward the use of private institutions to enhance access to postsecondary education programs. One issue that is particularly challenging for Ontario is the transferability of credits between the college and university sectors. This process is essential in facilitating lifelong learning.

A combination of key factors contributes to these policy trends. One factor is federal and provincial government policies that consistently give credit to postsecondary education as the means of making Canada more competitive in a time of globalization and economic restructuring. Consequently, governments in Ontario and BC have focused on the relevance of postsecondary education programs to the workplace. In BC, for example, the relevance of university programs to the labour market became an important but sensitive issue. In Ontario, the traditional reluctance of universities to work on improving the articulation of programs from colleges and other institutions also received attention. The second key factor is the severe limitations on public expenditures that were caused by cyclical economic depressions and changes in federal transfer payments. These were amplified by public concern for federal and provincial debt and deficit, public demand for lower taxes, and rising costs of other government priorities, especially health care services. These circumstances may partially explain the election of New Right provincial governments in recent years. The preference of these groups for market economies and smaller government is another key factor. Finally, the historical binary structure of postsecondary education, with universities offering academic programs and colleges offering vocational training, has played a role in shaping the emerging postsecondary landscape and the way issues of postsecondary education have been addressed. For example, more significant

changes occurred at the college level partially because they were less autonomous than universities.

In the area of affordability, the first major trend in tuition fee policy is increasing fees in spite of various government attempts to stifle increases, particularly in BC. The period between 1985/86 and 2004/05 was punctuated with erratic swings between the regulation and deregulation of tuition fees, more specifically, a movement from regulation of tuition fees towards deregulation occurred in Ontario, while BC underwent a roller-coaster movement from the absence of a policy on tuition fees, to regulation, to deregulation, and back again to regulation. Another policy trend has been a differentiation of tuition fee schedules depending on whether a student was domestic versus international, or enrolled in an undergraduate versus a graduate or professional program. These trends are symptomatic of the rising costs of postsecondary education, which have resulted in more of the costs being shifted to students. Thus, the affordability of postsecondary tuition fees alone has become a legitimate concern.

One key factor generally contributing to these policy trends related to affordability has been research demonstrating the private economic benefits of postsecondary education including higher employment income. Such studies have precipitated increasing levels of acceptance of the free market principle that beneficiaries pay costs commensurate with the degree of benefits received. A second key factor is the increasing amount of competition for scarce public resources from other government programs such as health care and K – 12 education. To offset the revenue gap between declining provincial grants and increasing costs to postsecondary institutions, governments have allowed institutions to increase tuition and other fee revenues, thereby shifting costs to student beneficiaries. While there were other factors that were pulling in the other direction, such as student demand for lower tuition and institutional lobbying for

increased funding, these were probably cancelled out by other factors pulling in the opposite direction. The observed differences between BC and Ontario are primarily a result of structural differences including the use of the funding formula in Ontario to regulate tuition fee increases and an NDP government in BC that imposed a six-year tuition fee freeze.

With respect to financial assistance policies aimed at helping students overcome financial barriers and enhancing equitable access to postsecondary education, one major trend has been the relatively flat levels of funding, or levels that, for the most part, do not correspond at all with increasing numbers of students. Maximum loan thresholds also have not kept up with tuition fee rates and the cost of living. Since student loans do not adequately meet students' financial requirements, another trend is a growing reliance on multiple sources of income for students including parental support, personal income from part-time or summer employment, and commercial bank loans. For some less wealthy students, potential implications of this trend include dropping out, longer completion times, larger debts and a growing inability to attend longer programs or graduate programs with very high tuition fees. Another major trend is the increased emphasis by governments on leveraging private sector funding through the use of matching grants for student scholarships. Governments are also withdrawing from the provision of non-repayable loans, loan remissions or grants, except as incentives to work in rural settings.

Contributing key factors influencing these policy trends include: 1) tension in federal-provincial relations and a lack of clarity as to who has the lead responsibility, which results in the preservation of the status quo instead of an ongoing review of the efficacy of student loan programs; 2) competing demands and a scarcity of public resources; and 3) the practices of other jurisdictions.

While the federal government has played a major role in student financial assistance, its influence on provincial policies in the area of research and development has been the most pronounced. Three major trends in federal research and development policies stand out. The first is the focus of federal funding on industry partnerships and market-driven research and development. This funding policy is consistent with the belief that postsecondary education and innovation plays a role in economic wealth in a global economy. The second is that more federal government funding has gone to natural sciences and engineering than to social sciences and humanities, which is consistent with the first trend. The third major trend is the increasing amount of federal government funding for research infrastructure including engineering, natural sciences, medical and biotechnology, which is necessary to house and germinate knowledge and innovation. Provinces have created reciprocating funding programs in order to match federal funding, thus furthering federal attempts to support research for commercialization and economic purposes. The issues related to market-driven research and the proliferation of university-industry linkages are well documented (Slaughter & Leslie, 1996; Tudiver, 1999). One concern is the transformation of traditional universities into corporate universities with characteristics that include academic capitalism, the erosion of academic freedom, competition and aggressive marketing to attract students, and an emphasis on corporate managerialism within university governance including performance budgeting and financial accountability.

Key factors within the policy environment that have contributed to these major policy trends include: 1) federal and provincial governments' policies suggesting that research and development as well as innovation lead to job creation and economic success; 2) the accepted historical role of the federal government for funding research; 3) the federal government's constitutional responsibility for national manpower and economic development; 4) the lobbying

of provincial governments by institutions to provide funds to match federal research funds; and 5) the traditional research mandate of universities.

There is apparently no consistent relationship between postsecondary funding trends and economic conditions in BC and Ontario. As well, there are significant differences in funding trends between BC and Ontario. First, while Ontario's provincial grants to colleges and universities have decreased during the period covered by this investigation, BC's provincial grants to colleges and universities have increased. Secondly, Ontario's university grants consume 77 per cent of total postsecondary education grants and have capacity for 63 per cent of total FTEs, while BC's university grants consume 49 per cent of total postsecondary education grants and have capacity for 41 per cent of total FTEs. Thirdly, BC's provincial grant per FTE is higher than Ontario's despite BC being a less affluent province. Fourthly, Ontario's funding for postsecondary education dramatically decreased in 1996/97 and 1997/98 as a result of federal transfer payment reductions, whereas BC's funding level remained relatively stable. Compared to Ontario, BC's postsecondary education system is better funded on a per FTE basis. As a result, Ontario's institutions, particularly universities, have been forced to rely more heavily on revenues from higher tuition fees and on private and other sources of income to cover the funding gap between operating requirements and provincial funding.

Two key factors contributing to the overall differences in funding policy trends in BC and Ontario are government priorities or strategic goals that have overridden economic and fiscal factors, and different government responses to federal transfer reductions. Finally, compared to BC, Ontario has had a more prosperous private sector that is willing to support universities through fund raising and other partnership endeavours.

Impacts on Postsecondary Education

This section summarizes and compares the effects of policies on postsecondary education access in Ontario and British Columbia. Areas considered include provincial funding levels, enrolment, participation, tuition fees, and investment and personnel in research and development.

With respect to provincial funding, the BC and Ontario governments are funding increasingly lower percentages of postsecondary operating expenditures. Some of the institutions' operating costs have been shifted to the private sector, including offloading costs to students, parents, as well as individual and corporate donors. This is reflected in the increased percentages of tuition fees and other revenues compared to the operating expenditures of universities and colleges. As a result of the tuition fee freeze and provincial grants per FTE, the percentage of tuition fees to operating expenditures is lower in BC than in Ontario. The percentage of other revenues to operating expenditures has also increased in BC and Ontario as a result of increased efforts to raise other revenues to offset decreasing provincial grants. The percentage of federal grants to universities' operating expenditures has been more or less maintained in both BC and Ontario.

The decline in the percentage of provincial grants to operating expenditures is a result of both a decline in provincial grant per FTE and increased costs on a per FTE basis. The operating cost per FTE for the postsecondary education system increased from \$12,013 and \$13,861 in 1988/89 to \$15,293 and \$14,744 in 2001/02 in BC and Ontario, respectively. The data suggests that the Ontario postsecondary education system is more cost-effective compared to BC.

With respect to enrolment, Ontario has higher university than college enrolment, whereas enrolment in BC colleges is higher than in BC universities. In spite of a trend in growing seat capacities, data based on high school applications to universities do not suggest much

improvement in the intake of Grade 12 applicants by universities in either BC or Ontario.

However, because of the greater number of university seats and the lack of local colleges with university transfer programs, a higher percentage of high school graduates in Ontario apply and register at universities immediately following high school than in BC. As well, inflated average entrance marks in Ontario and high cut-off marks for acceptance to BC universities suggest that competition for university entrance may have become stiffer. However, there is some indication that for Fall 2005 in BC, the supply of seats may have exceeded demand.

Given its significantly higher rate of postsecondary enrolment, it is no surprise that Ontario has a higher participation rate for postsecondary education than BC on a total population basis. However, BC's college participation rate is higher than Ontario's. Approximately 25 per cent of college participation in BC is in university transfer programs.

For the age cohort 15 – 24, Ontario's postsecondary participation rate is also slightly higher than BC's, although the participation rates of both provinces are below the national average. The Ontario college and university participation rates for this age group are high compared to BC. However, BC's university participation rate exceeded Ontario's in 2003/04.

The average undergraduate university tuition fee in Ontario is higher compared to BC. The rate of fee increase between 1989/90 and 2003/04 was also lower in BC because of a six-year tuition fee freeze by its NDP government. Between 1996/97 and 2002/03 tuition rates in BC were below the national average. However, in 2003/04, the second year of the tuition freeze lift, the average undergraduate tuition fee rate rose above the national average but still remained low compared to Ontario. The average tuition fee rate constituted 12 per cent of the average total income in BC and Ontario in 2003/04 compared to 7 per cent for BC and 6 per cent for

Ontario in 1989/90. This suggests that postsecondary education has not become more affordable.

With respect to research and development, the Ontario government invested 5.7 times more than BC in research at postsecondary institutions. Ontario also has the highest concentration of R&D personnel in Canada, followed by Quebec and BC. In 2002/03, its institutions captured 36.4 per cent of available federal funding through national granting councils, while BC only captured 11.5 per cent. On a per capita basis, BC's funding for research ranks seventh in Canada behind Alberta, Quebec, Ontario, Saskatchewan, Nova Scotia and Manitoba.

