#### Motion for Governing Council Thursday, February 14, 2002

#### Whereas

Post-secondary education is widely recognized as a public good.

#### And Whereas

Education is a right and not a privilege.

#### And Whereas

The University of Toronto is a public institution.

#### Be It Resolved That

The Governing Council implement a tuition fee freeze for the 2002-2003 session.

#### Be It Further Resolved That

The Governing Council strikes a committee to research, design and forward recommendation for the implementation of a program for the elimination of all tuition fees at the University of Toronto.

#### Tuition and (lack of) Accessibility

- Tuition is the second highest in all of Canada
- Average undergraduate tuition has more than doubled over the last ten years
- 82% of Ontarians support a tuition freeze
- Statistics Canada has issued a report documenting a link between tuition fees and diminishing access to post-secondary education

#### Tuition and other Jurisdictions (it is possible)

• British Columbia, Manitoba, Quebec, Newfoundland and Labrador have frozen tuition fees in the past

#### Free tuition

- E.g., France, Scotland, Ireland
- most of the OECD countries
  - Number of OECD countries which do not allow tuition fees for postsecondary education: 17 out of 29

# November 2001 Vol. 7, No. 5 Document aussi disponible en français **National Office** 170 Metcalfe St. Suite 500 Ottawa, ON K2P 1P3 tel. (613) 232-7394 fax (613) 232-0276 www.cfs-fcee.ca

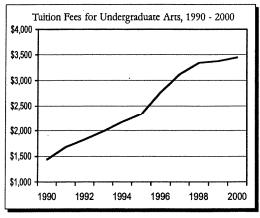
# **Tuition Fees in Canada:**

# A Pan-Canadian Perspective on Educational User Fees

# The User Pay System: What Can You Afford?

The steady decline of federal funding for postsecondary education over the last 20 years has resulted in provincial governments and individual college and university administrations replacing the lost funds by relying heavily on tuition fees and other user fees from students.

In 1990-1991 user fees accounted for an average of 18% of an institution's operating budget. The continual decline in government funding has brought the average up to 32% in 1998-1999, and much higher in some provinces. In the meantime, tuition fees have risen 126.2%, six times faster than the rate of inflation.



#### Student Debt is Soaring

The impact on student debt as a result of funding cuts has been devastating. On average, students completing a four-year program will have \$25,000 in debt, an increase of 300% from 1990.

#### Access is suffering

Recent studies are painting a disturbing picture of the effect high tuition fees have on access to post-secondary eduation for low and middle income Canadians. A study done at the University of Western Ontario demonstrated that after graduate and professional user fees were deregulated in Ontario, the participation rates of low-income families were cut in half.

Other researchers at the University of Guelph found that 40% fewer students from low-income families were attending the University as tuition rose. The conclusion is simple: user fees act as a barrier to accessibility.

### Tuition Freezes And Reductions: Steps to Ensuring Access

Although much of the blame for Canada's regression to a primarily user pay system falls onto the federal government, there is a great disparity amongst provinces with regard to tuition fee policy. In the face of deep cuts from the federal government, some provinces have frozen, and in some cases, reduced user fees. Others, like Nova Scotia, Alberta, Ontario and Sakatchewan incresed tuition fees and cut student aid in response to the crisis of underfunding.

#### **British Columbia**

BC has frozen tuition fees for the past five years. Under pressure from students, the government funded a 5% rollback of user fees in the 2000 provincial budget. For several years, BC has boasted the second lowest tuition fees in Canada. However, the newly elected government in British Columbia has made it clear that they are not committed to freezing or reducing tuition fees beyond this academic year.

#### Manitoba

Tuition fees in Manitoba have been frozen for two years. In 2000, the provincial government funded a 10% user fee reduction.

#### Québec

For residents of Québec, the province has the lowest university tuition fees in the country, and college is free. User fees in Québec have been frozen for 15 of the last 20 years.

