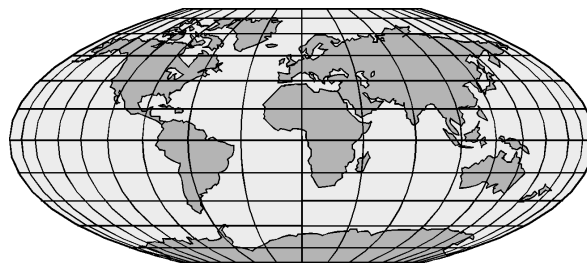


Environmental Scan



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Office of Institutional Analysis
University of Victoria
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Introduction

The 1994 Environmental Scan was originally produced to assist the Strategic Planning Task Force in developing a long-range plan for the University of Victoria, that meets the changing needs of our province and country. In this 1997 revision, charts, tables, and commentary have been updated when more recent information was available. The scan addresses many of the external factors likely to shape the future of the university over the next ten years. It begins with an overview intended to integrate those factors into a coherent picture of the social, cultural, and economic climate in which the university will be operating.

The body of the document is organized into units, most containing a chart and commentary. These units are grouped into the following four sections:

1. **Demographics** describes some population and social characteristics of British Columbia;
2. **Economy and Labour Force** describes some economic characteristics of British Columbia and Canada;
3. **Students** describes some aspects of enrolment and post-secondary education;
4. **The Public and Government** examines the attitudes of the government and Canadian public toward higher education.

Environmental Scan Overview

The demographic data indicate an aging population for B.C. and particularly for the Greater Victoria region. If, however, the high influx of people to British Columbia continues, demand for post-secondary education will remain high.

It seems likely that demand for educational services by mature students studying part-time will grow over the next 10 years. The basic pedagogy of universities has changed little over the years (some would say centuries) and is geared primarily to the needs of full-time students entering directly from secondary school. Universities will face increasing competition for these non-traditional students, and failure to adapt pedagogy, delivery, and curricula to new needs could result in exclusion from this potential growth area.

Most new jobs in B.C. will require some post-secondary education. There may be room for collaborative programming involving the strengths of both the college/institute sector and universities.

Competition for public sector funding will increase. The current pressure for accountability and relevance was generated, at least in part, by the need to question the effectiveness and efficiency of all public expenditures. Universities compete for funds with health care, debt servicing, unemployment, and economic restructuring. Even if the economy experiences real growth, it will be difficult for universities to claim a share of that growth.

The level of public subsidy will likely decrease and become more targeted. This in turn will continue the pressure on institutions to diversify their sources of funding and to continue to increase tuition fees. There will likely be continued pressure to increase the differentiation of fees on the basis of program costs and perceived personal economic benefit. There may also be questions as to whether students in certain programs, e.g. graduate programs, should receive the same level of public subsidy as those in first-degree programs.

The level of public respect for and confidence in universities has declined. In several other provinces, governments have commissioned public reviews in an attempt to address these public concerns. In response to these reviews, universities have been challenged to revise their governance and management systems to improve their flexibility and responsiveness, to improve the quality of undergraduate teaching, to adapt their programs more to the needs of the public, and to adapt their pedagogy to the needs of non-traditional students. In other parts of the world, similar pressures have led to major changes in the ways universities relate to the state, to each other, and to other parts of the education system. There are indications of similar initiatives in several Canadian provinces. In the course of this re-examination, several of the traditional values of Canadian universities will be questioned: e.g. the teaching-research connection, class size as a determinant of quality, tenure, and collegiality.

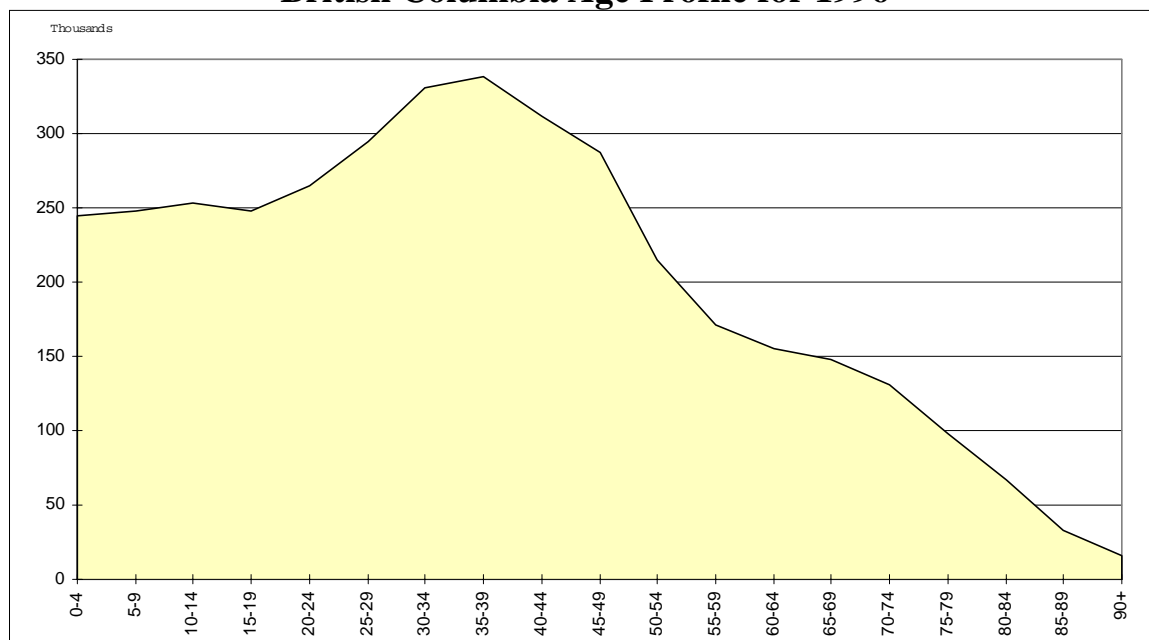
Universities have always experienced a tension between accountability and autonomy. In recent years the balance has been tilting in the direction of accountability to the public and government. The emphasis on accountability and performance measures will probably continue for the foreseeable future.

Section 1

Demographics

“Baby Boom” and “Boom Echo”

British Columbia Age Profile for 1996



- The “baby boom” occurred in Canada between 1947 and 1966. Those born in that period are now between 31 and 50 years of age. Although the population profile is similar in much of the developed world, the surge in the fertility rate after World War II occurred between 1946 and 1964 in the U.S., lasted longer but was less dramatic in Australia and New Zealand, and did not happen at all in Europe or Japan.
- The “boom echo”, resulting from the “baby boomers” having children, combined with a continuing migration to British Columbia, should increase the numbers of high school graduates over each of the next ten years.

B.C. Grade 12 Projected Enrolment

	Public	Private	Total
1996(Actual)	45,264	2,901	48,165
1997	46,373	2,970	49,343
1998	47,469	3,040	50,509
1999	48,421	3,098	51,519
2000	49,284	3,151	52,435
2001	50,375	3,223	53,598
2002	51,350	3,281	54,631
2003	51,814	3,308	55,122
2004	52,036	3,320	55,356
2005	52,594	3,362	55,956
2006	53,706	3,437	57,143

Implications:

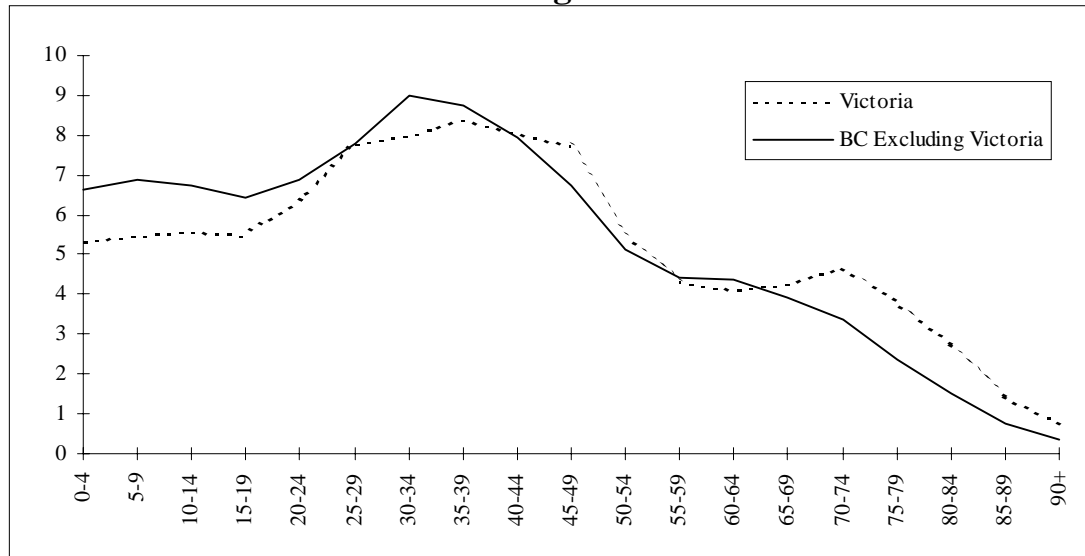
- It has been argued that much of the increase in post secondary enrolment in education was due to the drop in the child/parent ratio. The smaller families meant more income and assets were available for education. This possibility combined with the forecast of

continued migration to British Columbia suggests that the demand for post-secondary education will continue into the next millennium.

- The concept of “life-long learning”, combined with the trend toward more job and career changes, suggests a greater demand for post-secondary education, particularly part-time, from those over 25. Substantial growth is expected in the number of older British Columbians seeking flexible educational opportunities.

Victoria has an older population than British Columbia

B.C. and Victoria Age Profiles for 1996



- The current population profile of Victoria is, in general, similar to many other jurisdictions. The most noticeable difference is the second “hump” in the 60 - 74 age group.
- The population for the capital metropolitan area, which has grown from 267,000 in 1986 to 320,000 in 1996, is forecast to increase to 357,000 by 2006 and 419,000 by 2020. It should be noted, however, that population forecasts for small areas include assumptions on migration, births, and deaths based largely on past conditions. Unforeseen developments in economic climate, national immigration policy, and land use and zoning laws could result in a future much different from that forecast.