Limitations

This section will briefly highlight some limitations of this investigation. First, this investigation is heavily dependent on data availability. Given the diversity of data required, this investigation is limited to using data that has already been collected, published and made accessible. Thus, data availability, or lack of it, limits the level of discussion into which one can enter. Specifically, discussion has been limited in the following ways:

1. *Unavailability of quantitative data.* First, there is the issue of lack of recent data. While the policies examined covered 2004/05, data for 2003/04 and 2004/05 was generally not available. As a result, it was not possible to discuss the latest trends including significant policy changes like the double cohort in Ontario. Also, given that Statistics Canada data on revenue sources for operating expenditures of universities and colleges were available up to 2001/02, changes occurring since 2001/02, if any, are not reflected in the thesis. Secondly, there is a lack of certain data required to assess whether or not general policy goals were achieved. For example, the question of whether equality of access was

achieved was not answered given the lack of data and complexity of the issue. While data were available for a preliminary assessment of whether access to university had improved, a comparable preliminary assessment was not made for colleges because of the lack of readily available data regarding colleges. The assessment for universities had to be limited to high school graduates, again because data on other university applicants were not readily available.

2. *Participation rates.* Participation rates for the age cohort 18 – 24 rather than 15 – 24 might have been more useful as an indication of how accessible postsecondary education is to the age cohort who should generally be enrolled in postsecondary education. However, the 15 – 24 age group was selected because its only data source, the Labour Force Survey, contained comparable data for the period under investigation as well as data for BC, Ontario and Canada. The data used for the total population did not include Canada's data because FTE enrolment data for Canada were determined to be incompatible with the provincial FTE data.
3. *Research and Development.* Research and development policies and activities inevitably affect postsecondary education institutions. However, this area is large and is an entire thesis topic on its own. While an assessment of the impact of BC and Ontario research and development policies on postsecondary institutions was excluded, there is some general discussion based on literature.

Secondly, although provincial postsecondary funding, enrolment, participation, tuition fees and investment in research and development are included in this discussion, there is no attempt to assess the efficacy of policies based on these outcomes and trends. This investigation also does not assume a causal relationship between policies and the trends and outcomes of

postsecondary education for various reasons. These reasons include the difficulty of attributing a particular outcome to a particular policy or set of policies and a time lag between policy implementation and desired outcomes.

Thirdly, investigating the relationships between key access policies and the policy environment was based on a diligent literature search and consultations with a few key experts in the area. The extent to which the policy narratives are accurate and complete depends on the literature uncovered. The investigation did not include requests for access to internal government documents. This would have been a more thorough approach, but a costly and time-consuming one. Furthermore, the investigator's inferences and linkages drawn from the literature are necessarily subjective. The examination of BC may have been prejudiced by the researcher's personal perceptions and work experience in government.

Finally, this investigation assumes that policy decisions are made by governments and ignores important factors that are not captured in literature. These include personalities and dynamics within the rank and file of government, unrecorded promises, conversations or negotiations between decision makers, and interest groups and facts that are not made public for whatever reason. Thus, key factors within the policy environment highlighted in this thesis are true if viewed from a macro level and while they may be persuasive, they may not tell the full story.

Recommendations

The following recommendations are offered:

For Policy Makers:

- 1) The federal government and all the provincial governments should collaborate in policy discussions that involve stakeholders (academics, administrators, policy makers, students

and parents) to formulate a coordinated national and provincial postsecondary vision that will act as a framework for future policy decisions and to establish national standards. First, given the decentralization of postsecondary education, Canada lacks a coherent national postsecondary strategy. The existence of such a strategy could guide federal-provincial policies concerning not only postsecondary education but also economic development and the national labour force. Up to this day, there is no national presence in defining a Canadian “standard of practice” in various areas of postsecondary education (Marshall, 2004), including the accreditation of degree-granting institutions and the accreditation of degrees. Secondly, globalization may not necessarily be an inevitable process (Currie, 1998)²³³ and, if so, decision makers should collectively determine whether or not to accept practices linked to globalization and accept the resulting outcomes or to resist, mitigate or transform the forces of globalization in order to achieve the desired end goal.

- 2) The Ontario and British Columbia governments should review the current system design or structure and roles and mandates of universities and colleges with the view to meet the needs of students in the 21st century better. One pertinent question is what types of institutions are appropriate and in what mix? After the review, if a government determines that shifts from the current design are necessary, institutions should be given good incentives and flexibility to gravitate to the end goal. It is recommended that instead of funding institutions based on FTE enrolment alone, funding could be based on

²³³ Currie (1998, p.11) argues that “when most government agencies and politicians are speaking with one voice that suggests globalization practices are the only answer for all nations, it is difficult for other voices to be heard”. They speak with one voice because they have been influenced by the capitalist classes who have also managed to shape public opinion and shift voting patterns to the right through particular “free market” think tanks. The main message of these think tanks is that American corporate practices should be adopted, economies should be deregulated, and the power of trade unions should be limited (Wheelwright, 1995). Nevertheless, there are countries and institutions that are not moving with the tide (Currie, 1998 p. 6).

quality of programs. By focusing on quality as well as access, not only can governments ensure a quality education for students, but a quality postsecondary education system that is characterized by differentiation, well-articulated programs and centres of excellence and that meets the needs of individual communities.

- 3) Given that governments at both levels have adopted policies that are commercializing postsecondary education—particularly in the area of research and development—it is important that they not lose sight of postsecondary education's social benefits and the need for a social economy where community and human priorities are maintained amidst the dehumanizing aspects of global market forces (Dudley, 1998). It is recommended that governments put more funding toward social sciences and humanities research, and protect and provide space for the critical analysis of social issues.
- 4) Both levels of government should collaborate to review their collective funding of student financial assistance and their goals. They should work to refocus existing funding to meet the needs of targeted student groups and to improve the efficacy of various programs including loans, grants and scholarships. The current programs do not appear to meet student needs because the loan thresholds are not high enough to allow students to pay tuition fees, requiring students to rely on a variety of other funding sources.

For Future Research:

Existing literature on postsecondary education in Canada generally focuses on Ontario and/or Quebec because they are the two largest provinces and have mature university and college systems. Existing works discussing postsecondary education in every province were initiated at least a decade ago. Accordingly, a suggestion for future research would be an expansion of this

work to include other provinces in Canada. The examination of provincial access policies could also be expanded to other areas of postsecondary education such as quality of postsecondary education. Alternatively, the examination could be focused on a narrow area such as student financial assistance policies across Canada.

Future research could also focus on specific areas that this investigation highlighted but were outside its scope. One potential area is an in-depth investigation into institutional changes at BC or Ontario universities. There is literature available on the corporate university and on academic capitalism. However, there is little in-depth, rigorous work that examines the practices of globalization, the extent to which these practices are implemented, and their impacts on universities' expenditures and revenues, outputs, students, donors, social and cultural environments, governance, operations, faculties, administration, research and teaching.

Other potential research could aim to uncover how all beneficiaries of postsecondary education could most appropriately share its costs. Such a work could include a review of different jurisdictions such as Australia, the United Kingdom, the United States, Japan and France. Based on these reviews, the work would provide and give reasons for recommendations as well as discuss any potential risks and implications. Closely linked with this issue of cost-sharing is financial assistance to ensure not only access and affordability but also equity. Thus, another potential research project could investigate how cost-sharing primarily through increased tuition fees impact student participation, particularly those from lower income families and investigate the efficiency and effectiveness of federal-provincial spending for loans, grants, scholarships and tax credits and make recommendations for improvements.

Finally, a thorough investigation of federal transfer payments could be useful for future federal-provincial negotiations. The investigation would include policy changes, the policy

environment surrounding those changes, commitments from the federal government and trends in federal funding. The investigation could also include actions taken by provinces in response to policy changes, provincial allocation of federal transfer payments, and trends in provincial funding for postsecondary education, health, and social services and the relationship of these funds to federal payments. The objective of the research would be to develop a mandate for negotiation or a strategy for provinces to request higher amounts of federal transfer money for postsecondary education.

Concluding Remarks

Becoming a reflective practitioner is one of the objectives of the Doctor of Education in Educational Leadership and Policy. Coming from a work environment dominated by practical considerations and a culture where there is a reluctance to get involved with issues of a theoretical nature, my initial enthusiasm for the program turned into trepidation and concern over whether I would be able to integrate theory and practice successfully. As it turns out, my journey through this program has been one of learning by allowing theory to influence my practice and my practice to inform theory.

I began the program when I was a Manager of Postsecondary Education Policy at the Ministry of Advanced Education in the Government of British Columbia. My interest in postsecondary education was spawned by a Chinese proverb stating that if you give a man a fish, you feed him for a day; if you teach a man to fish, you feed him for a lifetime.

With time and help from the lenses provided from course work readings, it became clear that the organizations and structures involved in teaching men and women to fish were more complex and perplexing than I first thought they would be. Between my office and a classroom was a matrix of people, networks, and systems that interacted and influenced what was

accomplished. Between my desk, where policy options are developed and evaluated, and Cabinet committees, where policy and funding decisions are made, was another complex system of players, networks and systems. It appeared to me then that many policy decisions revolved around funding and the availability of resources.

Given the need to understand what was happening in the arena of policy and funding decisions, I moved to a new position in 1999 as a Treasury Board Analyst at the Ministry of Finance. My practice within a key central government agency afforded me an opportunity to better understand policy-making. Needless to say, my work as a Treasury Board Analyst—where my responsibilities included evaluating and making recommendations on funding requests to the Treasury Board and preparing budget documents outlining the government's fiscal plan and the province's economic conditions—has informed this study.

This study does not even begin to unravel the complexities of policy making but it illustrates their complexity and identifies some key factors in the policy environment that influence policy decisions. It also identifies trends and outcomes in postsecondary education that are useful to decision makers and stakeholders. This study will also inform my work at my current job, as Manager of Institutional Research at Capilano College. I hope that the institutional research I conduct at Capilano College will be integrated into college practices, as the management team uses it for planning and improving the way men and women are taught to fish.

REFERENCES

Chapter One

- Bowe, R. B., Ball, S. J. and Gold, A. (1992). *Reforming Education and Changing Schools. Case Studies in Policy Sociology*. London and New York: Routledge.
- Brown, P., Halsey, A.H., Lauder, H and Wells, A.S. (1997). The Transformation of Education and Society: An Introduction. In Halsey, A.H., Lauder, H., Brown, P. and Wells, A.S. (Eds.), *Education: Culture, Economy and Society* (pp.1–44). Oxford: Oxford University Press.
- Butlin, G. (1999). Determinants of Post-Secondary Participation. *Education Quarterly Review*, 5(3), 9-35. Catalogue no. 81-003-XIE. Ottawa: Statistics Canada.
- Cameron, D. M. (1991). *More Than An Academic Question: Universities, Government and Public Policy in Canada*. Halifax: The Institute for Research on Public Policy.
- Canada (1956). *Royal Commission on Canada's Economic Prospects. Preliminary Report*. Ottawa: Queen's Printer.
- Commission of Inquiry on Canadian University Education. (1991). *Report*. Ottawa: Association of Universities and Colleges of Canada.
- Conference Board of Canada. (1996). *Employability Skills*. Ottawa. (Pamphlet).
- Corak, M., Lipps, G. and Zhao, J. (2003). *Family Income and Participation in Postsecondary Education*. (Statistics Canada. Analytical Studies Research Paper Series. Catalogue no. 11F0019MIE2003210. Ottawa: Statistics Canada.
- Cripps, S. (2002). *Further Education, Government's Discourse and Practice. Killing a Paradigm Softly*. Aldershot: Ashgate Publishing Limited.
- Doherty-Delorme, D. and Shaker, E. (2002). *Missing Pieces III: An Alternative Guide to Canadian Postsecondary Education*. Ottawa: Canadian Centre for Policy Alternatives.
- Drucker, P. (1993). *Post-Capitalist Society*. Oxford: Butterworth-Heinemann.
- Finnie, R. and Laporte, C. (2003). *Family Background and Access to Postsecondary Education: What Happened in the 1990's*. (Queen's School of Policy Studies Working Paper 34). Kingston: Queen's School of Policy Studies.
- Finnie, R. (2004). *The Case For Student Loans: Why, When, How*. Kingston: Queen's University.