#### **Newfoundland & Labrador**

User fees have undergone significant reviews in recent years. Following two years of frozen fees, Grenfell College and Memorial University of Newfoundland were granted a 10%

# **Fact Sheet**

"Students made it impossible for me not to freeze tuition."

- Brian Tobin, then Premier of Newfoundland and Labrador

"The research clearly demonstrates that... students from lower income households are much more likely to be affected by financial issues when deciding to pursue or not pursue their education beyond high school."

- Maritime Provinces Higher Education Commission, 1997.

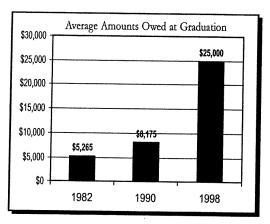
"Income-contingent repayment means learning with lifelong debt. It doesn't solve the problem it just extends the repayment."

- Stephen Mcdonald, Executive Director, Learning Assistance Division, Advanced Education and Career Develpment, Alberta, 1997. reduction in fees this year and promised a 25% reduction over 3 years, one of the largest reductions in Canadian history.

#### **Grants NOT Loans**

Despite soaring student debt levels, the federal government's strategy for reducing debt is deeply flawed. Canada remains one of two nations in the world without a national system of needs-based grants, yet saddles its students with some of the highest fees. The loans-based approach to student financial assistance has proved to be a failure at guaranteeing access.

The research clearly demonstrates that the cost of post-secondary education and increasing debt levels are significant factors in the decision students make about whether or not to continue their studies beyond high school. Even more significant is the finding that students from lower income households are much more likely to be affected by financial issues when deciding to pursue or not pursue their education beyond high school



# Income Contingent Loan Repayment Plans (ICLRPs): A Lifetime of Debt

Income contingent repayment schemes were designed with one purpose in mind: to facilitate a system of individual user fees in which the students pays the full cost of post-secondary education. ICLRPs go by many names, but they are first and foremost a regressive funding model that eliminates government support for post-secondary education, not an alternative loan plan.

Canadian students vigorously opposed the Plans when they were proposed by the federal government in 1994, and consequently they were never implemented.

Often referred to indirectly as "flexible repayment", ICLRPs stretch repayment out over a longer period of time. Additional interest payments ensure that students earning less after graduation will pay more than three or times more for their education than students with higher incomes, whom would pay equivalent loans back faster. Furthermore, the gender gap in wages will profoundly disadvantage women.

#### Millennium Scholarships

Despite the fact that the Millennium Foundation was endowed with \$2.5 billion over ten years, Millennium Scholarships have proven to be ineffective at providing wide spread relief to students.

More of a public relations exercise for the federal government than a student grants program, the Foundation has experienced great difficulty in ensuring all of the provinces distribute scholarships. Provinces like Ontario and Nova Scotia have refused to cooperate, and as a result students in those provinces are seeing little or no benefit from the program.

#### A Canada Student Grants Program

The only way to adequately begin to address the student debt crisis is for the federal government to introduce a Canada Student Grants Program (CSGP). For years, the Canadian Federation of Students has been proposing a system of needs-based grants that would be national in scope, and available to any student in financial need.

Reallocating the Millennium Foundation's endowment, as well as other ineffective federal programs, such as the Canada Education Savings Grants, could fund a CSGP. If a CSGP was administered as a non repayable portion of the Canada Student Loan, then the federal government could use its existing infrastructure to save on costs, as well as avoid difficult federal-provincial arrangements.



#### **MEDIA RELEASE**

For Immediate Release Friday, December 7, 2001

## MIDDLE AND LOW INCOME FAMILIES LESS LIKELY TO ACCESS UNIVERSITY Gap in participation rates has widened since 1986

**Toronto** –Statistics Canada reports that students from the highest quarter income bracket are 50% more likely than students from middle income brackets to attend university. Less than half of young people from low-income backgrounds have access to higher education and the wealthiest quarter are 2.5 times more likely to pursue a university education. The report also suggests that these gaps have widened between 1986 and 1998.