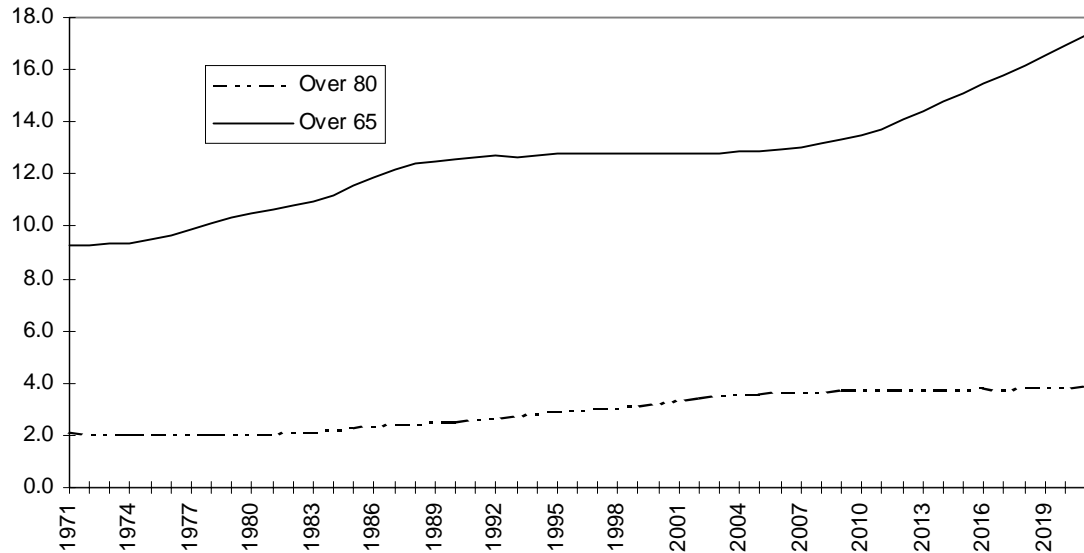
Implication:

- Post-secondary institutions in Victoria will be serving and be served by an area with a growing, ageing population with a high percentage of retirees. This large constituency of seniors could mean a lower public funding priority for education. Alternatively, it can represent an opportunity for programming less directed to career aspirations but more to general interest and leisure. A related question is whether society will continue to subsidize education with little potential for economic benefit to society.

Source: BC Stats

A growing percentage of British Columbia's population will be seniors

Trends in British Columbia's Retirement Age Population



- Per cent of population over age 65 as of 1993:

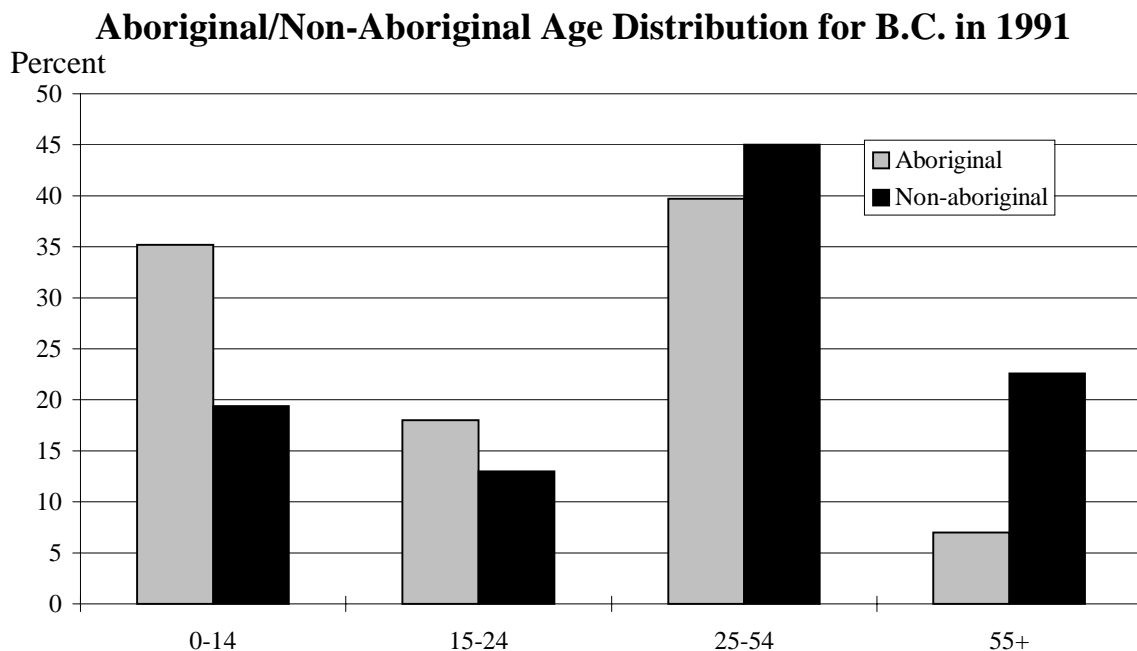
B.C.	13	Canada	12	Sweden	18
Great Britain	16	West Germany	15	Italy	14.5
France	14	USA	12.5	Japan	12.5
Australia	11	Argentina	9	South Korea	5
Philippines	3.5				
- In 1971, 9.3% of the British Columbia population was over 65 and 2.1% was over 80. By 2021 it is forecast that these two percentages will almost double.

Implication:

- The issue of whether we can afford the increasing social costs and tax burdens associated with an ageing population without severely cutting into other areas such as education, were examined in 1988 and 1992. The conclusion was that it may be possible if the recent levels of economic growth can be maintained in the long term. The question is whether such economic growth can be maintained given our current dependence on natural resource extraction.

Source: BC Stats

British Columbia's aboriginal population is young and growing



- The Aboriginal population in British Columbia is much younger than the Non-Aboriginal population, with the 0 - 14 age group forming 35.2% of the former but only 19.4% of the latter. This is the result of the higher fertility rate of First Nations women. The gap between the two groups, however, is narrowing, and forecasters expect this to continue.
- Aboriginal people have a lower employment rate than Non-Aboriginal people. The percentage of First Nations people with a paid job in June 1991 was 62%, while the percentage for First Nations people living on a reserve was 36%. Nearly a quarter of registered Indians on reserves live in remote areas, where employment opportunities are limited.
- In 1981 there were 83,000 Aboriginal people in British Columbia which formed 3.0% of the population. By 1991 this had climbed to 169,000, or 5.2% of the population.
- The exposure of B.C. First Nations people to some post-secondary education or training is lower than for the overall population. However, younger Aboriginal people have both a higher educational attainment and greater labour force participation than their older counterparts.

Implication:

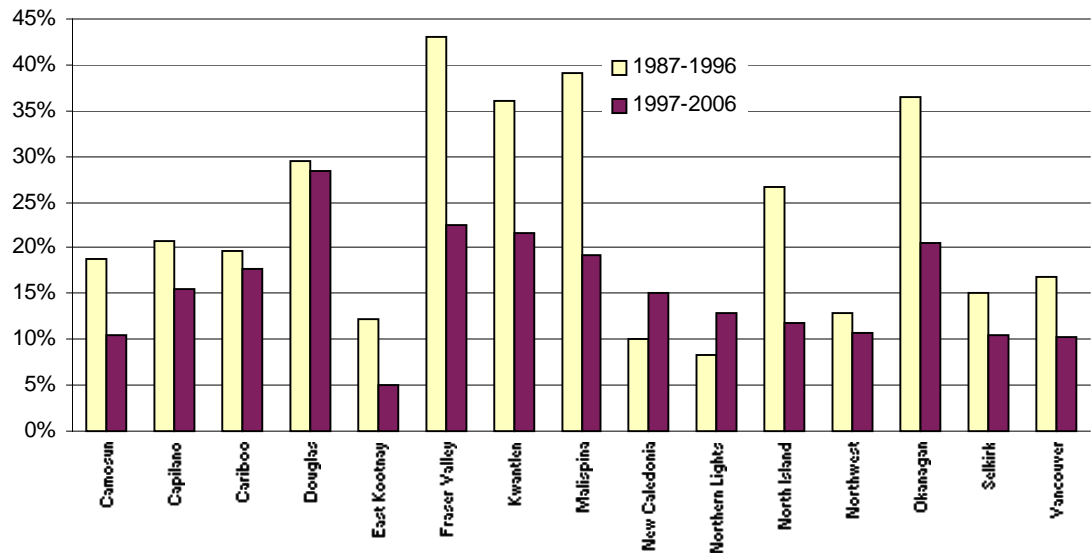
- Although the Aboriginal component of British Columbia's population is small, its relative growth, particularly in the younger age group, will result in First Nations people becoming an increasingly important part of B.C.'s labour force and post-

secondary population. There will be some market for post-secondary programming appropriate to the needs of the First Nations people both on and off reserves.

Source: B.C. Stats
Ministry of Skills, Training, and Labour

Areas of growth in British Columbia

Population Growth by College Region



- The Camosun College region, or Capital Regional District, includes school districts 61 (Victoria), 62 (Sooke), 63 (Saanich), and 64 (Gulf Islands).
- Continued population growth driven by migration to British Columbia is forecast for all regions, including the Capital Regional District, where population increased by 19% from 1987 - 1996.
- In the next ten years, population on the lower mainland is forecast to grow 22%, while a 15% increase is forecast for Vancouver Island.

Implication:

- The demand for higher education will continue to increase across the province. However, growth pressure is apparently less here than in many other parts of the province, particularly the lower mainland.