- Francis, D. (1998). Universities Grabbing Too Big a Slice of the Education Pie. People Understand Apprenticeships and Skills are Better than a Degree. *Financial Post Daily*. September 22, 1998 v.11 (132) S22 p.23.
- Green, M. and Hayward, F.M. (1997). Forces for Change. In M. Green (Ed.), *Transforming Higher Education. Views from Leaders Around the World* (pp. 3-26). Pheonix: Oryx Press.
- Haveman, R. H. and Wolfe, B.L. (1984). Schooling and Economic Well-being: The Role of Nonmarket Effects. *Journal of Human Resources*, 19, 377-407.
- Jamieson, B.D. and Pedersen, K.G. (1997). Canada. In M. Green (Ed.). *Transforming Higher Education. Views from Leaders Around the World*. (pp. 150-172). Pheonix: Oryx Press.
- Johnstone, D. B. (1993). The Costs of Higher Education: Worldwide Issues and Trends for the 1990s. In P.G. Altbach and D.B. Johnstone (Eds.), *The Funding of Higher Education. International Perspectives* (pp. 3 - 24). New York and London: Garland Publishing, Inc.
- Jones, G. A. (in press). Canada. In J.J.F. Forest and P.G. Altbach (Eds.), *International Handbook of Higher Education*. Dordrecht: Kluwer Academic Publishers.
- Kogan, M. (1975). *Educational Policy-Making*. London: George Allen and Unwin Ltd.
- Kogan, M. (1978). *The Politics of Educational Change*. Manchester: Manchester University Press.
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. (2nd Ed.). San Francisco: Jossey-Bass Publishers.
- Rounce, A. (2004). *Access to Postsecondary Education: Does Class Still Matter?* Saskatoon: Canadian Centre for Policy Alternatives.
- Schmidt, S. (2005, June 16). High Tuitions Intensify Doctor Shortage. *Nanaimo Daily News*, B13.
- Skolnik, M.L. (1986). Diversity in Higher Education: The Canadian Case. *Higher Education In Europe*, 11(2), 19-32.
- West, E.G. (1993). Ending the Squeeze on Universities. In S.T. Easton (Ed.), *Ending the Squeeze on Universities* (pp.9-49). Montreal: Institute of Research for Public Policy.
- World Bank. (1994). *Development in Practice: The Lessons of Experience*. Washington, DC: The World Bank.

Zhao, J. and de Broucker, P. (2002). Participation in Postsecondary Education and Family Income. *The Daily*. January 9, 2002. Catalogue no. 11-001-XIE. Ottawa: Statistics Canada.

Chapter Two

Albrecht, D. and Zideman, A. (1992). *Funding Mechanisms for Higher Education: Financing for Stability, Efficiency and Responsiveness*. (World Bank Discussion Paper No. 153). Washington, D.C.: World Bank.

Allen, R. (1998). *The Employability of University Graduates in the Humanities, Social Sciences, and Education: Recent Statistical Evidence*. Vancouver: University of British Columbia.

Altbach, P.G. and Davis, T. (1999). *Global Challenge and National Response: Notes for an International Dialogue on Higher Education*. International Higher Education, No. 14, Winter 1999, (pp. 2-5). Chestnut Hill, MA: Centre for International Higher Education.

Althusser, L. (1972). *Ideology and Ideological State Apparatuses*. In B. Cosin (Ed.), *Education, Structure and Society* (pp. 242-280). Harmondsworth: Penguin Books

Andrews, L. (1999). *Does HECS Deter? Factors Affecting University Participation by Low SES Groups*. Australian Higher Education Division, Department of Education, Training and Youth Affairs. Retrieved on January 28, 2002 from <http://www.dest.gov.au/archive/highered/occpaper/99F/does.pdf>

Arnot, M. and Weiler, K. (Eds.). (1993). *Feminism and Social Justice in Education*. London: Falmer Press.

Aronowitz, S. and De Fazio, W. (1997). The New Knowledge Work. In A.H. Halsey et al (Eds.), *Education: Culture, Economy and Society* (pp. 224-239). Oxford: Oxford University Press.

Ashton, D.N. and Sung, J. (1997). Education, Skill Formation, and Economic Development: The Singaporean Approach. In Halsey, A.H., Lauder, H., Brown, P. and Wells, A.S. (Eds.), *Education: Culture, Economy and Society* (pp. 207-218). Oxford: Oxford University Press.

Atkinson, J. (1985). The Changing Corporation. In D. Clutterbuck (Ed.), *New Patterns of Work* (pp. 13-34) Aldershot: Gower.

Barro, R.J. (2001). Education and Economic Growth. In J.F. Helliwell (Ed.), *The Contribution of Human and Social Capital to Sustained Economic Growth and Well-Being* (pp. 14-41). Hull, Quebec: Human Resources Development Canada.

- Baum, S. and Payea, K. (2005). Education Pays 2004. The Benefits of Higher Education for Individuals and Society. Trends in Higher Education Series. Retrieved on August 30, 2005 from http://www.collegeboard.com/prod_downloads/press/cost04/EducationPays2004.pdf
- Becker, W.E. (1997). Commentary. In P.W. Miller, and J.J. Pincus (Eds.), *Funding Higher Education: Performance and Diversity*. (pp. 63-69). Canberra: Department of Employment, Education, Training and Youth Affairs. Retrieved on July 5, 2005 from <http://www.dest.gov.au/archive/highered/eippubs/eip97-19.pdf>.
- Blackmore, J. (1997). The Gendering of Skill and Vocationalism in Twentieth Century Australian Education. In Halsey, A.H., Lauder, H., Brown, P. and Wells, A.S. (Eds.), *Education: Culture, Economy and Society* (pp.224–239). Oxford: Oxford University Press.
- Block, F. (1990). *Postindustrial Possibilities: A Critique of Economic Discourse*. Berkeley: University of California Press.
- Bowles, S. and Gintis, H. (1976). *Schooling in Capitalist America*. London: Routledge.
- Boothby, D. (2002). *Rate of Return to Education: A Distributional Analysis Using the Life Paths Model*. Ottawa: Human Resources Development Canada.
- Bowe, R.B.; Ball, S.J. and Gold, A. (1992). *Reforming Education and Changing Schools. Case Studies in Policy Sociology*. London and New York: Routledge.
- Bowen H.R. (1977). *Investment in Learning: The Individual and Social Value of American Higher Education*. San Francisco: Jossey Bass.
- Breneman, D. W. (1997). *Trends and Issues in Finance of Public Higher Education in the United States*. In P.W. Miller, and J.J. Pincus (Eds.), *Funding Higher Education: Performance and Diversity*. (pp. 111-122). Canberra: Department of Employment, Education, Training and Youth Affairs. Retrieved on July 5, 2005 from <http://www.dest.gov.au/archive/highered/eippubs/eip97-19.pdf>.
- Brown, P. (1990). The “Third Wave”: Education and the Ideology of Parentocracy. *British Journal of Sociology of Education*, 11, 65-85.
- Brown, P. (1995). Cultural Capital and Social Exclusion: Some Observations on Recent Trends in Education, Employment and the Labour Market. *Work, Employment and Society*, 9(1), 29–51.
- Brown, P., Halsey, A.H., Lauder, H. and Wells, A.S. (1997). The Transformation of Education and Society: An Introduction. In Halsey, A.H., Lauder, H., Brown, P. and Wells, A.S. (Eds.), *Education: Culture, Economy and Society* (pp.1–44). Oxford: Oxford University Press.

- Brown, P. and Lauder, H. (1992). Education, Economic and Society: An Introduction to a New Agenda. In P. Brown, and H. Lauder (Eds.), *Education for Economic Survival: From Fordism to Post-Fordism?* (pp. 1-44). London: Routledge.
- Brown, P. and Lauder, H. (1997). Education, Globalization and Economic Development. In Halsey, A.H., Lauder, H., Brown, P. and Wells, A.S. (Eds.), *Education: Culture, Economy and Society* (pp.172-192). Oxford: Oxford University Press.
- Buchbinder, H. and Newson, J. (1990). Corporate-University Linkages in Canada: Transforming a Public Institution. *Higher Education*, 20, 355-379.
- Buchbinder, H., and Rajagopal, P. (1993). Canadian Universities and the Politics of Funding. In P.G. Altbach, and D.B. Johnstone (Eds.), *The Funding of Higher Education: International Perspectives* (pp.271-284). New York: Garland Publishing.
- Canadian Federation of Students (CFS). (2002). *Increasing the Burden: Loan Repayment Schemes to Privatize Higher Education Costs*. A Response to Ross Finnie. Retrieved on August 1, 2005, from <http://www.cfs-fcee.ca/html/english/research/submissions/sub-200201-finnie.pdf>
- Carnevale, A. and Porro, J. (1994). *Quality Education: School Reform of the New American Economy*. Washington: US Department of Education.
- Carnoy, M. and Levin, H. (1985). *Schooling and Work in the Democratic State*. Stanford: Stanford University Press.
- Chapman, B. (1997). *Some Financing Issues for Australian Higher Education Teaching*. Canberra: Centre for Economic Policy Research, Australian National University.
- Chapman, B. and Ryan, C. (2003). *The Access Implications of Income Contingent Charges for Higher Education: Lessons from Australia*. (Discussion Paper No 463). Canberra: Centre for Economic Policy Research, Australian National University.
- Clark, B. (1962). *Education and the Expert Society*. San Francisco: Chandler.
- Clark, B. (1993). The Problem of Complexity in Modern Higher Education. In Rothblatt, S. and Wittrock, B. (eds). *The European and American University since 1880s* pp. 263-279. Cambridge, UK: Cambridge University Press.
- Clark, B. (1998). *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. New York: Pergamon
- Clark, B. (2000). Collegial Entrepreneurialism in Proactive Universities. Lessons from Europe. *Change* 32(1) 10-19.
- Clark, B. (2001). The Entrepreneurial University: New Foundation for Collegiality, Autonomy and Achievement. *Higher Education Management* 13(2) 9-24.