"This report confirms the very real fear experienced by average Ontarians that they will not be able to send their children to university," said Joel Duff, Ontario Chairperson of the Canadian Federation of Students. "The fact that in Ontario average tuition fees for undergraduate arts programmes are the second highest in Canada, means a bleak future for the children of ordinary families here."

The report notes that the gap in participation rates between young people from the highest and lowest economic backgrounds was the narrowest at the college and CEGEP level. College tuition fees have typically been less expensive, while there are no tuition fees charged at CEGEPs.

The impact of the Ontario government's 1997/98 policy decision to allow unlimited tuition fee increases for all graduate programmes, and certain professional and post-diploma programmes was not reflected in the Statistics Canada report which relied on data gathered in or before 1998.

According to the Federation, tuition fees for the Commerce programme at Ryerson increased by more than 35 percent between 1996/97 and 2000/01 and by 45 percent for the same programme at Carleton University. For Medicine, the costs increased at the University of Toronto from \$4,850 in 1997/98 to \$14,700 this year.

But most worrying to the Federation, in light of the Statistics Canada report, is the impact of deregulation for certain courses offered by Ontario colleges. Dental Hygiene programmes at Niagara, Canadore and St. Clair colleges increased between 300 and 400 percent in just two years. Computer Animation at Sheridan College increased from \$1,400 in 1997/98 to \$11,000 in 2000/01.

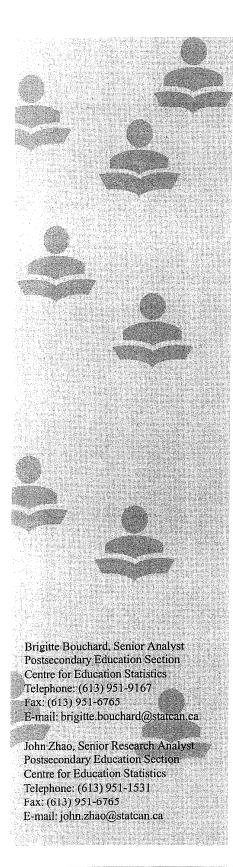
"The colleges have traditionally been more accessible to middle and lower income students, but with the current direction of the Ontario government, access to college education could already be compromised," said Duff.

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#### For more information contact:

Joel Duff, Canadian Federation of Students Ontario Chairperson at 416-925-3825 or 416-707-0349 (cell) Pam Frache, Canadian Federation of Students Government Relations Coordinator: 416-925-3825

A national day of action on February 6 is part of an ongoing campaign calling for a freeze and reduction of tuition fees, a national system of needs-based grants and a reinvestment in higher education. For more information visit the Canadian Federation of Students at <a href="https://www.cfsontario.ca">www.cfsontario.ca</a>.



### University education: Recent trends in participation, accessibility and returns

#### Introduction

Public debate about increased tuition fees and corresponding concern over student indebtedness raises questions about the growing costs of university education. Factors influencing the choice to attend university include availability of financing, family socio-economic status, labour market conditions and perceived benefits of such an education.

This article provides an overview of important trends in costs and accessibility and assesses the financial and related returns (such as employment prospects) associated with participation in university education. The focus is on the trend in participation rates in the 1990s, compared with the national and provincial trends in tuition fees over the same period. We include an analysis of the cost of tuition versus the ability to pay, as illustrated by the evolution of average family income. Then we examine how a university education relates to job prospects and earnings. The conclusion summarizes the various trends that, together, illustrate the magnitude of the investment associated with participation in university education.

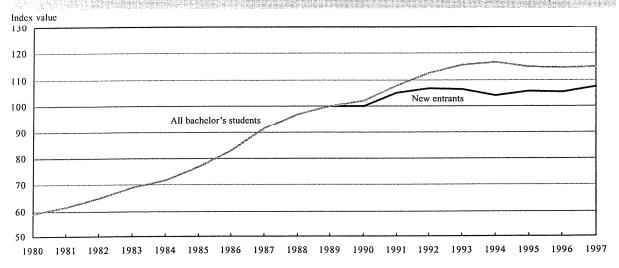
#### Flattening participation

This analysis starts with an examination of the enrolment trend. We converted enrolment to a participation rate and expressed it in the form of an index, with 1989 as the base year (i.e., 1989 index = 100). We performed these two steps to factor out the effect of population growth and to better illustrate the trend from 1989 to 1997.