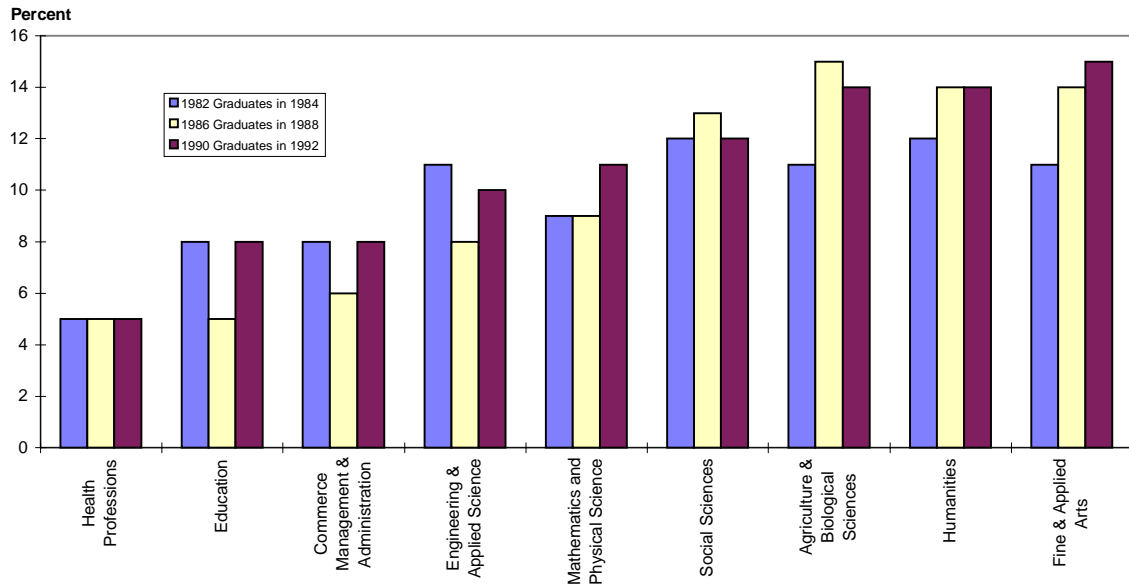
Source: BC Stats

Section 2

Economy and Labour Force

Health Profession employees have the lowest unemployment rate while Fine and Applied Arts Graduates have the highest

Unemployment Rates for Canadian University Graduates by Field of Study



- Employment status is as of June 1984 for 1982 graduates, May 1988 for 1986 graduates, and June 1992 for 1990 graduates.
- The health professions, which include physicians, dentists, veterinarians, chiropractors, nurses, physiotherapists, pharmacists, dieticians, optometrists, opticians, dental hygienists, and medical laboratory technicians, continue to have a low unemployment rate of 5%. An ageing population means that the demand for health professionals will remain strong.

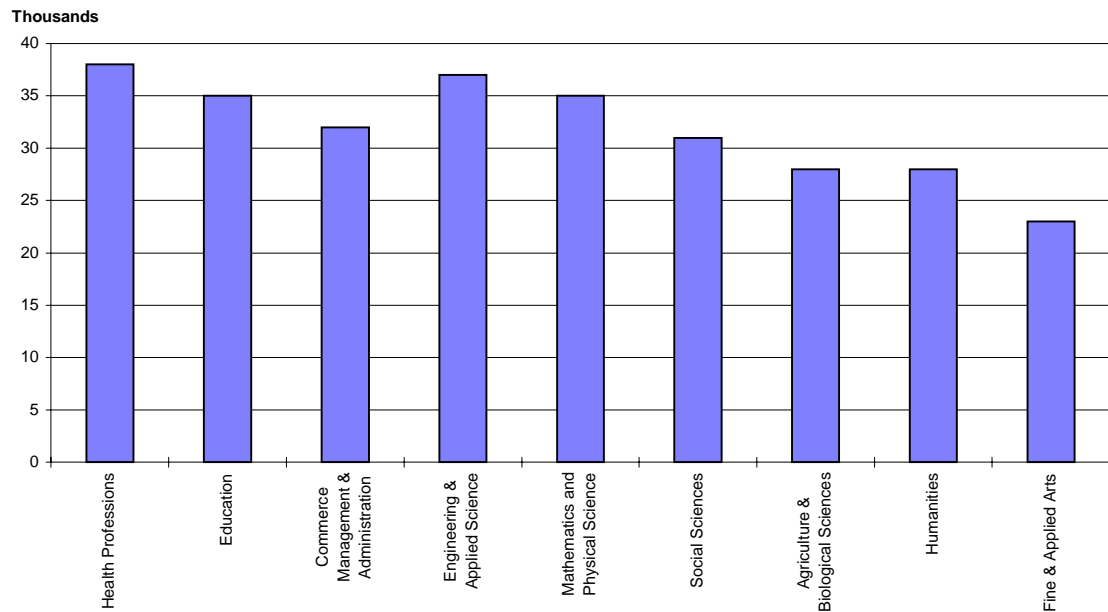
Implication:

- The decline in employment opportunities in certain fields of study may influence future demand at universities, particularly if tuition fees grow higher. The prospect of much higher student debt will likely result in students looking at their education choices more critically.

Source: Earning and Labour Force Status of 1990 Graduates, Statistics Canada
B.C. Ministry of Skills, Training, and Labour

Graduates in the Health Professions have the highest starting salaries

Median Salaries for Full-Time Canadian University Graduates by Discipline



- Full-time is defined to be thirty or more hours of employment per week. Salaries are as of June 1992 for those who graduated in 1990. Bars are in the order of decreasing employment prospects.
- The highest salaries for 1990 graduates working full-time in 1992 went to graduates from health-related fields. Not coincidentally, graduates from the health professions had the lowest unemployment rate, indicating that the demand for such graduates was high relative to the supply. Conversely, not only were graduates from agriculture and biological science, humanities, and fine and applied arts more likely than other graduates to be unemployed, those that acquired full-time employment earned less.

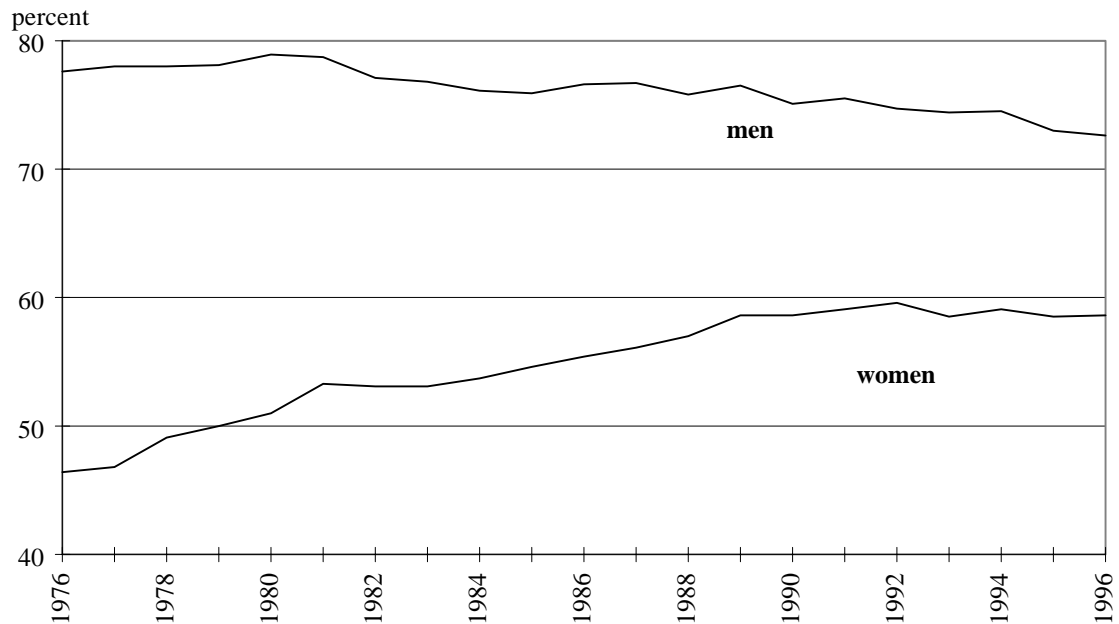
Implication:

- Demand for education in areas with low salaries and high employment may decline relative to other, more lucrative, areas.

Source: Earnings and Labour Force Status of 1990 Graduates, Statistics Canada

Labour force participation of women has levelled off

BC Labour Force Participation Rates for Men and Women



- The massive entry of women into the labour force has been one of the defining social changes of the last twenty years. Between 1975 and 1990 the number of women who entered the labour force was almost double the number of men who entered. But the participation rate for women has levelled off, while the rate for men continues to decrease. This decrease for men is particularly precipitous in the 55 - 64 age group. The recession pushed older men out of the labour market more than it did women. This is consistent with the fact that manufacturing and construction, areas dominated by male workers, were particularly hard hit during the recession. The growth of early retirement, both forced and voluntary, also contributed to this change. Between 1976 and 1996 the participation rate of men aged 55 - 65 dropped from 72% to 63%.
- A recent Statistics Canada study showed that the earning power of Canadian men under 35 has deteriorated for nearly twenty years. This is the result of several factors, including the declining percentage of unionized workers, and the shift from manufacturing to lower-paying service sector jobs, as unskilled and semi-skilled workers are replaced by machines.
- The labour force participation rate for women will continue to drive the demand for child care workers.