- Collins, R. (1979). *The Credential Society*. New York: Academic Press.
- Commission of Inquiry on Canadian University Education (1991). *Report*. Ottawa: Association of Universities and Colleges of Canada.
- Corak, M., Lipps, G. and Zhao, J. (2003). *Family Income and Participation in Postsecondary Education*. Analytical Studies Research Paper Series. Catalogue no. 11F0019MIE2003210. Ottawa: Statistics Canada.
- Coulombe, S., Tremblay, J. F. and Marchand, S. (2004). *International Adult Literacy Survey. Literacy Scores, Human Capital and Growth Across Fourteen OECD Countries*. Catalogue no. 89-552-XPE no 11. Ottawa: Statistics Canada.
- Currie, J and Newson, J. (Eds.). (1998). *Universities and Globalization. Critical Perspectives*. Thousand Oaks: Sage.
- Dale, R. (1982). *Education and the Capitalist State*. In M. Apple (Ed.), *Cultural and Economic Reproduction in Education* (pp. 127-161). London: Routledge.
- Dale, R. (1997). The State and the Governance of Education: An Analysis of the Restructuring of the State-Education Relationship. In Halsey, A.H., Lauder, H., Brown, P. and Wells, A.S. (Eds.), *Education: Culture, Economy and Society* (pp. 273-281). Oxford: Oxford University Press.
- De Broucker, P. and Lavallee, L. (1998). Getting Ahead in Life: Does Your Parents' Education Count? *Education Quarterly Review* 5, 1:22-28. Catalogue no. 81-003-XIE. Ottawa: Statistics Canada.
- Dewey, J. (1916). Democracy and Education. In R. Reed & T.W. Johnson (Eds.), *Philosophical Documents in Education* (2nd Ed.) (pp. 100-105). New York: Longman.
- Drolet, M. (2005). *Participation in Postsecondary Education in Canada. Has the Role of Parental Income and Education Changed over the 1990s?* Analytical Studies Research Paper Series. Catalogue no. 11F0019MIE2003243. Ottawa: Statistics Canada.
- Easton, D. (1965). *A Framework for Political Analysis*. Englewood Cliffs, N.J.: Prentice-Hall.
- Ehrenberg, R.G. (2003). *Financing Higher Education Institutions in the 21st Century*. Paper presented at the Annual Meeting of the American Educational Finance Association in Orlando on March 29, 2003. New York: Cornell Higher Education Research Institute.
- EKOS Research Associates Inc. (2005). *Ontario Universities: Public Perceptions on Tuition and Funding*. Toronto: Council of Ontario Universities.
- Esping-Andersen, G. (Ed.). (1994). *Changing Classes, Stratification and Mobility in Post-Industrial Societies*. London: Sage.

- Finnie, R. and. Schwartz, S. (1996). *Student Loans in Canada. Past, Present and Future*. Toronto: CD Howe.
- Finnie, R. (2001). *Measuring the Load, Easing the Burden*. (Commentary no.165). Ottawa: C.D. Howe.
- Finnie, R., Laporte, C. and Lascelles, E. (2004). *Family Background and Access to Postsecondary Education: What Happened Over the 1990s?* Analytical Studies Research Paper Series. Catalogue no. 11F0019MIE2004226. Ottawa: Statistics Canada.
- Finnie, R., Usher, A. and Vossenstynne, H. (2004). Meeting the Need. A New Architecture for Canada's Student Financial Aid System. *Policy Matters*, 5(7). Retrieved on December 2, 2004 from <http://www.irpp.org>.
- Frenette, M. (2005). *The Impact of Tuition Fees on University Access: Evidence from a Large-scale Price Deregulation in Professional Programs*. Analytical Studies Research Paper Series. Catalogue no. 11F0019MIE2005263. Ottawa: Statistics Canada.
- Gallie, D. and White, M. (1993). *Employee Commitment and the Skills Revolution*. London: Policy Studies Institute.
- Giddens, A. (1998). *The Third Way: The Renewal of Social Democracy*. Cambridge: Polity Press.
- Hansen, W.L. (1983) Impact of Student Financial Aid on Access. In J. Froomskin (Ed.), *The Crisis in Higher Education* (pp.84-96). New York: Academy of Political Science.
- Heller, D. (1999). The Effects of Tuition and State Financial Aid on Public College Enrolments. *The Review of Higher Education*, 23(1), 65-89.
- International Labour Organization (ILO). (1995). *World Employment 1995*. Geneva: ILO.
- Ireland Department of Education and Science (2003). *Supporting Equity in Higher Education. A Report to the Minister for Education and Science*. May 2003, Dublin. Retrieved on September 2, 2005 from http://www.education.ie/servlet/blobServlet/he_supporting_equity.pdf
- Islam, N. (1995). Growth Empirics: A Panel Data Approach. *The Quarterly Journal of Economics*, 110(4), 1127-1171.
- Johnstone, D. B. (1986). *Sharing the Costs of Higher Education*. New York: College Entrance Examination Board.
- Johnstone, D.B. (1993). The Costs of Higher Education: Worldwide Issues and Trends for the 1990s. In P.G. Altbach and D.B. Johnstone (Eds.), *The Funding of Higher Education: International Perspectives*. (pp. 3-24) New York: Garland.

- Johnstone, D.B. (2003a). The Finance and Politics of Cost-Sharing in Higher Education. In W. Min, Z. Yang, and W. Li (Eds.), *Raising Adequate Resources for Education: Proceedings on International Conference on Economics of Education*. (pp. 75-88). Beijing: The People's Education Publishing House.
- Johnstone, D.B. (2003b). Cost Sharing in Higher Education: Tuition, Financial Assistance, and Accessibility in Comparative Perspective. Retrieved on June 20, 2005 from <http://www.gse.buffalo.edu/org/IntHigherEdFinance>.
- Johnstone, D.B. (2004). The Economics and Politics of Cost Sharing in Higher Education: Comparative Perspectives, *Economics of Education Review*. 20:4, 2004 pp. 403-410.
- Johnstone, D.B. (2005a). A Political Culture of Giving and the Philanthropic Support of Public Education in International Perspective. *International Journal of Educational Advancement*, Vol. 5, No. 3 2005 pp. 256-264.
- Johnstone, D.B. (2005b). *Higher Educational Accessibility and Financial Viability. The Role of Student Loans*. Prepared for the World Report on Higher Education: The Financing of Universities II. Retrieved on June 20, 2005 from <http://www.gse.buffalo.edu/org/IntHigherEdFinance>.
- Junor, S. and Usher, A. (2002). *The Price of Knowledge. Access and Student Finance in Canada*. Montreal: Canada Millennium Scholarship Foundation Research Series.
- Kane, T.J. (1995). *Rising Public College Tuition and College Entry: How Well Do Public Subsidies Promote Access to College*. Cambridge: National Bureau of Economic Research Working Paper, No.5164.
- Kerr, C., Dunlop, J., Harbison, F. and Myers, C. (1973). *Industrialism and Industrial Man*. Harmondsworth: Penguin.
- King, A.J.C., Warren, W.K., and Miklas, S.R. (2004). Study of Accessibility of Ontario Law Schools. Social Program Evaluation Group. Kingston: Queen's University.
- Krugman, P. (1993). *Peddling Prosperity: Economic Sense and Nonsense in the Age of Diminished Expectations*. New York: W.W. Norton.
- Kwong, J.C., Dhalla, I.A., Steiner, D.L., Baddour, R.E., Waddell, A.E., and Johnson, I.L. (2002). Effects of Rising Tuition Fees on Medical School Class Composition and Financial Outlook. *Canadian Medical Association Journal* 166, 8, pp. 1023-1028.
- LaRocque, N. (2003). *Who Should Pay? Tuition Fees and Tertiary Education Financing in New Zealand*. Wellington: Education Forum.

- Lauder, H. (1997). Education, Democracy, and the Economy. In Halsey, A.H., Lauder, H., Brown, P. and Wells, A.S. (Eds.), *Education: Culture, Economy and Society* (pp. 382-392). Oxford: Oxford University Press.
- Levin, H.M. and Kelley, C. (1997). Can Education Do It Alone? In A.H. Halsey, H. Lauder, P. Brown and A.S. Wells (Eds.), *Education: Culture, Economy and Society* (pp. 240-251). Oxford: Oxford University Press.
- Li, W. and Min, W. (not dated). *Tuition, Private Demand and Higher Education Expansion in China*. Peking: School of Education, Peking University.
- Lidley, R. and Wilson, R. (1995). *Review of Economy and Employment: An Occupational Assessment*. Institute of Employment Research. Coventry: University of Warwick.
- Lyddon, J.W, Fonte, R., Miller, J.L. (1986). *Toward a Framework to Analyze State Funding of Higher Education*. (Paper presented at 1986 Annual Meeting of the Association for the Study of Higher Education). East Lansing: AISHE, Michigan State University.
- McKeown-Moak, M.P. (2001). *Financing Higher Education in the New Century. The Third Annual Report from the States*. Denver: State Higher Education Executive Officers.
- McPherson, M.S. and. Schapiro.M.O. (1997). *Demand for American Higher Education: Prices, College Attendance, and Federal Policy*. In P.W. Miller, and J.J. Pincus (Eds.), *Funding Higher Education: Performance and Diversity*. (pp. 13-24). Canberra: Department of Employment, Education, Training and Youth Affairs. Retrieved on July 5, 2005 from <http://www.dest.gov.au/archive/highered/eippubs/eip97-19.pdf>.
- Marcucci, P.N. & Johnstone, D.B. (2003). *Tuition Policies in a Comparative Perspective: Theoretical and Political Rationales*. (Paper written for the 28th Annual Conference of the American Education Finance Association). Retrieved on June 20, 2005 from <http://www.gse.buffalo.edu/org/IntHigherEdFinance>.
- Marginson, S. (1993). *Education and Public Policy in Australia*. Melbourne: Cambridge University Press.
- Marginson, S. (1997). *Markets in Education*. Sydney: Allen and Unwin
- Miller, P.W. and Pincus, J. J. (1997). Introduction. In P.W. Miller, and J.J. Pincus (Eds.), *Funding Higher Education: Performance and Diversity*. (pp. 1-12). Canberra: Department of Employment, Education, Training and Youth Affairs. Retrieved on July 5, 2005 from <http://www.dest.gov.au/archive/highered/eippubs/eip97-19.pdf>.
- Neave, G. and Van Vught, F.A. (Eds.). (1991). *Prometheus Bound. The Changing Relationship Between Government and Higher Education in Western Europe*. Oxford: Pergamon.