Graph 1 incorporates two full-time participation rate indices: one is all bachelor's-level enrolments as a percentage of the 19- to 21-year-old population; the other is new entrants at the bachelor's level (i.e., first-year enrolments<sup>1</sup>) as a percentage of the 19-year-old population. The data pertaining to new entrants, available only since 1989, are more appropriate for examining shifts in participation rates, since total enrolments are subject to a locking-in effect in later years. That is, individuals tend to continue their education once they have started. The choice to attend university is primarily made at the outset, and hence first-year enrolments are more sensitive to changes in any of the factors in the following discussion. Also, first-year enrolments



Graph 1
Full-time bachelor's participation rate index (1989=100)



Notes: New entrants' refers to bachelor's students who are new to the institution. Full-time participation rates: all bachelor's students as a percentage of the 19- to 21-year-old population, and new entrants as a percentage of the 19-year-old population.

Source: University Student Information System.

show any change in participation trends more quickly, as overall enrolments are an assortment of cohorts entering at several different points in time.

Since 1991, and coincident with the rise in tuition fees in the 1990s (see **Increasing costs of education**), there has been a plateau in the number of new entrants. While there was a 5% increase in new entrant participation between 1989 and 1991, the pattern in the 1990s has been nearly flat, with only slight growth between 1991 (105.3) and 1997 (107).

The overall participation rate was less affected because of the locking-in effect, and continued to increase until 1994. Since 1995, it has remained relatively stable at about 15% over its 1989 level. Compared with the trend in the 1980s, the increase in participation was smaller in the 1990s. Indeed, the participation rate index increased from 59 to 100 between 1980 and 1989, while it increased only to 115 by 1997. Further analysis of participation reveals that most of the increase in the participation rate at the bachelor's level in the 1990s is the result of an increase in participation for women in the 18-to-24 age group.

In terms of full-time new entrant and full-time total participation at the bachelor's level, the 1990s has witnessed a flattening in the participation rate, slightly altering the historical increasing trend.

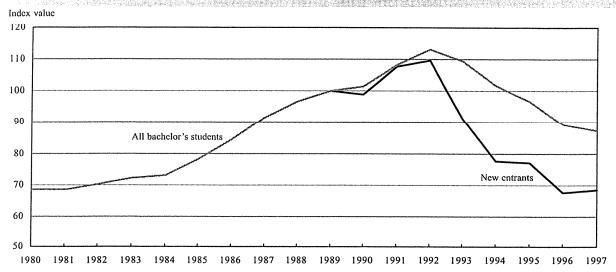
For part-time enrolments, the situation is more dramatic. Overall part-time participation rates<sup>2</sup> have been falling since 1992, following a long period of relatively stable increase. The index for the overall part-time participation rate fell to 87 in 1997, after peaking at 113 in 1992. The drop is even larger for new entrant participation, with the index falling from almost 110 in 1992 to 69 in 1997. A more detailed examination of participation rates by age group reveals that the overall decrease in part-time participation is being driven by the 25-and-over age group, while part-time participation in the 15-to-24 age group is holding much more steady.

Furthermore, the decline in part-time enrolment since 1992 also coincides with a period of voluntary 'capping off' of first-year enrolment by some universities. Enrolments may have been capped for a number of reasons, including the decline in government funding, the shifting of some enrolment and/or resources to other disciplines, or simply the shifting of resources to new programs being established.

Knowing the long-term trend of increasing full- and part-time enrolment in university courses, what factors are associated with the recent flattening? The levelling-off coincided with a period when tuition increases were sharpest (see **Increasing costs of education**). However, for a more complete picture, we must look beyond cost trends as a potential deterrent to participation to consider also financing, demand in the labour market for university graduates, economic returns to individuals on university education, and equity issues such as how access to education varies with family background.