Implication:

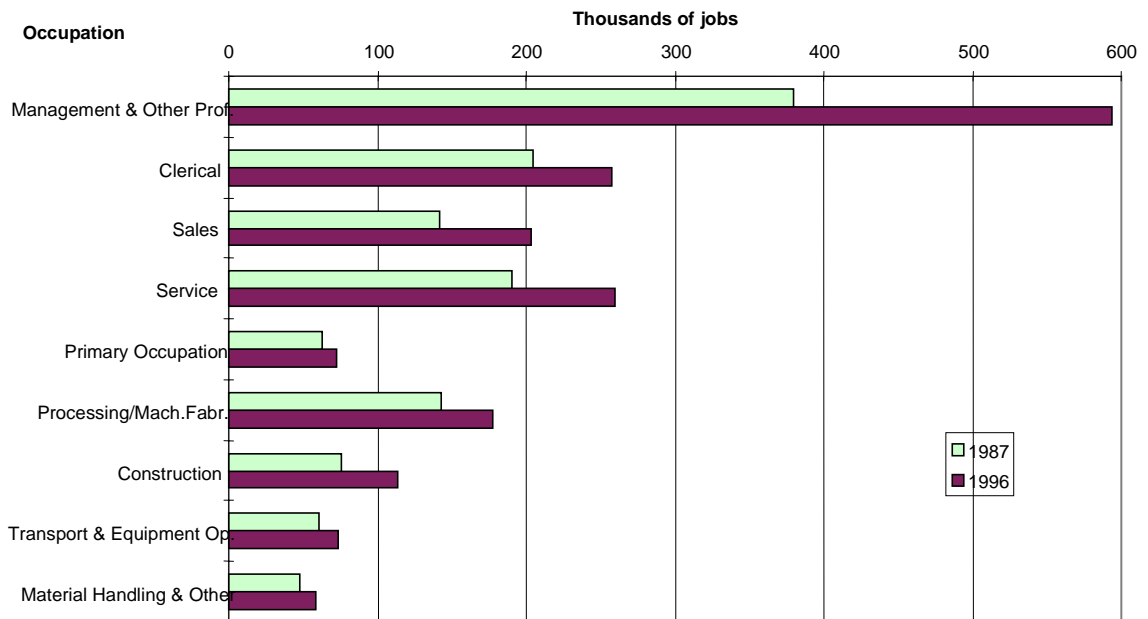
- The increase in B.C. female work force participation and B.C. female university attendance, which has been greater than for men for many years, are linked. This

long-term growth in the supply of qualified women students — a result of their increasing educational participation — can now be expected to level off.

Source: Ministry of Skills, Training, and Labour

White-collar jobs have increased at a greater rate than blue-collar jobs

British Columbia Employment by Occupation



- The following changes in the number of jobs by occupational category took place between 1987 and 1996:

White Collar

	Change in Employment ('000s)	Share of Total Increase
Managerial/ Professional	214	43%
Service	69	14%
Sales	61	12%
Clerical	53	11%

Blue Collar

	Change in Employment ('000s)	Share of Total Increase
Construction	37	7%
Processing	34	7%
Transport	13	3%
Material	11	2%
Primary	9	2%

- White collar jobs are defined as those where the worker deals mainly with people or information. Blue collar are those where manual labour constitutes an important part of the job. Primary occupations include farming, fishing, logging, and mining.
- In 1987, employment in white collar jobs accounted for 70.2% of all jobs. By 1993 this percentage had increased to 72.7%, largely due to the increase in the managerial/professional category, where the share of total employment increased from 30.5% to 32.9%.

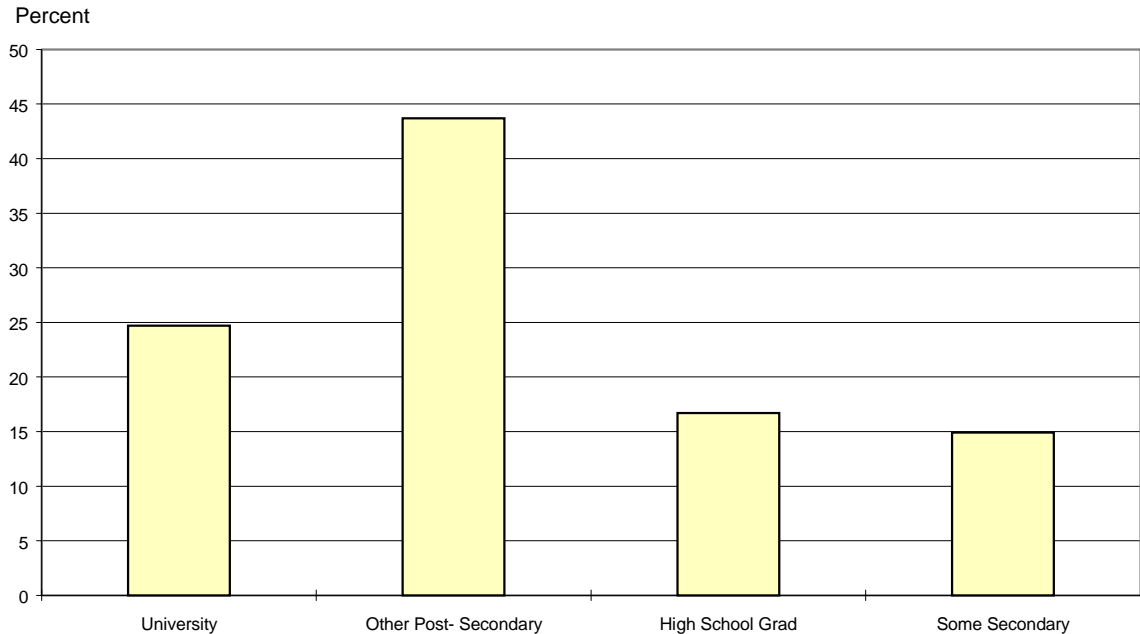
Implication:

- The changing skill requirements of the labour market will be reflected in changes in areas of demand in higher education. Areas that have shown strong growth in the 90s and have a shortage of qualified personnel include management jobs, especially in health and education; electronic, electrical, mechanical, and software engineering; chemical, biological, and environmental science; social work; forestry conservation; and physiotherapy, occupational and speech therapy.

Source: Labour Force Annual Averages, Statistics Canada

The majority of new jobs in the next decade will require post-secondary education

Projected B.C. Employment Openings by Minimum Education Requirement, 1995 - 2005



- The highest proportion of new jobs in British Columbia to the year 2005 will require, as a minimum, some non-university post-secondary education. However, many of these jobs will be filled by those who are “overqualified”, i.e. with university degrees.
- From 1990 to 1996, 83% of the jobs filled in the province went to people with post-secondary credentials.
- Since 1991, provincial funding has been shifting in favour of non-academic programs. In the last six years, the province has created twice as many new seats in colleges and institutes as it has opened in the universities. College and institute funding has increased 24% over that period, while university funding has increased by 13%.
- Employers are hiring three times as many university graduates as the province’s universities are supplying.

Implication:

- Though the debate in British Columbia continues over the relative merits of a university versus a trade and technical credential, both sides agree that British Columbians with only a high school degree face a bleak future.

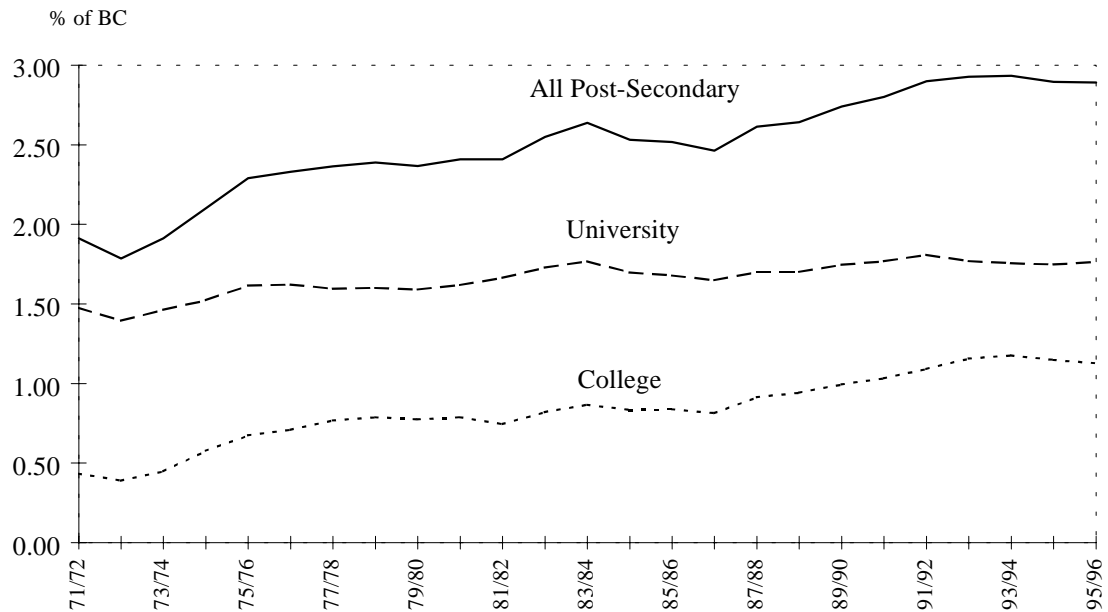
Source: Ministry of Skills, Training, and Labour

Section 3

Students

The participation rate of B.C. universities has remained relatively constant for the last ten years