- Nussbaum, T.J. (2003). *California's Investment in Public Education: A Look at the Past Three Decades*. Washington D.C.:US Department of Education.
- Organization for Economic Cooperation and Development (OECD). (1996). *Employment Outlook*. Paris: OECD.
- Organization for Economic Cooperation and Development (OECD). (1997). *Employment Outlook*. Paris: OECD.
- Otterwill, R. and Wall, A. (2000). Vocationalism and Relevance in Higher Education: Issues concerning the delivery of contextual material to first-year students on business and public sector courses. *Journal of Vocational Education and Training*, 52(3), 521-534.
- Psacharopoulos, G. (1993). The Future of Higher Education Financing. In P.G. Altbach, and D.B. Johnstone (Eds.), *The Funding of Higher Education, International Perspectives* (pp.61-70). New York and London: Garland Publishing.
- Rae, B. (2005). Ontario. A Leader in Learning. Report and Recommendations. Toronto. Retrieved on March 14, 2005 from <http://www.raereview.on.ca/en/report/default.asp?loc!=report>.
- Sharma, R. (2004). Performance-Based Funding in the Entrepreneurial North American and Australian Universities. *Journal of Higher Education Policy and Management* 25(1), 109-118.
- Siegfried, J. J., and Round, D.K. (1997). *Differential Fees for Degree Courses in Australian Universities*. In P.W. Miller, and J.J. Pincus (Eds.), *Funding Higher Education: Performance and Diversity*. (pp. 45-62). Canberra: Department of Employment, Education, Training and Youth Affairs. Retrieved on July 5, 2005 from <http://www.dest.gov.au/archive/highered/eippubs/eip97-19.pdf>.
- Slaughter, S. and Leslie, L. (1997). *Academic Capitalism: Politics, Policies and the Entrepreneurial University*. Baltimore: John Hopkins University Press.
- Smyth, J. (Eds.). (1995). *Academic Work: The Changing Labour Process in Higher Education*. London: Society for Research into Higher Education and Open University Press.
- State Council of Higher Education for Virginia. (2003). White Paper. Budget Choices, Policy Decisions: Challenges Facing Virginia's Four-Year Colleges and Universities in the Midst of a Budget Crisis. Richmond: SCHEV.
- Streeck, W. (1989). Skills and the Limits of Neo-Liberalism: The Enterprise of the Future as a Place of Learning. *Work, Employment and Society*, 3, 90-104.
- Streeck, W. (1992). *Social Institutions and Economic Performance*. London: Sage.

- Thurow, L. (1993). *Head to Head: The Coming Economic Battle between Japan, Europe and America*. London: Nicholas Breasley.
- Troyna, B. (1992). Can You See the Join? An Historical Analysis of Multicultural and Anti-Racist Education Policies. In D. Gill, B. Mayor and M. Blair (Eds.), *Racism and Education: Structures and Strategies*. London: Sage.
- Tudiver, N. (1999). *Universities for Sale: Resisting Corporate Control over Canadian Higher Education*. Toronto: James Lorimer and Company.
- Turk, J.L. (Ed.). (2000). *The Corporate Campus: Commercialization and the Dangers to Canada's Colleges and Universities*. Toronto: CAUT and James Lorimer.
- Vaillancourt, F. (1997). The Private and Total Returns to Education in Canada, 1986. *Canadian Journal of Economics*, 28(3), 532-554.
- Vaillancourt, F. and Bourdeau-Primeau, S. (2002). The Returns to University Education, 1990 and 1995. In D. Laidler (Ed.), *Renovating the Ivory Tower: Canadian Universities and the Knowledge Economy*. Toronto: C.D. Howe.
- Vossenstyne, H. (2002). *A New Look at Price Responsiveness*. Paper presented at the 13th CHER Annual Conference, Bowness-on-Windermere, United Kingdom.
- Vossenstyne, H. (2004). *Portability of Student Support: An Inventory of 21 Countries*. Enschede: Centre for Higher Education Policy Studies.
- Wasser, H. and Picken, R. (1998). Changing Circumstances in Funding Public Universities. A Comparative View. *Higher Education Policy*, 11, 29-35
- Wellen, R. (2004). The Tuition Dilemma and the Politics of "Mass" Higher Education. *The Canadian Journal of Higher Education*, 34(1), 47-81.
- West, E.G. (1994). *Education and the State: A Study in Political Economy*. Indianapolis: Liberty Fund.
- West, E.G. (1997). *Student Loans Under New Scrutiny. A Fraser Institute Occasional Paper*. Retrieved on 1 July, 2005, from <http://www.ncl.ac.uk/egwest/pdfs/student%20loans.pdf>
- Wildavsky, A. (1986). *Budgeting: A Comparative Theory of Budgetary Process*. New Brunswick, USA: Transaction Books.
- Williams, G. (1990). *Financing Higher Education: Current Patterns*. Paris: OECD.
- Williams, G. (1992). *Changing Patterns of Finance in Higher Education*. Buckingham: Open University Press.

- Woodhall, M. (Ed.). (2002). Paying for Learning. The Debate on Student Fees, Grants and Loans in International Perspective. *Special International Issues of the Welsh Journal of Education* 11(1), pp. 1-13.
- World Bank. (1994). *Development in Practice. Higher Education: The Lessons of Experience*. Washington: International Bank for Reconstruction and Development.
- Ziderman, A. and Albrecht, D. (1995). *Financing Universities in Developing Countries* (Vol. 16). Washington: The Falmer Press.
- Ziderman, A. (2002). Alternative Objectives of National Student Loan Schemes. In M. Woodhall (Ed.), *Paying for Learning. The Debate on Student Fees, Grants and Loans in International Perspective. Special International Issues of the Welsh Journal of Education*, 11(1), pp. 37-47.
- Zhao, J and de Broucker, P. (2001). Participation in Postsecondary Education and Family Income. *The Daily*, December 7, 2001. Catalogue no. 11-001-XIE. Ottawa: Statistics Canada.

Chapter Three

- Association of Universities and Colleges of Canada. (2002). A Strong Foundation for Innovation. Background Papers. Student Assistance. Retrieved on September 3, 2004 from http://www.aucc.ca/pdf/english/reports/2002/innovation/student_aid_e.PDF
- Association of Universities and Colleges of Canada. (2003). *Submission to the Government Caucus on Post Secondary Education and Research*. Ottawa: AUCC.
- Association of Universities and Colleges of Canada. (2004). *Building on our Strengths: Higher Education and Research for Canada's Future. A brief submitted to the House of Commons Standing Committee on Finance*. Ottawa: AUCC.
- Bladen, V.W. et al. (1965). *Financing Higher Education in Canada: Report of a Commission to the Association of Universities and Colleges of Canada*. Toronto: University of Toronto Press.
- British Columbia. (1996). Budget 1996. Victoria: Ministry of Finance and Corporate Relations.
- Bok, D. (1990). *Universities and the Future of America*. Durham: Duke University Press.
- Cameron, D. M. (1991). *More Than an Academic Question: Universities, Government, and Public Policy in Canada*. Halifax: The Institute for Research on Public Policy.
- Canada. (1940). *Report of the Royal Commission on Dominion-Provincial Relations*, Ottawa: King's Printer.

- Canada. (1951). *Report of the Royal Commission on National Development in the Arts, Letters and Sciences*. Ottawa: King's Printer.
- Canada. (1964). *Report of the Royal Commission on Health Services*. Ottawa: Queen's Printer.
- Canada. (1981a). *Fiscal Arrangements in the Eighties - Proposals of the Government of Canada. Presented by the Honourable Allan J MacEachern, Deputy Prime Minister and Minister of Finance*. Ottawa: Ministry of Finance.
- Canada. (1981b). *Fiscal Federalism in Canada. Report of the Parliamentary Task Force on Federal-Provincial Fiscal Arrangements*. Ottawa: Ministry of Supply and Services Canada.
- Canada. (1981c). *A Report of the Task Force on Labour Market Development*. Prepared for the Minister of Employment and Immigration. Ottawa: Task Force on Labour Market Development in the 1980's.
- Canada. (1981d). *Work for Tomorrow: Employment Opportunities for the '80s*. Ottawa: House of Commons, Parliamentary Task Force on Employment Opportunities for the 1980s.
- Canada. (1999). 1999 Budget Speech. Ottawa: Department of Finance.
- Canadian Association of University Teachers. (2005). *CAUT Almanac of Post-Secondary Education in Canada*. Ottawa: CAUT.
- Davenport, P. (2000). *Universities, Innovation and the Knowledge-Based Economy*. (Paper presented at the CERF/IRRP Conference on Creating Canada's Advantage in an Information Age). Ottawa: IRRP.
- Dennison, J. D. and Gallagher, P. (1986). *Canada's Community Colleges. A Critical Analysis*. Vancouver: University of British Columbia Press.
- Economic Council of Canada. (1965). *Second Annual Review: Towards Sustained and Balanced Economic Growth*. Ottawa: Queen's Printer.
- Finnie, R. and Schwartz, S. (1996). *Student Loans in Canada. Past, Present and Future*. Toronto: CD Howe Institute.
- Finnie, R. (2004). *The Case for Student Loans: Why, When, How*. Kingston: Queen's University Press.
- Gunther, M. and Van Loon, R.J. (1981). Federal Contribution to Post-Secondary Education: Trends and Issues. In R.L. Bellaire and D.M. Nowlan (Eds.), *Financing Canadian Universities: For Whom and By Whom?* Toronto: OISE Press.

- Jones, G. A. (in press). Canada. In J.J.F Forest, and P.G. Altbach (Eds.), *International Handbook of Higher Education*. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Junor, S. and Usher, A. (2004). *The Price of Knowledge 2004. Access and Student Finance in Canada* (Millennium Research Series). Ottawa: Millennium Scholarship Foundation.
- MacDonald, J. B. et al. (1969). *The Role of the Federal Government in Support of Research in Canadian Universities. Special Study No 7 prepared for the Science Council of Canada and the Canada Council*. Ottawa: Science Council of Canada and Canada Council.
- Organization for Economic Cooperation and Development. (1976). *Reviews of National Policies for Education: Canada*. Paris: OECD.
- Peitchinis, S. G. (1971). *Financing Post Secondary Education in Canada*. Toronto: Council of Ministers of Education of Canada.
- Psacharopoulos, G. (1993). The Future of Higher Education Financing. In P. Altbach and D.B. Johnstone (Eds.), *The Funding of Higher Education, International Perspectives*. New York and London: Garland Publishing, Inc.
- Quebec. (2004). *Consultation Paper*. Quebec City: Quebec Parliamentary Committee on Education for the Quality, Accessibility and Funding of Universities.
- Rae, B. (2005). Ontario. A Leader in Learning. Report and Recommendations. Toronto. Retrieved on March 14, 2005 from <http://www.raereview.on.ca/en/report/default.asp?loc!=report>.
- Sheffield, E. F. (1955). *Canadian University and College Enrolment Projected to 1956*. Paper presented at the National Conference of Canadian Universities Proceedings, pp.39-46. Ottawa: NCCU.
- Tudiver, N. (1999). *Universities for Sale: Resisting Corporate Control over Canadian Higher Education*. Toronto: James Lorimer and Company.

Chapter 4

- Advisory Panel on Future Directions for Postsecondary Education. (1996). *Excellence, Accessibility and Responsibility*. Toronto. Retrieved on 30 July, 1998 from <http://www.edu.gov.on.ca/eng/document/reports/futuree.html>
- Allan, L.G. and others (1983). An Examination of Performance of First Year Students at an Ontario University: An Admission Perspective. *Canadian Journal of Higher Education* 13(3), 37-54.