Graph 2
Part-time bachelor's participation rate index (1989=100)



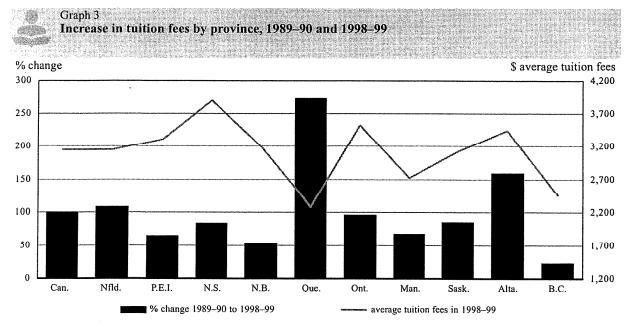
Notes: New entrants' refers to bachelor's students who are new to the institution. Part-time participation rates: all bachelor's students as a percentage of the population 15 years and older, and new entrants as a percentage of the population 15 years and older.

Source: University Student Information System.

#### Increasing costs of education

Over the past few years, tuition increases have occurred across most types of programs, with the rate varying among institutions and programs. To illustrate the trend, we used the undergraduate level arts programs.<sup>3</sup> There is a long-

term trend of increase in average tuition fees for undergraduate arts programs (in constant 1997 dollars). The rate of increase accelerated in the 1990s and consequently, average tuition fees approximately doubled between the 1989–90 and 1998–99 academic years.



Source: Survey of Tuition and Living Accommodation Costs at Canadian Universities.

The increase between 1989–90 and 1998–99 was highest in Quebec, shooting average undergraduate tuition up from \$611 to \$2,278. Tuition fees in Quebec had remained fairly stable in the 1980s, and despite showing the sharpest increase in the 1990s, average tuition in Quebec remains the lowest of all provinces. If out-of-province students, who must pay higher tuition fees than students from Quebec, are excluded, the average tuition in Quebec is likely even lower. There was also a sharp increase in tuition in Alberta (159%) during the same period. The smallest increases occurred in New Brunswick (53%), and British Columbia (22%).

While these increases are significant, it is necessary to look at tuition in the context of overall cost.



# Costs of university education as share of family income

| Average       | Total | Average | Tuition   | Total    |
|---------------|-------|---------|-----------|----------|
| under-        | cost* | family  | as share  | cost as  |
| graduate      |       | income  | of family | share of |
| tuition, arts |       |         | income    | family   |
|               |       |         |           | income   |

|         | 1997 constant dollars |       |        | %   |     |
|---------|-----------------------|-------|--------|-----|-----|
| 1986–87 | -, -                  | 5,052 | 56,921 | 2.5 | 8.9 |
| 1996–97 |                       | 5,629 | 57,146 | 4.6 | 9.9 |

Note: \*Includes tuition fees, other additional fees (such as athletics, health and student association) and on-campus housing and meal plans.

Sources: Survey of Tuition and Living Accommodation Costs at Canadian Universities. Statistics Canada, 1997, Income Distributions by Size in Canada (Catalogue no. 13-207-XPB).

Table 1 illustrates the evolution of the cost burden of university education on families (in constant 1997 dollars). The total costs include tuition fees, additional fees, plus accommodation and meal costs. These represent the majority of costs associated with university education, but do not include books or transportation, for example, because of lack of data.

Between 1986–87 and 1996–97, tuition rose faster than other costs, increasing its share from 29% to 47% of the total costs. Room and board remained the largest portion of the costs, but from over two-thirds of the costs in 1986–87, it represented just over half in 1996–97. Room and board costs—those charged by universities to students living in residence or other accommodation on campus—might not accurately reflect the change in costs for those living off-campus. In constant dollars, additional fees and room and board costs decreased slightly between 1986–87 and 1996–97.