B.C. Post-Secondary Academic Participation Rates



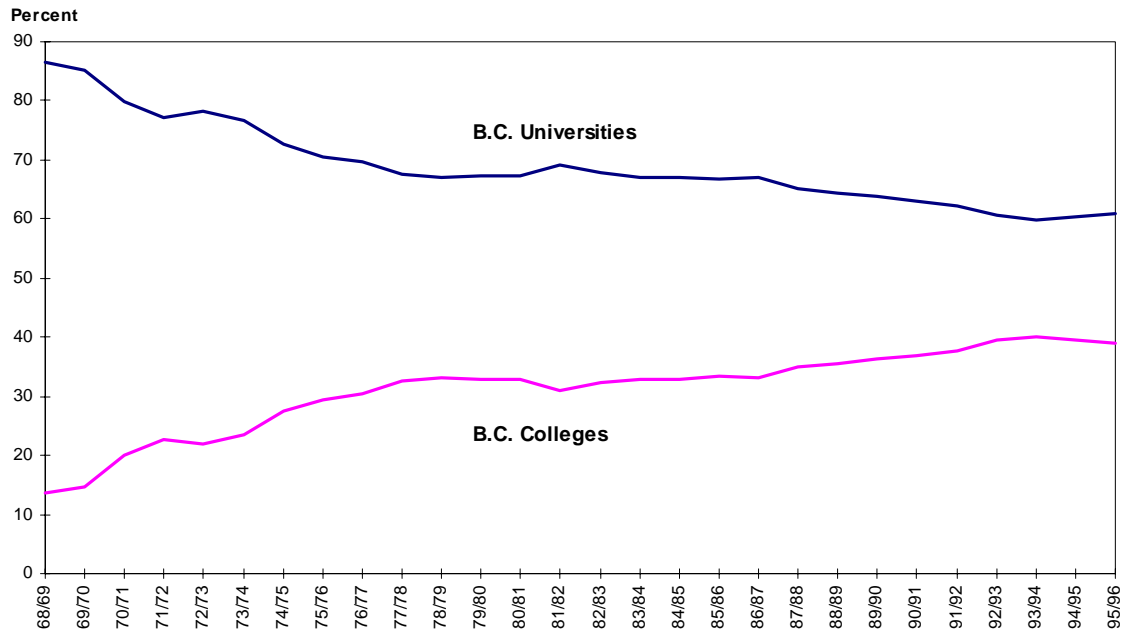
- The British Columbia university participation rate (number of students divided by the B.C. population) has remained roughly constant since 1983/84. The current figure of 1.76% compares with 1.61% twenty years ago — a growth of 15%.
- Since 1983/84, the college participation rate has increased 26%. In twenty years their participation rate has increased almost two and a half times.

Implication:

- The growth in university enrolment over the last ten years is a reflection of the growth in population. The growth in college enrolment is, in addition to population growth, an increase in their participation rate. The recent expansion of the B.C. university sector, combined with the uncertainty of population forecasts, may mean that university enrolment could actually drop if accessibility is not increased.

Universities are facing increasing competition in the provision of higher education services

Share of B.C. Post-Secondary Academic Enrolment by Institution Type



- Universities have never enjoyed a monopoly in the provision of advanced education — only in the provision of credentials, specifically degrees.
- Canadian universities have enjoyed a protected environment by virtue of government control of the authority to grant degrees. Even so, some foreign (largely USA) institutions have found it feasible to export programs. The North American Free Trade Agreement will likely make it more difficult to control this form of competition.
- The private (largely corporate) sector is becoming increasingly involved in the provision of higher education. It was estimated that employers in the USA spent more on employee education (excluding on-the-job-training) than the total of all state appropriations for universities. Some corporate sponsored institutions and programs have been accredited (e.g. Arthur D. Little, The Wang Institute).
- Governments in many countries and several Canadian provinces have responded to the pressure for accessibility by extending degree-granting authority to other existing institutions or by creating new ones. The most significant examples for Canada are the creation of the Unified National System in Australia and the demise of the traditional “binary” system in the United Kingdom. In each of these cases the government has created a single tertiary education system involving universities, institutes, and colleges. For example, in Australia, government initiative converted a higher education system composed of 19 universities and 47 colleges of advanced education (1987) to the current one composed of some 35 universities all funded by the same rules. This imposes severe pressures on small and weak universities —

unable to compete with former colleges for teaching resources or with the large multi-versities for research funding.

- Advances in computer and communications technology have the potential to make education materials available anywhere in the world. This is likely to become increasingly important in the education plans of non-traditional students. Institutions will be required to re-examine and question the traditional lecture mode of pedagogy. For example, a recent deal struck between an Alberta University and an Ontario college shows how new types of competition are rewriting the rules for post-secondary education in Canada. For September 1998, the University of Calgary's Faculty of Nursing will offer a one year, post-diploma Bachelor of Nursing to students at Centennial College in Scarborough, Ontario. The university programs, taught by Calgary and Centennial faculty, will be offered by the Internet. The deal marks a new beachhead for institutions outside a province in competing with a university in that province.
- There is increasing pressure on institutions to grant advanced standing or transfer credit for other educational experiences. This pressure ranges from public insistence that credits be more easily transferable between universities, to proposals to grant credit or advanced standing for non-institutional education or work experiences.

Implication:

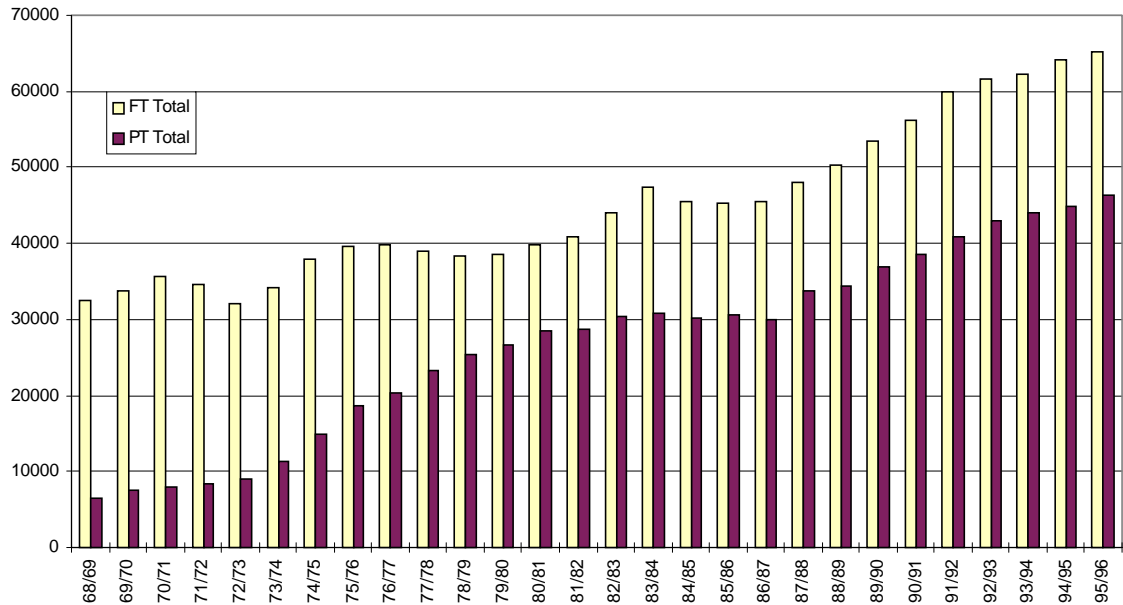
- If traditional institutions are seen to be unresponsive to changes in society's educational needs they may find their role usurped by other, more flexible, forms of learning.

International Trends in Accessibility

- Higher education in Europe has traditionally meant attending a university. In recent decades all major Western European countries, with the exception of Austria and Italy, have established at least one parallel system of post-secondary education.
- These parallel systems, which tend to offer degrees that can be completed in two or three years, deliver specialized training in ways that are viewed as more efficient and less costly than the universities. These new institutions are also seen as a way to upgrade the education and qualification of a work force increasingly viewed as being less effective than those in such nations as Japan. The education tends to be narrower and more practically oriented than that offered by universities, and gives training in such areas as business, engineering, medicine, social work, and teaching.
- Unlike the community colleges in the United States, competition for admission to the European institutions can be intense, often making them harder to get into than some universities. They are also a true parallel system in that they are not for people hoping to go to university.
- In 1992, Britain decided to give university status to its polytechnics, which now compete with the traditional universities for government funds. The move was seen as a way to attract more students to the polytechnics by increasing their status in relation to the universities.
- The proportion of British college-aged students in post-secondary education has jumped by 15 to 30 percent in five years. This brings it to the level of Greece and Portugal: still low by Western European standards, where nations like Denmark and France have rates of 50%.

Part-time enrolment has grown more rapidly than full-time enrolment

Academic Post-Secondary Enrolment at B.C. Institutions



- In 1968/69, part-time academic enrolment at B.C. universities and colleges was 20% of the full-time enrolment. By 1995/96, the figure had reached 71%. The growth in part-time academic enrolment at the colleges has been particularly striking, where part-time has exceeded full-time enrolment since 1976/77. The opening of four colleges in 1975/76, with mainly part-time enrolment, contributed to this growth. In B.C. universities, part-time enrolment has increased from 15% of full-time enrolment in 1968/69 to 47% of full-time enrolment in 1995/96.

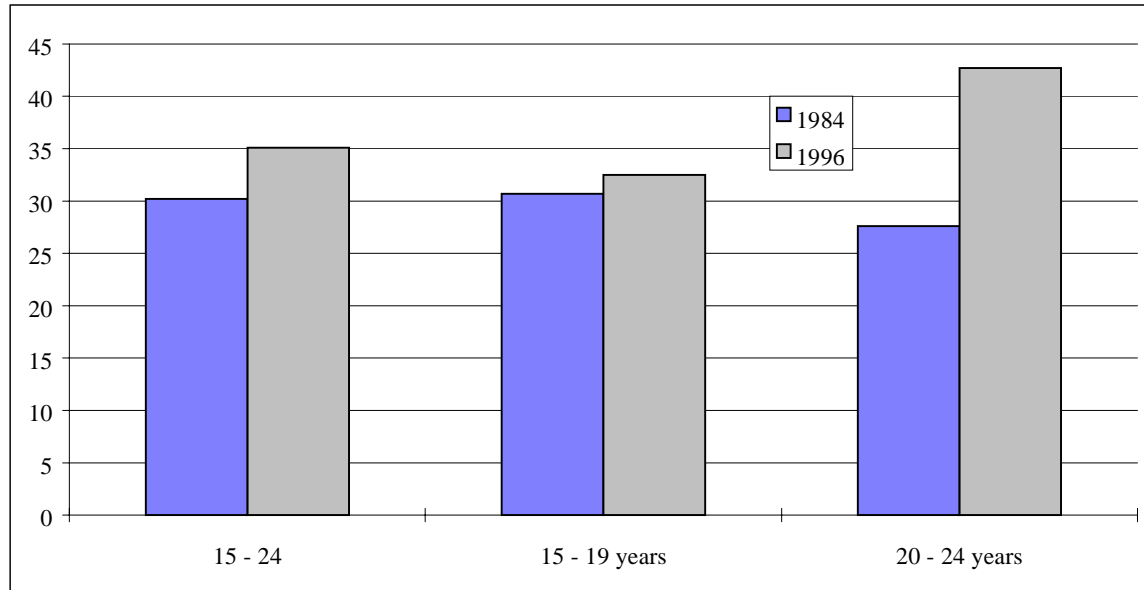
Implication:

- The ageing of the population, higher skill requirements for the job market, and the growth of “life-long learning” suggests continued growth in the demand for part-time programs. According to the Canadian Labour Market and Productivity Centre, the half-life of technical knowledge is three to seven years. “In a rapidly changing field,” says John Kettle, “most of what you know will be wrong in four years. Unless you act like a student for the rest of you life while keeping your job going, you’re going to be hopelessly out of touch — or have to go into management.”