- Ashton, D.N. and Sung, J. (1997). Education, Skill Formation, and Economic Development: The Singaporean Approach. In A.H. Halsey, H. Lauder, P. Brown and A.S. Wells (Eds.), *Education, Culture, Economy and Society* (pp. 207-218). Oxford: Oxford University Press
- Brown, P. and Lauder, H. (1997), Education, Globalization and Economic Development. In A.H. Halsey, H. Lauder, P. Brown and A.S. Wells (Eds.), *Education: Culture, Economy and Society* (pp.172-192). Oxford: Oxford University Press.
- Brown, P., Halsey, A.H., Lauder, Wells, A.S. (1997). The Transformation of Education and Society: An Introduction. In A.H. Halsey, H. Lauder, P. Brown and A.S. Wells (Eds.), *Education: Culture, Economy and Society* (pp.1-44). Oxford: Oxford University Press.
- Buchbinder, H. and Rajagopal, P. (1993). Canadian Universities and the Politics of Funding. In P. G. Altbach & D.B. Johnstone (Eds.), *The Funding of Higher Education. International Perspectives* (pp.271-284). New York and London: Garland Publishing, Inc.
- Cameron, D. and Royce, D. (1996). *Prologue to Change: An Abbreviated History of Public Policy and Postsecondary Education in Ontario. Background Paper to the Advisory Panel on Future Directions for Postsecondary Education*. Toronto: Government of Ontario.
- Casas, F.R. and Meaghan, D.E. (1995). Grade Inflation and University Admissions in Ontario: Separating Fact from Perception. *Canadian Journal of Higher Education*, 25(3), 49-70.
- Commission on the Future Development of the Universities of Ontario. (1984). *Ontario Universities: Options and Futures*. Toronto: The Bovey Commission.
- Council of Ontario Universities. (1996). *The Financial Position of Ontario Universities*. (1996). Toronto: COU.
- Council of Ontario Universities. (2004). *Resource Documents 2004*. Toronto: COU. Retrieved 30 October, 2004 from http://cou.on.ca/_bin/publications/onlinePublications.cfm.
- Council of Ontario Universities. (2005a). *Compendium of Statistical and Financial Information 2003-2004*. May 2005. Toronto: COU. Retrieved June 30, 2005, from http://cou.on.ca/_bin/publications/onlinePublications.cfm
- Council of Ontario Universities. (2005b). *Facts and Figures 2005: A Compendium of Statistics Ontario Universities*. January 2005. Toronto: COU. Retrieved June 30, 2005, from http://cou.on.ca/_bin/publications/onlinePublications.cfm
- Courchene, T. & Telmer, C. (1998). *From Heartland to North American Region State: The Social, Fiscal and Federal Evolution of Ontario*. (Monograph Series on Public Policy, Centre of Public Management, Faculty of Management). Toronto: University of Toronto.

- Dennison, J. and Gallagher, P. (1986). *Canada's Community Colleges. A Critical Analysis*. Vancouver: University of British Columbia Press.
- Dewey, J. (1897). My Pedagogic Creed. In R. Reed & T.W. Johnson (Eds.), *Philosophical Documents in Education* (2nd Ed.) (pp.92-100). New York: Longman.
- Ehring, G. and Roberts, W. (1993). *Giving Away a Miracle: Lost Dreams, Broken Promises and the Ontario NDP*. Oakville: Mosaic Press.
- Fairweather, J.S. (1988). *Entrepreneurialship and Higher Education*. Washington, D.C.: Association for the Study of Higher Education.
- George, P. (2004). *Financing Quality in Ontario Universities. Speech to the Higher Education in Canada Conference by the John Deutsch Institute for the Study of Economics Policy at Queen's University, February 13, 2004*. Retrieved August 5, 2004, from http://cou.on.ca/_bin/publications/speeches.cfm
- Jones, G. (1997). Higher Education in Ontario. In G.A. Jones (Ed.), *Higher Education in Canada. Different Systems, Different Perspectives* (pp. 137 - 159). New York and London: Garland Publishing, Inc.
- Krugman, P. (1993). *Peddling Prosperity: Economic Sense and Nonsense in the Age of Diminished Expectations*. New York: WW Norton.
- Lang, D., House, D., Young, S., and Jones, G.A. (2000). *University Finance in Ontario*. Research Monographs in Higher Education. Number 5. Winnipeg: The University of Manitoba.
- Mullen, R. (1995). Indicators of Grade Inflation. Paper presented at the 35th Association for Institutional Research Forum. Boston. (ERIC Document Reproduction Service No. ED 386970).
- Neave, G. and Van Vught, F.A. (Eds.). (1991). *Prometheus Bound. The Changing Relationship Between Government and Higher Education in Western Europe*. Oxford: Pergamon.
- Ontario. (1985). *1985 Ontario Budget*. Toronto: Ministry of Treasury and Economics.
- Ontario. (1986). *1986 Ontario Budget*. Toronto: Ministry of Treasury and Economics.
- Ontario. (1987). *1987 Ontario Budget*. Toronto: Ministry of Treasury and Economics.
- Ontario. (1988). *1988 Ontario Budget*. Toronto: Ministry of Treasury and Economics.
- Ontario. (1990). *Vision 2000. Quality ad Opportunity*. Toronto: Ministry of Colleges and Universities.

- Ontario. (1991). *1991 Ontario Budget*. Toronto: Ministry of Treasury and Economics.
- Ontario. (1992a). *1992 Ontario Budget*. Toronto: Ministry of Treasury and Economics.
- Ontario. (1992b). *Investing in Tomorrow's Jobs: Effective Investment and Economic Renewal*. Toronto: Ministry of Treasury and Economics.
- Ontario. (1993a). *1993 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (1993b). *Ontario Economic Outlook*. Toronto: Ministry of Finance.
- Ontario. (1994). *1994 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (1996a). *1996 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (1996b). *Budget Speech*. Toronto: Government of Ontario.
- Ontario. (1997). *1997 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (1998). *1998 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (1999). *1999 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (2000). *2000 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (2001a). *2001 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (2001b). *Budget Speech*. Toronto: Government of Ontario.
- Ontario (2002a) *2002 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (2002b). *Budget Speech*. Toronto: Government of Ontario.
- Ontario. (2003a). *2003 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (2003b). *Budget Speech*. Toronto: Government of Ontario.
- Ontario. (2004a). *2004 Ontario Budget Papers*. Toronto: Ministry of Finance.
- Ontario. (2004b). *Budget Speech*. Toronto: Government of Ontario.
- Ontario. (2004c). *Getting Results for Ontario, Progress Report*. Retrieved September 2, 2004, from <http://www.resultsontario.gov.on.ca/pdf/report2004.pdf>.
- Ontario. (2005a). *2005 Ontario Budget Papers*. Toronto: Ministry of Finance.

- Ontario. (2005b). *Budget Speech*. Toronto: Government of Ontario Budget Speech
- Ontario. (2005c). *Reaching Higher. The McGuinty Government Plan for Postsecondary Education*. May 11, 2005. Backgrounder. Retrieved on June 30, 2005 from <http://www.fin.gov.on.ca/english/budget/bud05/pdf/bke1.pdf>
- Ontario Council of University Affairs. (1992). *Transfer of Undergraduate Course Credits Among Ontario Universities: Report and Recommendations*. Toronto: OCUA
- Ontario Council of University Affairs. (1993). *University Accountability: A Strengthened Framework*. Toronto: OCUA. Task Force on University Accountability
- Ontario Council of University Affairs. (1994). *Sustaining Quality in Changing Times: Funding Ontario Universities. A Discussion Paper*. Toronto: OCUA.
- Ontario Ministry of Education and Training. (1993). *No Dead Ends*. Toronto: Ministry of Education and Training.
- Ontario Investing in Students Task Force. (2001). *Portals and Pathways. A Review of Postsecondary Education in Ontario*. Toronto: Ministry of Training, Colleges and Universities.
- Ontario Learning Opportunities Task Force. (2002). *It's About Belonging: Learning Opportunities Task Force Report*. Richmond Hill, Ontario: Task Force 2002.
- Ontario Premier's Council. (1990). *People and Skills in the New Global Economy*. Toronto: The Council.
- Ontario Premier's Council on Technology. (1988). *Report of the Premier's Council. Competing in the New Global Economy*. Toronto: Queen's Printers.
- Ontario Progressive Conservative Caucus (1992). *New Directions Vol. 2: A Blueprint for Learning in Ontario*. Toronto: PC Caucus.
- Ontario Task Force on Advanced Training. (1992). *College to University Transfer Study*. Toronto: Task Force on Advanced Training.
- Powell, B. (2004). Private Universities: A Way to Increase Access to University Education in Ontario. *Higher Education in Europe*, 28(2), pp. 243 – 253.
- Rae, B. (2005). *Ontario. A Leader in Learning. Report and Recommendations*. Toronto. Retrieved on March 14, 2005 from <http://www.raereview.on.ca/en/report/default.asp?loc1=report>

- Rea, K. (1987). The Political Economic Record. In C. Watson (Ed.), *Governments and Higher Education - the Legitimacy of Intervention* (pp.145-172). Toronto: The Ontario Institute for Studies in Education.
- Royce, D. (1997). *University System Co-ordination and Planning in Ontario: 1945-1996*. Unpublished Doctoral Thesis, University of Toronto.
- Skolnik, M.L. (1995). Evolution of Relations Between Community Colleges and Universities in Ontario. *Community College Journal of Research and Practice*, 19(5), 437-450.
- Slaughter, S. and Leslie, L. (1997). *Academic Capitalism. Politics, Policies, and the Entrepreneurial University*. Baltimore and London: Johns Hopkins University Press.
- Statistics Canada. (2004a). National Graduates Survey: Student Debt. *The Daily*. April 26, 2004, pp. 2-4. Retrieved on December 23, 2004 from <http://www.statcan.ca/Daily/English/040426/d040426.pdf>
- Statistics Canada. (2004b). University Tuition Fees. *The Daily*. September 2, 2004, pp. 2-4. Retrieved on September 2, 2004, from <http://www.statcan.ca/Daily/English/040902/d040902.pdf>
- White, R. (1985). *Ontario 1916 - 1985. A political and Economic History*. Toronto and London: Dundurn Press.
- White, R. (1998). *Ontario Since 1985*. Toronto: Eastendbooks.
- Young, S. (2002). The Use of Market Mechanisms in Higher Education Finance and State Control: Ontario Considered. *The Canadian Journal of Higher Education*. Vol. XXXII. No. 2, pp. 79-102.