Over this period, tuition nearly doubled while gross family incomes remained unchanged (in constant 1997 dollars). However, when we consider only undergraduate arts students living on campus, the annual total costs have increased only slightly, from 8.9% of gross family income to 9.9%. The implications of the tuition increase in the past decade may therefore not be the same for young people from low-income families as for those from high-income families. For students from low-income backgrounds who must stay home while attending university, tuition has always represented a greater portion of the total costs; consequently, the more rapid increase in tuition would have had a greater impact on these students. For students from higher-income families who choose to live on campus, the increase in tuition cost does not appear to have substantially increased the total financial burden on the family. This finding is of interest, especially given the widening enrolment gap between young people from low socio-economic backgrounds and those from high or middle socio-economic backgrounds (see Widening gap by socio-economic status).

#### Growing student debt

The National Graduates Surveys indicate that government-sponsored student loan programs account for the large majority of student debt at the time of graduation. Data about the 1990 and 1995 graduating classes give a clear indication of rapidly growing student debt among borrowers, even though the proportion of students who borrow from government-sponsored student loan programs has dropped. Among the 1990 cohort, 50% of bachelor's, 47% of master's and 40% of PhD graduates had borrowed from student loan programs, compared with 48%, 43% and 31%, respectively, for the 1995 cohort. This change may be attributed in part to modifications in the eligibility criteria for some government-sponsored student loan programs.

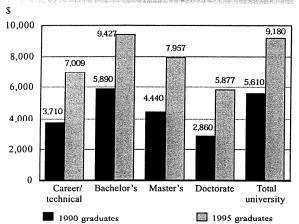
Graph 4 shows the student debt increase for the classes of 1990 and 1995 at various levels of postsecondary education. The debt shown here represents the amount owed two years after graduation, when graduates have had the opportunity to find employment and begin repayment.<sup>4</sup>

The data show a 69% increase in the average amount owed to student loan programs by all university graduates two years after graduation. The increase among bachelor's graduates is 60%—slightly less than the average for all university graduates. However, even with the larger increases, master's and PhD graduates still owed significantly less than bachelor's graduates. Students at the graduate levels are likely to have access to scholarships, fellowships and teaching and/or research assistantships, which may reduce their reliance on student loans. College graduates' average debt two years after graduation increased 89%

between the 1990 and 1995 cohorts, reaching \$7,000. Findings from a study on administrative data from the Canada Student Loan Program (Plager and Chen 1999) described an increase of 13% between 1990-91 and 1995-96 in the average amount owed by university students at the time of loan consolidation, that is, within six months of graduation or the end of the full-time study period.



Average amount owed two years after graduation by graduates who have not received additional degree or certification



Note: Includes only those graduates who had not received additional degree/diploma/certificate two years after graduation.

Source: National Graduates Surveys.

#### Blishen socio-economic status index

Family socio-economic status (SES) is operationally defined as the Blishen socio-economic index for fathers' occupations (index available on the Public Use Sample Files for the 1994 General Social Survey (GSS) and Analytic Files [Statistics Canada use only] for the 1986 GSS) when the young people were 15 years old. The young people are divided into three SES groups: those whose fathers' occupations fall into the highest quartile of the Blishen index (high SES); those whose fathers' occupations fall into the middle half of the Blishen index (middle SES); and those whose fathers' occupations fall into the lowest quartile of the Blishen index, as well as those who did not have a father or father substitute at age 15 or whose fathers were not employed (low SES). Father's occupation was preferred to mother's occupation as a much higher proportion of fathers were in the labour force. The Blishen socio-economic status index has been shown to have high concurrent validity with both education and income and is well accepted in social research.

While the overall proportion of university graduates indebted to student loan programs has decreased slightly, 1995 graduates owed at least 60% more than their 1990 counterparts two years after graduation. The trend in tuition and other costs, together with the increasing debt load carried after graduation, reveal a picture of heavier burden.