Source: BC Ministry of Skills, Training, and Labour

More students work while attending school

Employment Rates of Full-Time BC Students



- Between 1984 and 1996 the percentage of full-time students aged 15 - 24 who participated in the labour force between September and April rose from 30.2% to 35.1%. Most noticeable was the increased participation of the 20 - 24 year group, from 27.6% to 42.7%

Implication:

- Part-time and responsive program design, such as weekend or evening degree programs, will be needed to minimize the attrition of the growing number of students who either choose to, or need to, work while attending school.

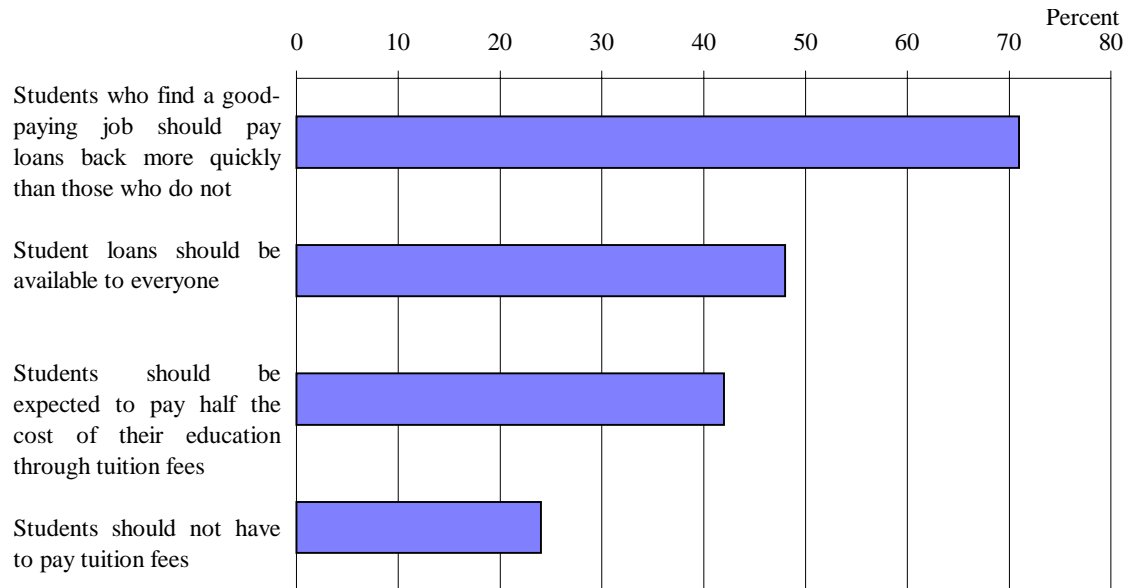
Source: Labour Force Annual Averages, Statistics Canada

Section 4

The Public and Government

Student funding

Statements Related to Tuition Fees/Student Aid % Agree/Strongly Agree



- The December 1992 survey question: "...tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. a) Student loans should be available to everyone regardless of his or her financial circumstances b) Students should not have to pay tuition fees to attend university; it should be free c) Students who find a high-paying job after university should be asked to pay back their loans more quickly than students who get a low-paying job after university d) Students should be expected to pay at least half the cost of their university education through higher tuition fees."
- The telephone survey was conducted for the Association of Universities and Colleges (AUCC). A sample of 2000 was used, which means that there is a 95% certainty that the results are within ± 2.0 percentage points of the results had the entire Canadian population been surveyed.
- About three-quarters of the population believed that students should pay tuition. The provinces that most strongly believe this are: Alberta (85%), Saskatchewan (82%), Nova Scotia (76%), and British Columbia (75%). The level also went up for those in the higher income brackets, with 80% of those earning over \$60,000 a year supporting tuition.
- Over 70% of respondents agreed that students who acquire a higher paying job after university should be asked to pay back their loan more quickly than those with a lower paying job. Support was strongest in Manitoba (76%), British Columbia (75%) and Quebec (74%). Older people (55 and above) were more likely to support this measure (79%) than younger (18-34) people (65%). There was no significant difference among those with different educational levels.

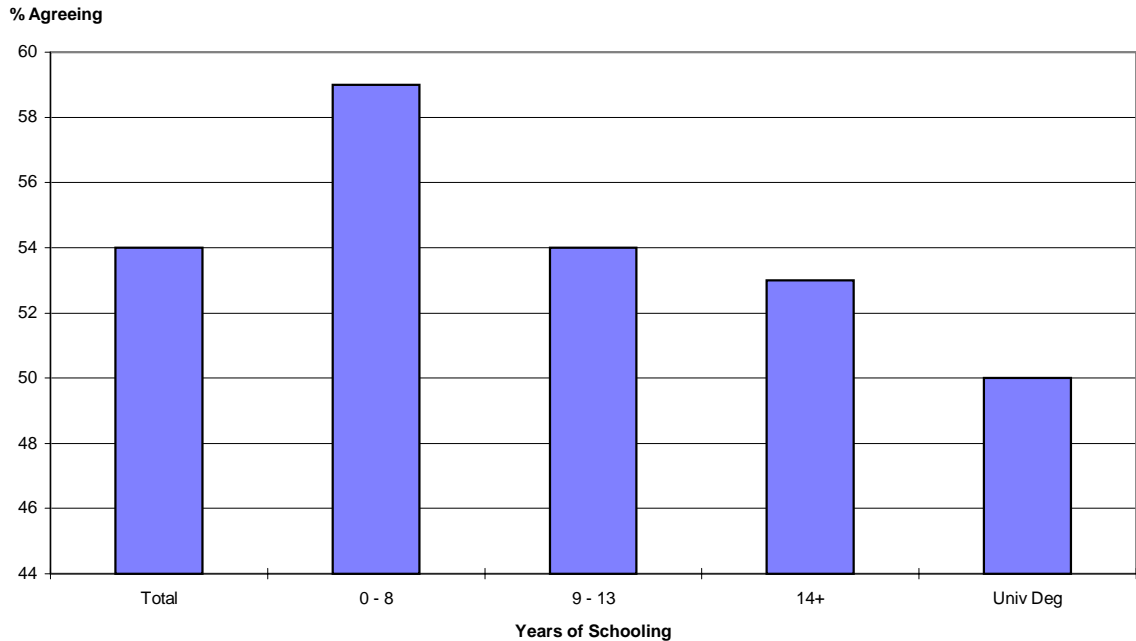
- About half (48%) of respondents believed that student loans should be available to everyone. The concept of universality for student assistance was more strongly supported by those with less than a high school education (56%) than by those with a university education (38%).
- This survey has not been updated. However, a 1996 survey of 1,000 adults living in Ontario, conducted by the Ontario Institute for Studies in Education, indicated that 90% of respondents believed students should pay tuition, with 60% believing that students should pay at least half the cost of their education.
- A 1997 study from the Maritime Provinces Higher Education Commission revealed major differences between low and higher-income students when it came to financing their education. In a questionnaire, 57% of parents earning less than \$30,000 said they would have second thoughts about their children continuing their studies, given the amount of loans required and the time taken to pay them off — compared to 28% of students in families earning more than \$50,000.

Implication:

- The public strongly supports a student repayment plan based on income, but does not support free tuition. This opposition to free tuition, combined with cost of tuition which has doubled in the last ten years, may threaten the notion that ability, not income, should be the criterion for further studies.

The belief that universities do an adequate job of preparing students for the work world, which has declined since 1990, decreases with education

Do Universities Adequately Prepare Students for the Work World?