Chapter Five

- Ashton, D.N. and Sung, J. (1997). Education, Skill Formation, and Economic Development: The Singaporean Approach. In A.H. Halsey, H.Lauder, P. Brown and A.S Wells (Eds.), *Education. Culture, Economy, Society*. (pp.207-223). Oxford: Oxford University Press.
- Association of Universities and Colleges in Canada. (2003). *Trends in Higher Education: Shifting the Policy Debate*. Retrieved on 20 January, 2004, from <http://www.tupc.bc.ca/publications/trends.pdf>.
- Barman, J. (1996). *The West Beyond the West. A History of British Columbia*. Toronto: University of Toronto Press.

- Barr-Telford, L, Cartwright, F., Prasil, S. and Shimmons, K. (2003). *Access, persistence and financing: First results from the Postsecondary Education Participation Survey (PEPS). Education, skills and learning – Research Paper*. Statistics Canada. Ottawa: Catalogue no. 81-595-MIE — No. 007.
- BC Council of Admissions and Transfer (BCCAT). (2003). *The Class of 1996 Five Years after Graduation: Comparing BC University Outcomes for Direct Entry and Transfer Students*. Retrieved on 1 July, 2004, from <http://www.bccat.bc.ca/pubs/univoutcomes.pdf>
- BC Council of Admissions and Transfer (BCCAT). (2004). *2003/04 Annual Report to the Ministry of Advanced Education*. Retrieved on 1 July, 2004, from <http://www.bccat.bc.ca/pubs/ar03-04.pdf>
- BC Liberal Party (2001). *New Era of Hope and Prosperity for British Columbia*. 2001 Election Platform. Retrieved on July 2, 2001 from <http://www.bcliberals.com/EN/308/>
- BC Progress Board. (2002). *Learning to Win: "Ready Get Set Go" – Report of the Panel on Education, Skills, Training and Technology Transfer*. Vancouver: BC Progress Board.
- BC Statistics. (2003). *Input Indicators of the British Columbia High Technology Sector. A Project of BC Stats and the Ministry of Competition, Science and Enterprise*. Retrieved on 1 July, 2004, from http://www.bcstats.gov.bc.ca/data/bus_stat/busind/hi-tech/htii2003.pdf
- British Columbia. (1986). *Budget 1986*. Victoria: Ministry of Finance.
- British Columbia. (1987). *Budget 1987*. Victoria: Ministry of Finance.
- British Columbia. (1988). *Access to Advanced Education and Job Training in British Columbia. Report of the Provincial Access Committee*. Victoria: Ministry of Advanced Education and Job Training.
- British Columbia. (1989a). *Access for All. Together A Better BC. (Speaking Notes for the Honourable Stan Hagen, Minister of Advanced Education and Job Training)*. Victoria: unpublished.
- British Columbia. (1989b). *Budget 1989*. Victoria: Ministry of Finance and Corporate Relations.
- British Columbia. (1989c). *Hansard*, July 18, 1989. Victoria: Legislative Assembly.
- British Columbia. (1991). *Budget 1991*. Victoria: Ministry of Finance and Corporate Relations.
- British Columbia. (1992a). *Budget 1992*. Victoria: Ministry of Finance and Corporate Relations.
- British Columbia (1992b). *Forces of Change Influencing Education and Training. Discussion Paper*. (2nd Ed.). Victoria: Ministry of Advanced Education, Training and Technology.

- British Columbia. (1993). *Budget 1993*. Victoria: Ministry of Finance and Corporate Relations.
- British Columbia. (1994). *Budget 1994*. Victoria: Ministry of Finance and Corporate Relations.
- British Columbia (1995a). *Aboriginal Post-Secondary Education and Training Policy Framework*. Victoria: Ministry of Advanced Education, Training and Technology.
Retrieved on 1 September, 2003, from
<http://www.aved.gov.bc.ca/aboriginal/framework.htm>
- British Columbia. (1995b). *Hansard*, June 8, 1995. Victoria: Legislative Assembly.
- British Columbia. (1995c). *Hansard*, June 15, 1995. Victoria: Legislative Assembly.
- British Columbia (1996a). *Charting A New Course. A Strategic Plan for the Future of British Columbia's College, Institute and Agency System*. Victoria: Ministry of Education, Skills and Training.
- British Columbia (1996b). *Environmental Scan. British Columbia's Learning and Labour Market Environment*. Victoria. Ministry of Advanced Education, Training and Technology (Not published).
- British Columbia (1997a). *Moving On. Transition from K – 12 to Postsecondary Education*. Victoria: Ministry of Skills, Training and Labour.
- British Columbia (1997b). *Critical Issues in Financing BC's Colleges and Institute System*. Victoria: Ministry of Skills, Training and Labour.
- British Columbia (1998). *Hansard*, April 22, 1998. Victoria: Legislative Assembly.
- British Columbia. (1999a). *1999 Budget Speech*. Victoria: Ministry of Finance and Corporate Relations.
- British Columbia (1999b). *Hansard*, May 18, 1999. Victoria: Legislative Assembly.
- British Columbia. (2000). *Hansard*, April 5, 2000. Victoria: Legislative Assembly.
- British Columbia. (2001a). *2001 Budget Speech*. Victoria: Ministry of Finance and Corporate Relations.
- British Columbia. (2001b). *Economic and Fiscal Update Speech*. Victoria: Ministry of Finance and Corporate Relations.
- British Columbia. (2001c). *Hansard*. March 20, 2001. Victoria: Legislative Assembly.
- British Columbia (2002a). *Budget and Fiscal Plan 2002/03 – 2004/05*. Victoria: Ministry of Finance.

- British Columbia (2002b). *First Quarterly Report, 2002/03*. Victoria: Ministry of Finance and Corporate Relations.
- British Columbia. (2002c). *Hansard*, May 13, 2002. Victoria: Legislative Assembly.
- British Columbia. (2002d). *British Columbia Public College Sector Performance Report 2000*. Retrieved on 1, September, 2004 from <http://www.aved.gov.bc.ca/historical.htm>.
- British Columbia. (2003). *Report on the 2004 Budget Consultation Process by the Select Standing Committee on Finance and Government Services*. Victoria: Legislative Assembly. Retrieved on 2, January, 2005, from <http://www.legis.gov.bc.ca/cmt/37thparl/session-4/fgs/reports/Rpt-FIN-37-4-ThirdReport-Nov14.pdf>
- British Columbia. (2004a). *Budget and Fiscal Plan 2004/05 – 2006/07*. Victoria: Ministry of Finance.
- British Columbia. (2004b). *2003/04 Annual Service Plan Report*. Victoria: Ministry of Advanced Education.
- British Columbia. (2005a). *Throne Speech by the Honourable Iona Campagnolo*. Victoria: Legislative Assembly.
- British Columbia. (2005b). *2005/06 – 2007/08 Ministry of Advanced Education Service Plan*. Victoria: Ministry of Advanced Education.
- British Columbia. (Undated). *A 5 Year Plan for Science and Technology 1990-1995*. Victoria: Ministry of Advanced Education, Training and Technology.
- British Columbia Labour Force Development Board (BCLFDB). (1995). *Training for What?* Vancouver: BCLFDB.
- British Columbia Labour Force Development Board (BCLFDB). (1996). *Training for Whom?* Research Paper (Unpublished).
- British Columbia Premier's Technology Council (2001). *First Quarterly Report. November 22, 2001*. Retrieved on 20 February 2004, from http://www.gov.bc.ca/bcgov/content/docs/@2Ig53_0YQtW/the_ptc_report_q1_1.pdf
- British Columbia Task Force in Employment and Training. (1991). *Learning and Work: The Way Ahead for British Columbians*. Victoria: Government of British Columbia.
- Brown, P. and Lauder, H. (1997). Education, Globalization and Economic Development. In A.H. Halsey, H. Lauder, P. Brown and A.S. Wells (Eds.), *Education. Culture, Economy, Society* (pp.172-192). Oxford: Oxford University Press.

- Building a Future of Excellence: A University of Northern BC.* (1988). (A report commissioned by the Interior University Society). Unpublished.
- Carney, P. (1978). *Report of the Distance Education Planning Group on a Delivery System for Distance Education in British Columbia.* Victoria: Ministry of Education.
- CAUT. (2003). University Tuition Fees in Canada, 2003: The Declining Affordability of Higher Education. *CAUT Education Review*, 5(1). Retrieved on 20 February 2004, from <http://www.caut.ca/en/publications/educationreview/educationreview5-1.pdf>
- CAUT. (2005). Paying the Price. The Case for Lowering Tuition Fees in Canada. *CAUT Education Review*, 7(1). Retrieved on 20 February 2004, from <http://www.caut.ca/en/publications/educationreview/educationreview7-1.pdf>
- Dennison, J.D. (1987). Universities under Financial Crisis: The Case of British Columbia. *Higher Education*, 16, 135-143.
- Dennison, J.D. (1997) Higher Education in British Columbia. 1945-1995; Opportunity and Diversity. In G.A. Jones (Ed.), *Higher Education in Canada: Different Systems, Different Perspectives* (pp. 31-57). New York: Garland Publishing Inc.
- Doherty-Delorme, D. and Shaker, E. (Eds.). *Missing Pieces V. An Alternative Guide to Canadian Post-Secondary Education.* Ottawa: Canadian Centre for Policy Alternatives.
- Faris, R. (1992). *Life-long Learning for the 21st Century: A Report on the Future Development of Adult/Continuing Education in BC.* Victoria: Ministry of Advanced Education, Training and Technology.
- Federation of Post Secondary Educators of BC (FPSE). (2003). *Building BC's Economy: Strengthening Post-Secondary Education. Submission to the Select Standing Committee on Finance and Government Services.* Retrieved on 5 January, 2004, from <http://www.fpse.ca/resources/publications>
- Federation of Post-Secondary Educators of BC (FPSE). (2004). *Reinvesting in Post-Secondary Education Expanding Access and Ensuring Affordability. Submission to the Select Standing Committee on Finance and Government Services Budget 2005 Consultation.* Retrieved on 5 January, 2005, from <http://www.fpse.ca>
- Finnie, R., Laporte, C. and Lascelles, E. (2004). *Family Background and Access to Post-Secondary Education: What Happened over the 1990s? Analytical Studies Branch research paper series.* Ottawa: Statistics Canada (Catalogue no. 11F0019MIE — No. 226).