#### Widening gap by socio-economic status

One of the most significant findings of the current trend analysis is that there has been a widening gap in university participation by family socio-economic status (SES) as revealed in the 1986 and 1994 General Social Surveys. In both 1986 and 1994, we examined the university participation rates<sup>5</sup> of young people aged 18 to 21 years by family socio-economic background. We found that the university participation rates for young people from low and middle SES background were quite similar in 1986—13.7% and 14.5%, respectively. However, by 1994, a wide gap had occurred between these two groups, with the rates standing at 18.3% and 25.3%, respectively. Coincidentally, this ever-widening gap has been evident since 1989—the same period of time when rapid tuition increases occurred. It may be that young people from low SES backgrounds are least able to shoulder the burden of higher tuition fees and these increases have affected their participation more than the participation of students from middle or high SES family backgrounds.

In both 1986 and 1994, the university participation rates for young people from high SES backgrounds were significantly higher than for those from middle and low SES backgrounds. However, compared with young adults from middle SES backgrounds, the enrolment increase is smaller for people from high family SES background. This may be partly due to their high starting point-in 1986 it was 33%—and therefore further large increases are less likely. The increase in high SES background participation rates is still larger than that for young people from low family SES background.

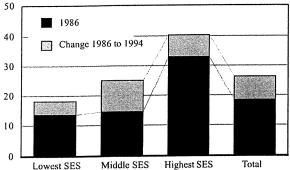
It should be pointed out that significant increases in university tuition fccs started around 1989 or 1990 and continued beyond 1994. As the most recent observation on participation by family SES was in 1994, it can be expected that the impact of tuition increases in the 1990s on university participation has not been fully captured.

Our findings suggest that university participation rates have not increased as fast for young people from low family SES background. This factor combined with the increase in tuition fees has created a widening gap between them and young people from more affluent family backgrounds. This finding may have important policy implications surrounding issues such as accessibility and equality of opportunity. We need to continue to monitor the situation



# Graph 5 University participation rate of 18- to 21-year-olds by socio-economic status of family

University participation rate (%)



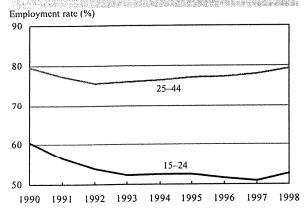
Notes: University participation rate: young people aged 18 to 21 who have had at least some university education at the time of the interview as a percentage of the 18- to 21-year-old population. Family socio-economic status is operationally defined as the Blishen socio-economic index for fathers' occupations when respondents were 15 years old.

Source: General Social Survey, 1994.

in order to determine whether university participation of young people from low family socio-economic background has fallen further behind since 1994.



### Employment rate by age group



Source: Labour Force Survey.

#### Declining youth employment

One hypothesis is that the flattening out of the full-time enrolment rate and the decline in part-time university education may be partly attributable to stronger labour market conditions that create a pull towards employment and hence a push away from education. However, available data do not seem to support this hypothesis. The youth employment rate continued to decline throughout the 1990s until 1997, while the employment rate for people in the prime age group (25 to 44) has rebounded since 1993. The youth employment rate did not start to rebound until 1998. The decline in the youth employment rate occurred during the same period when the enrolment rate stagnated or declined. Even though we are not able to establish a direct link between tuition increase and the stagnation and decline in university participation in the 1990s, the labour market does not appear to be an important factor.

Thus far we have examined several issues and identified key trends: flattening and declining university participation, rising tuition and a widening gap in participation by socioeconomic background. Next we turn our attention to labour market returns of a university education from an individual, as opposed to a societal, perspective.