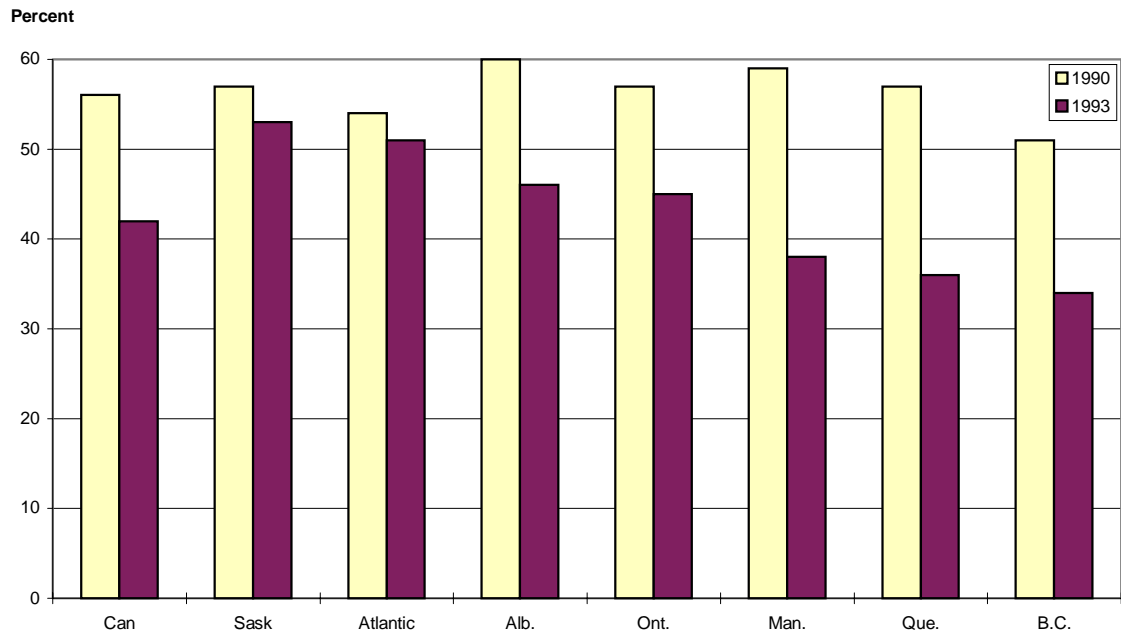


- The September 1993 survey question: “Do universities in this province do an adequate job of preparing students for the work world?”
- There has been a dramatic decline of nine points since 1990 in the percentage of Canadians who agree that universities do an adequate job in preparing students for the work world, with the greatest declines in Manitoba and British Columbia.
- The Environics Research Group suggests that increasing concern among Canadians regarding the ability of students to compete in the wider world outside academia is a reflection of anxiety over the economy and the uncertain employment picture. They also suggest that the results may reflect concern that cutbacks in education funding are affecting the ability of universities to give students the training required by increasingly demanding employers.
- The results of a 1997 update of this survey may be purchased by interested organizations.
- A survey of the general public in British Columbia, dealing with knowledge of and attitudes toward the post-secondary sector, is being conducted by The University Presidents’ Council of B.C. and the Advanced Education Council of British Columbia. Results should be available early in 1998.

Source: Environics Research Group Limited

Canadians have grown more critical of the quality of post-secondary education

Respondents Rating Post-secondary Education as “Excellent or Good”

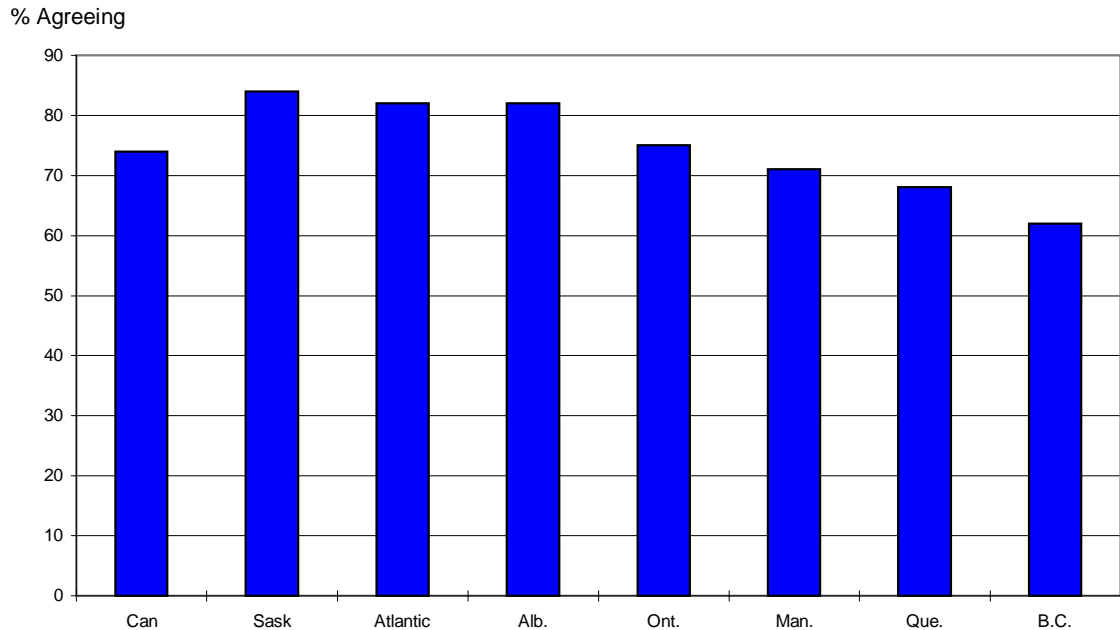


- The September 1993 survey question: “Thinking about your own province, do you think the quality of post-secondary education is generally excellent, good, adequate, poor, or very poor?”
- Although all areas of Canada have declined in Canadians’ assessment of the quality of post-secondary education, the most dramatic declines have been in Manitoba, Québec, and British Columbia. In British Columbia, the excellent or good rating dropped from 51% to 34%.
- The public is sending mixed messages about their level of satisfaction with university education in Canada. In the major reviews on accountability which have occurred in most Canadian provinces, there is dissatisfaction with the quality and quantity of undergraduate teaching, the amount of time devoted by the professoriate to research and internal governance, administrative costs, adaptation to the needs of non-traditional students, lack of criteria by which to measure quality, and program relevance, to name a few of the concerns. On the other hand, the pressure on accessibility indicates that the public still places a high value on a university degree.
- The results of a 1997 update of this survey may be purchased by interested organizations.
- A survey of the general public in British Columbia, dealing with knowledge of and attitudes toward the post-secondary sector, is being conducted by The University Presidents’ Council of B.C. and the Advanced Education Council of British Columbia. Results should be available early in 1998.

Source: Environics Research Group Limited

Satisfaction of Canadians with adult education opportunities remains, in general, high.

Do Universities Provide Adequate Adult Education Opportunities?

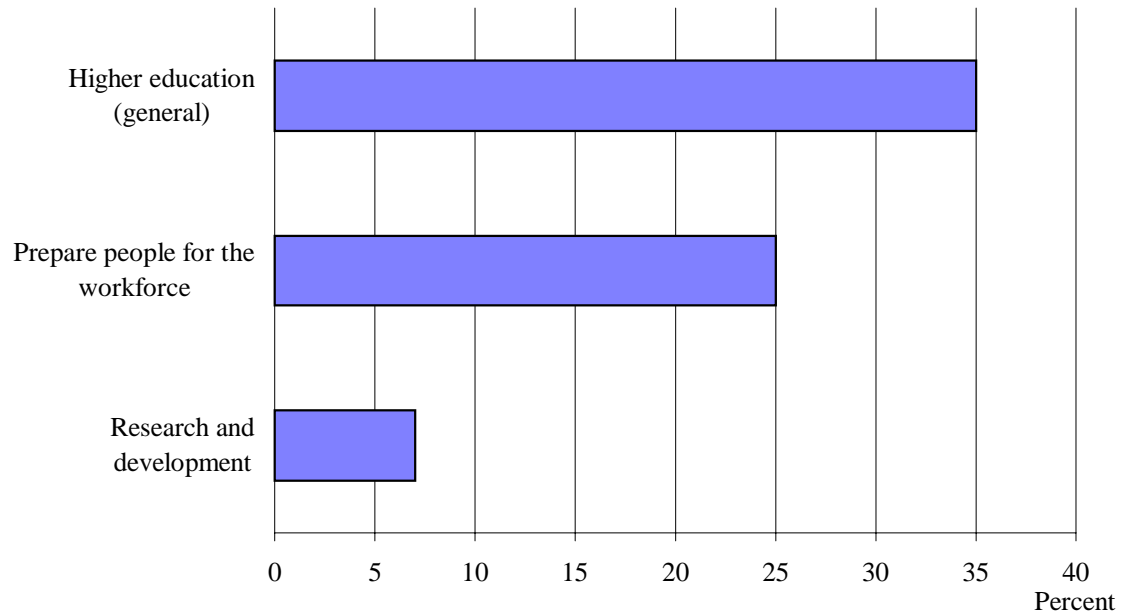


- The 1993 survey question: “Do universities in this province do an adequate job of providing ongoing education to adults?”
- The satisfaction with the contribution of universities to adult education opportunities remains high, and is essentially unchanged from 1990. Residents in the Atlantic provinces, Québec, and Saskatchewan expressed the highest level of satisfaction, while residents in B.C. expressed the lowest, at 62%.
- The results of a 1997 update of this survey may be purchased by interested organizations.

Source: Environics Research Group Limited

Canadians view general education and preparing students for the workforce as the two most important roles of the university

The Most Important Role of Universities in Canada



- The December 1992 survey question: “What, in your opinion, is the most important role of universities in Canada? And, what is the second most important role.
- The telephone survey was conducted for the Association of Universities and Colleges of Canada (AUCC). A sample of 2000 was used, which means there is a 95% certainty the results are within ± 2.0 percentage points of the results had the entire Canadian population been surveyed.
- Sixty percent of respondents volunteered either higher education (general) or preparing young people for the workplace as the most important role of a Canadian university. Less than one in ten (7%) mentioned research and development as the most important role of universities in Canada. In response to what was the second most important role of universities, 38% did not provide a response, 10% said higher education, 10% said research and development, and 9% said job training.
- This survey has not been updated.

The Most important Role of Universities in Canada by Province

	Higher education (general)	Prepare young people for workforce		Higher education (general)	Prepare young people for workforce
British Columbia	50	22	Alberta	41	23
Manitoba	48	18	New Brunswick	41	21
Nova Scotia	46	16	Ontario	36	27
Saskatchewan	45	29	Newfoundland	35	31
P.E.I.	44	23	Québec	17	26

- In all provinces but Québec, higher education (general) was considered the most important role for the university. This value ranged from a high of 50% in British Columbia to a low of 17% in Québec, where more respondents ranked preparing young people for the workplace as being most important.