- Fisher, D., Lee, J., MacIvor, M. and Rubenson, K. (2005). *The Development of a Post-Secondary Education System in British Columbia: Transformation and Change. Draft Policy Narrative*. Retrieved on 30 June, 2005 from <http://www.nyu.edu/iesp/aiheps/downloads/finalreports/May%202005/British%20Columbia.%20transformation%20and%20change.pdf>.
- Frenette, M. (2003). *Access to College and University: Does Distance Matter?* (Analytical Studies Branch research paper series). Ottawa: Statistics Canada (Catalogue no. 11F0019MIE — No. 201).
- Gaber, D. (2003). *Provincial Coordination and Inter-Institutional Collaboration in British Columbia's College, University College and Institute System*. Retrieved on 30 June, 2005 from http://www.ajcc.ca/ftp/pub/monograph/BC_collaboration.pdf
- Gallagher, P. (1989). *Opening Doors to Lifelong Learning: Empowering Undereducated Adults*. Victoria: Ministry of Advanced Education, Training and Technology.
- Goard, D. (1977). *Report of the Commission on Vocational Technical and Trades Training in BC*. Victoria: Ministry of Education.
- Hommen, L. (1997). The British Columbia Labour Force Development Board: Delivering Consensus. In A. Sharpe and R. Haddow (Eds.), *Social Partnerships for Training* (pp.217-250). Kingston: School of Policy Studies, Queen's University.
- Hyland, T. (2001). Vocationalism, Work and the Future of Higher Education. *Journal of Vocational Education and Training*. 53(4), 677-684.
- Ipsos Reid. (2004). *Grading BC's Postsecondary Industry: The Public's Perspective*. Retrieved on 23 December, 2004 from http://www.ipsos-reid.com/pdf/products/IR_Grading.pdf.
- Jeffels, R. R. (1972). *College and University: Towards the First Decade. Occasional Paper No 1. Post Secondary Education*. Victoria: British Columbia Department of Education.
- Macdonald, J. B. (1962). *Higher Education in British Columbia and a Plan for the Future*. Vancouver: UBC.
- Malcolmson, J. and Lee, M. (2004). *Financing Higher Learning. Post-secondary Education Funding in BC*. Vancouver: Canadian Centre for Policy Alternatives.
- Marginson, S. (1997). *Educating Australia. Government, Economy and Citizen since 1960*. Cambridge: Cambridge University Press.
- Moran, L. (1991). *Legitimation of Distance Education: A Social History of the Open Learning Institute of British Columbia, 1978 - 1988. Thesis*. Vancouver: UBC.

- Neave, G. and Van Vught, F.A. (1991). *Prometheus Bound. The Changing Relationship between Government and Higher Education in Western Europe*. Oxford: Pergamon Press.
- New Democratic Party of British Columbia. (1991). *A Better Way for British Columbia. 1991 New Democrat Election Platform*. (Pamphlet).
- New Democratic Party of British Columbia. (1996). *On Your Side. New Democrat Election Platform 1996*. Burnaby. (Pamphlet).
- Neylan, M.S. (1993). *Report of the Fraser Valley Committee on Post-Secondary Education Phase I*. Victoria: Ministry of Advanced Education, Training and Technology.
- OECD. (1989). *Education and the Economy in a Changing Society*. Paris: OECD.
- Orum, J. (1992). *Review of the BC Student Assistance and Barriers to Post-Secondary Participation. Final Report*. Victoria: Ministry of Advanced Education.
- Otterwill, R. and Wall, A. (2000). Vocationalism and Relevance in Higher Education: Issues concerning the delivery of contextual material to first year students on business and public sector courses. *Journal of Vocational Education and Training*, 52(3), pp. 521-534.
- Pan-Canadian Education Indicators Program (PCEIP). (2003). *Education Indicators in Canada. Report of the Pan-Canadian Education Indicators Program*. Ottawa: Canadian Statistics Council.
- Prince, J. P. (1996). At the Edge of Canada's Welfare State: Social Policy Making in British Columbia. In R.K Carty (Ed.), *Politics, Policy and Government* (pp. 236-271). Vancouver: UBC Press.
- Rayner, W. (2000). *British Columbia's Premiers in Profile: The Good, the Bad and the Transient*. Surrey, BC: Heritage House.
- Resnick, P. (1985). BC Capitalism and the Empire of the Pacific. *BC Studies*, 67, pp. 29-46.
- Royal Commission of Independent Schools. (1988). *A Legacy for Learners: Report of the Royal Commission on Education*. Victoria: Queen's Printers.
- Scarfe, B. (1996). Public Finance and Fiscal Policy in British Columbia. In R.K Carty (Ed.), *Politics, Policy and Government* (pp. 217-235). Vancouver: UBC Press.
- Schroeder, H. (1991). *After High School – What? The Public's Response to Findings of the Fraser Valler Access Committee. Report of the Fraser Valley Access Consultation Group*. Victoria: Ministry of Advanced Education, Training and Technology.

- Schuetze, H. and Day, W.L. (2001). Postsecondary Education in BC 1989-1998: The Impact of Policy and Finance on Access, Participation and Outcomes. *Vancouver: Centre for Policy Studies in Higher Education and Training, University of British Columbia.*
- Statistics Canada. (2003). *Postsecondary Education Participation Survey. The Daily, September 10, 2003 pp. 5-6, from <http://www.statcan.ca/Daily/English/030910/d030910.pdf>*
- Statistics Canada. (2004a). University Tuition Fees. *The Daily*. September 2, 2004, pp. 2-4. Retrieved on September 2, 2004, from <http://www.statcan.ca/Daily/English/040902/d040902.pdf>
- Statistics Canada (2004b). Paying for Higher Education. *Education Matters*, September 2004 No. 3. Retrieved on December 23, 2004, from <http://www.statcan.ca/english/freepub/81-004-XIE/200409/main.htm>.
- Statistics Canada. (2004c). National Graduates Survey: Student Debt. *The Daily*. April 26, 2004, pp. 2-4. Retrieved on December 23, 2004 from <http://www.statcan.ca/Daily/English/040426/d040426.pdf>
- The Role of the Universities in the Economic Development of British Columbia. A Report by Simon Fraser University, The University of Victoria, and The University of British Columbia.* (1987). Unpublished.
- The University Presidents' Council of British Columbia. (TUPC). (2002). *The Core Review. What is it and what does it mean for British Columbia Universities.* Retrieved on 2 January, 2004, from <http://www.tupc.bc.ca/publications/CoreReview.pdf>.
- The University Presidents' Council of British Columbia. (TUPC). (2004). *Our Universities Our Future.* Retrieved on 2 January, 2004, from <http://www.tupc.bc.ca/publications/OurUniversitiesOurFuture.pdf>.
- Tudiver, N. (1999). *Universities for Sale.* Ottawa: CAUT.
- Winegard, W.C. (1976). *Report of the Commission on University Programs in Non-Metropolitan Areas.* Unpublished.
- Ziderman, A. and Albrecht, D. (1995). *Financing Universities in Developing Countries*, Vol.16. Washington DC: Falmer Press.
- Wattamaniuk, W. (2005). Access to Undergraduate Studies in BC. If You Build, Will They Come? Burnaby: Simon Fraser University. Retrieved on August 30, 2005 from <http://www.sfu.ca/analytical-studies/>

Chapter Six

- Allen, M. and Vaillancourt, C. (2005). *Class of 2000. Profile of Graduates and Student Debt*. Ottawa: Statistics Canada. Catalogue 81-595-MIE.
- Association of Universities and Colleges of Canada (AUCC). (2003). *Trends in Higher Education 2003*. Ottawa: AUCC.
- BC Liberal Party. (2005). *BC Liberal Platform – A Proven Plan for a Golden Decade*. Retrieved 2 July, 2005, from http://www.bcliberals.com/news_and_issues/bc_liberal_platform_-_a_proven_plan_for_a_golden_decade/
- Canada. (2005). *Budget Speech*. Retrieved 30 June, 2005, from <http://www.fin.gc.ca/budget05/pdf/speeche.pdf>
- Canadian Association of University Teachers (CAUT). (2005). *Almanac of Post-Secondary Education 2005*. Retrieved 2 June, 2005, from <http://www.caut.ca/en/publications/almanac/default.asp>
- Canadian Federation for Humanities and Social Sciences (CFHSS). (2004). Brief to the Standing Committee on Finance. November 23, 2004. Retrieved December 24, 2004 from <http://www.fedcan.ca/english/publications>
- Council of Ontario Universities (COU). (2005). *Compendium of Statistical and Financial Information Ontario Universities 2003/04*. Toronto: Research, Analysis and Policy Division of COU.
- Fisher, D. and Rubenson, K. (1998). The Changing Political Economy. The Private and Public Lives of Canadian Universities. In J. Currie and J. Newson (Eds.), *Universities and Globalization. Critical Perspectives* (p. 77-98). Thousand Oaks, London, New Delhi: Sage Publications.
- Green, M. and Hayward, F. (1997). The Forces of Change. In M. Green (Ed.), *Transforming Higher Education. Views from Leaders Around the World*. Phoenix: Oryx Press
- Junor, S. and Usher, A. (2004). *The Price of Knowledge 2004. Access and Student Finance in Canada* (Millennium Research Series). Ottawa: Millennium Scholarship Foundation.
- Johnstone, D.B. (1993). The Costs of Higher Education: Worldwide Issues and Trends for the 1990s. In P.G. Altbach and D.B. Johnstone (Eds.), *The Funding of Higher Education. International Perspectives* (pp.3-24). New York and London: Garland Publishing, Inc.
- Rae, B. (2005). *Ontario. A Leader in Learning. Report and Recommendations*. Retrieved 3 January, 2005, from <http://www.raereview.on.ca/en/report/default.asp?loc1=report>

Skolnick, M.L. (2004). *Does Structure Matter: (Where) Do Questions About Structure Fit on the Higher Education Policy Agenda?* Kingston: John Deutsch Institute, Queen's University.

Slaughter, S. and Leslie, L. (1997). *Academic Capitalism. Politics, Policies, and the Entrepreneurial University*. Baltimore and London: Johns Hopkins University Press.

Statistics Canada. (2005). Research and Development Personnel 1993 to 2002. *The Daily*, May 3, 2005. Ottawa: Statistics Canada

Task Force on Competitiveness, Productivity and Economic Progress. (2004). *Realizing Our Prosperity. Third Annual Report*. Toronto: Institute for Competitiveness and Prosperity.

The University Presidents' Council of British Columbia (TUPC). (2003). *The Innovation Equation – When We Invest, We Win*. Retrieved 2 January, 2005, from http://www.tupc.bc.ca/publications/The_Innovation_Equation.pdf

Tudiver, N. (1999). *Universities for Sale*. Ottawa: CAUT.

Chapter Seven

Currie, J. and Newson, J. (Eds.). (1998). *Universities and Globalization. Critical Perspectives*. Thousand Oaks: Sage Publications.

Dudley, J. (1998). Globalization and Education Policy in Australia. In J. Currie & J. Newson (Eds.), *Universities and Globalization. Critical Perspectives* (pp.21-44). Thousand Oaks: Sage Publications.

Marshall, D. (2004). *Degree Accreditation in Canada*. (Paper presented to the International Consortium for Education and Economic Development 2004 Annual conference). Retrieved on August 1, 2005 from <http://mtroyal.ab.ca/president/files/DegreeAccredinCanada.pdf>

Slaughter, S. and Leslie, L. (1997). *Academic Capitalism. Politics, Policies, and the Entrepreneurial University*. Baltimore and London: Johns Hopkins University Press.

Tudiver, N. (1999). *Universities for Sale*. Ottawa: CAUT.