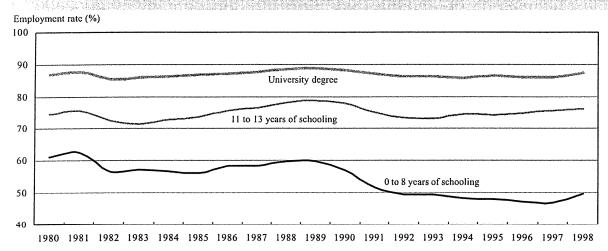
#### Positive returns

### Employment prospects are better with a university education

The employment rate for people with university degrees is much higher than for those with less education. Since 1980, the employment rate of degree holders has consistently been above 85%, compared with less than 75% in recent years for those with only high school education6 and less than 50% for those with up to eight years of education. Moreover, the employment rate of people with university degrees appears much less influenced by fluctuations in economic cycles than that of people with lower education. In this sense, a university degree not only initially helps to gain employment, but also leads to jobs that are less likely to disappear in economic downturns. In the past decade especially, virtually all job creation in Canada has occurred in professional and managerial occupations, which demand high education qualifications. Between 1989 and 1998, the professional and managerial occupations gained 780,000 workers while employment in most other occupations declined.7



Graph 7
Employment rate by level of education, 25 to 44 age group



Source: Labour Force Survey.

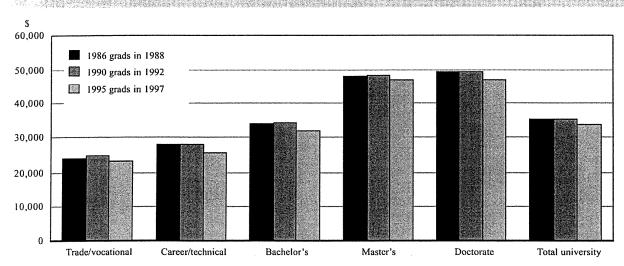
#### Earnings are highest for university degree holders

According to results from the National Graduates Surveys from successive survey years (1986, 1990 and 1995), two years after graduation university graduates' earnings are higher than those of trade or vocational and career or technical college graduates. In 1997, bachelor's graduates

of the class of 1995 earned an estimated \$32,000, compared with \$25,700 at the career or technical college level and \$23,400 at the trade or vocational level. Master's and PhD graduates earned even greater amounts, at an average of \$47,000 in 1997 for the 1995 graduating class. Clearly, university graduates enjoy higher earnings.



Graph 8
Estimated median annual earnings two years after graduation of 1986, 1990 and 1995 graduates working full time



Source: National Graduates Surveys.

Graph 8 also reveals that in constant 1997 dollars, earnings of university graduates two years after graduation decreased when comparing the 1995 cohort with the 1986 and 1990 cohorts. At the trade, vocational, career and technical college levels, earnings increased slightly in constant terms between the 1986 and 1990 cohorts, but suffered more significant decreases between the 1990 and 1995 cohorts (5.4% and 8.1% respectively) than at the university level (4.8%).

#### Conclusions

Full-time university enrolment rates have levelled off in the 1990s, in contrast to the long-term increasing trends; part-time university enrolment rates have fared worse, falling significantly during the 1990s. These enrolment changes coincide with a number of events. During the 1990s, the cost of university education increased, at a time when the trend in family income, in real terms, was flat. Between 1986 and 1994—a period which reflects only a portion of the increases in tuition fees and other costs of university education—we witnessed a widening gap in enrolment by SES. We have seen slightly fewer students borrowing from government-sponsored student loan programs, yet the amount borrowed and the debt levels two years after graduation are significantly higher. Increases in tuition and debt levels may have more impact on the participation of students from families with a lower socio-economic status. The advantages of a university education remain; they include increased employment opportunities, more stability of employment, and higher EQR earnings.

#### **Notes**

- 'New entrants' refers to bachelor's students who are new to the institution.
- 2. Part-time participation rates: all bachelor's students as a percentage of the population 15 years and older; and new entrants as a percentage of the population 15 years and older.
- In order to compute a rate of increase for average arts tuition by province, average tuition was weighted by enrolment in arts programs at each institution in each province.
- 4. These results apply only to those graduates who have not received any additional degrees, diplomas or certificates at the time of the survey, although they

- may have pursued some further education.
- 5. University participation rate: young people aged 18 to 21 who have had at least some university education at the time of the interview as a percentage of the 18- to 21-year-old population.
- 6. Eleven to 13 years of education is used as a proxy for high school completion.
- 7. Zhao et al. (2000).

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