Implication:

- The proportion of the public that considers the most important role of the university to be general higher education is greater than the proportion who view the university's role as simple job training. Few view research and development as the most important role.

Demands for university accountability are growing, both in Canada and abroad

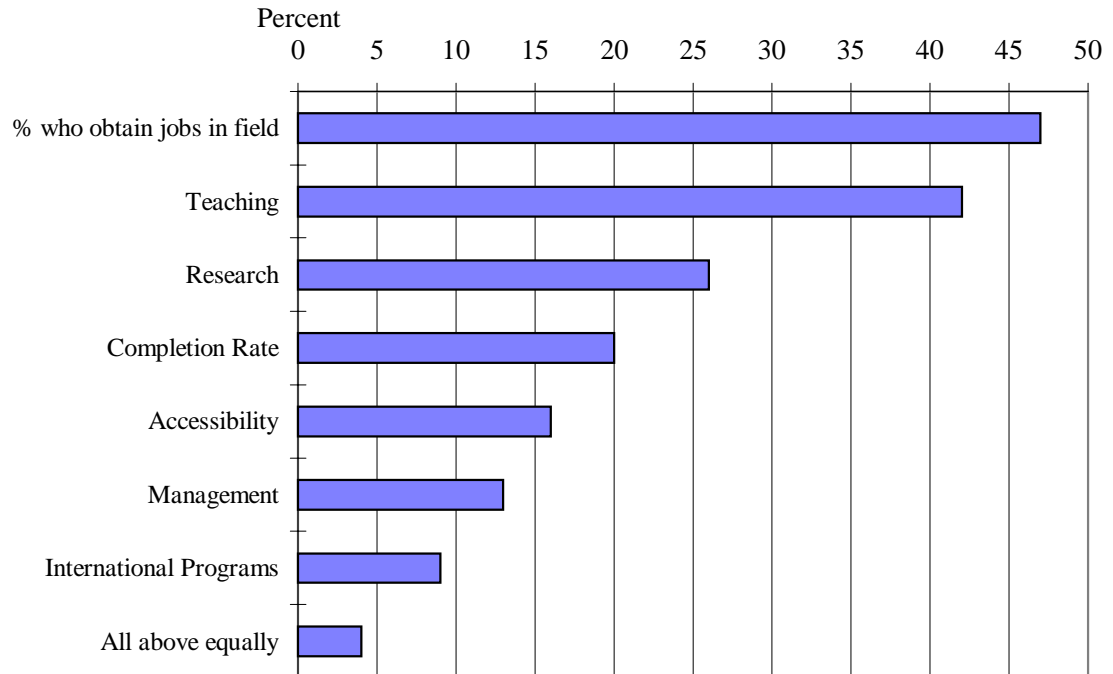
- Virtually all provincial governments in Canada have challenged their universities to be more transparent and accountable, in program as well as fiscal matters, with Governments seeking assurances that universities are both efficient and effective. In a 1997 plenary on Higher Education in Canada, Harry Arthurs, President Emeritus of York University, stated that “the blowsy rhetoric that emanates from institutions” will need to be replaced with more clarity on the meaning of such words as “quality” and “excellence”.
- This trend is world-wide and has been at the root of the major restructurings that have occurred in the U. K., Australia, and New Zealand, as well as in several European countries. There is no evidence that the process is complete, either abroad or in Canada.
- Major reviews initiated by provincial governments have occurred in most Canadian provinces. In September 1997, the educational ministers from nine provinces approved the introduction of measures to evaluate the performance of post-secondary institutions.
- As part of this restructuring, the search for performance measures has also become international. An International Network of Quality Assurance Agencies in Higher Education, composed of 35 countries, was formed in Hong Kong in 1991 and held its first meeting in Québec in May 1993.
- International assessment of standards is being driven in general by the tendency to freer world-wide trade in both goods and services (including education), and in particular by the growing tendency of universities in some countries to aggressively export programs and recruit foreign students.
- In the name of accountability many governments (e.g. U. K., Australia, New Zealand, Ontario, Manitoba, Alberta) either have or are proposing to implement performance-based funding models.

Implication:

- In the absence of institution-designed performance measures, government-designed measures are likely to be developed to serve government’s needs.

University Quality

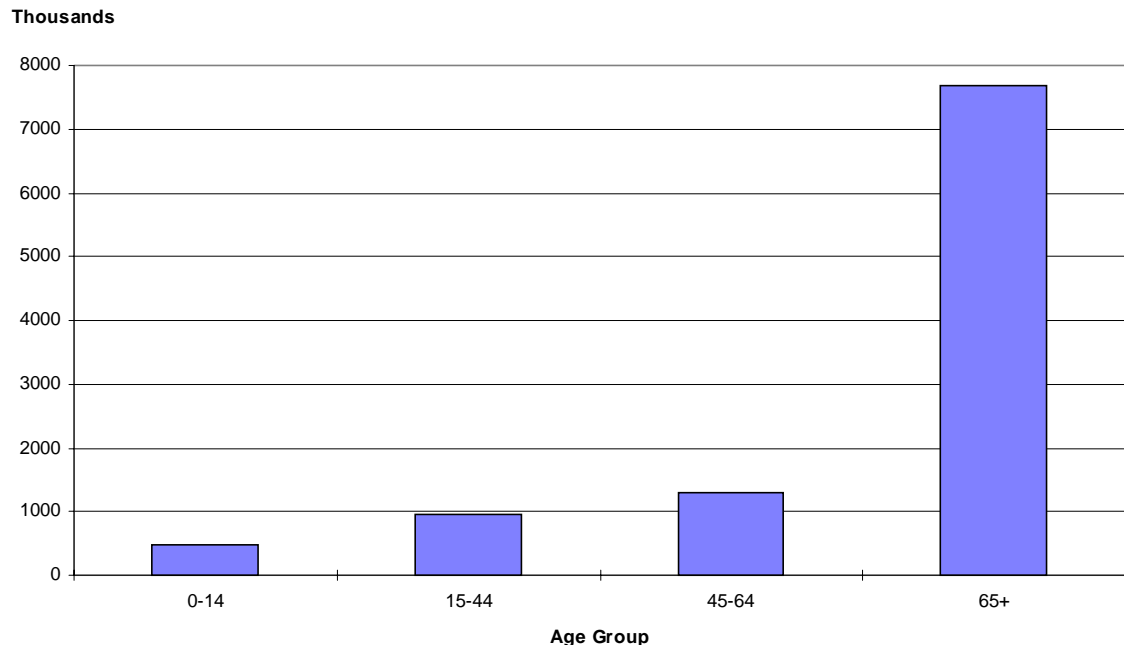
Factors Deemed Important in Measuring University Quality



- The January 1991 survey question: “Which of the following factors are important in measuring the quality of universities? (three responses only) a) Research b) Management c) Student Completion Rate d) Accessibility e) International Programs f) Teaching g) Percentage of graduates who obtain jobs in their field of study h) The above equally.”
 - The telephone survey was conducted for the Association of Universities and Colleges (AUCC). A sample of 1500 was used, which means that there is a 95% certainty that the results are within ± 2.5 percentage points of the results had the entire Canadian population been surveyed
 - The two most important factors deemed by the public as very important in measuring the quality of universities were the percentage of those who obtain jobs in their field (47%) and teaching (42%). About one quarter rated research as being important, while one-fifth rated completion rate as important. Accessibility, Management and International Programs were only weakly supported as a measure of quality.
 - This survey has not been updated. However, a survey of the general public in British Columbia, dealing with knowledge of and attitudes toward the post-secondary sector, is being conducted by The University Presidents’ Council of B.C. and the Advanced Education Council of British Columbia. Results should be available early in 1998.
- Source: The Angus Reid Group

The competition for public funding from such areas as health care for an ageing population will likely increase

B.C. Per Capita Health Care Costs for 1994



- In addition to health care for an ageing population, the competition for public funding which has faced universities for the past several years will probably increase. This competition derives from several sources:
 - costs of servicing public debt
 - costs of unemployment resulting from economic restructuring
 - need to renew the physical infrastructure (deferred maintenance)
 - other social programs (e.g. employment equity)
 As a result, the pressure to increase tuition fees and to differentiate fees on the basis of program costs and perceived personal benefit will likely increase.
- Traditional funding systems which give institutions a great deal of control over the use of public funds are coming under increasing pressure from government. Changes are being introduced in the direction of less “block” funding and more targeted funding in line with government priorities. Examples include the separation of funding for teaching and research (infrastructure) in Britain and to a lesser extent in Australia, and the competitive approach to funding new student places in Britain.
- In a 1997 address, Jeffrey Simpson of the Globe and Mail argued that spending will go more to health than education. He believes, however, that after health, education still has a good claim on public money and public consciousness.
- A July 1997 poll by the Environics Research Group showed that 90% of respondents approved of closer ties between business and post secondary education, possibly as a result of budget cuts in education. However, over three quarters of the respondents

opposed corporate advertising in classrooms, and a third objected to suggestions that business help design the curriculum.

Implication:

- The funding future would appear to consist of more strings, more competition.

International Changes

- Examples of educational restructuring described in the literature include members of the European Community, Central and Eastern Europe, Japan, India, Nigeria, Hong Kong, Australia, New Zealand, Great Britain, The United States, and several Canadian provinces. In virtually all cases the restructuring involves fundamental change in the relationships among universities, between universities and other components of the education system including post-secondary and secondary, and particularly between the institutions and governments.
- Accreditation of institutions and programs by an outside agency is becoming common. Most often this is done by a government department or agency but in a few notable cases (the U.K., Australia, the USA) it is done by independent agencies, with varying degrees of independence from government and the universities. Canada is virtually unique in the lack of such a process. The closest approximation to accreditation is membership in the AUCC.
- Curriculum revision in the direction of internationalization is becoming common. This will increase the centrality of courses involving foreign culture and language and could encourage the development of international cooperative arrangements.