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NAVIGATION BUTTONS

The graduates of '82: where are they?

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The Canadian labour market is not static. The recent economic recession and recovery, industrial restructuring and technological change have had a profound impact, and will continue to do so. How have young workers, especially the highly educated ones, fared through these developments? This study offers some insights by examining the experiences of a recent (1982) group of Canadian university and community college graduates over a five-year period, 1982-1987. (1)

Of particular interest in this study are:

- Which fields of study offered the best employment opportunities and earnings?
- How good was the match between a graduate's job and the field of study?
- What was the pattern of interprovincial mobility following graduation?
- How different were the short- and longer-term school-to-work transitional experiences?

Field of study

Most of the analysis in this study revolves around the various fields of study of the 1982 graduates. Education and the combined group of commerce, economics and law were the two most popular fields of study among the university graduates, each accounting for 19% of the total (Table 1). Among the community college graduates, health sciences was the most popular field (18%), followed closely by management and administration (16%) and by secretarial science and merchandising (15%). (2)

VIEW Table 1 **Distribution of 1982 graduates by field of study and sex**

Source: *National Graduates Survey*

The distribution of graduates by field of study revealed not only the persistence of some traditional patterns, but also the emergence of new trends. For example, men continued to dominate in engineering and physical sciences, and women in education, health sciences and secretarial science. Among the more notable shifts were the increased enrolment in electronics, mathematics and computer science, and the increased proportion of women in commerce and business. (3)

Post-graduation employment experiences

To follow the employment fortunes of the 1982 graduates through the various phases of the recent business cycle, three dates were selected as reference periods in this study. The first date occurs approximately half a year following the students' graduation (January 1983) and roughly coincides with the end of the most recent economic recession in Canada. The second period (May-June 1984) marks the two-year point following graduation, and a year and a half into the economic recovery. The third period

(March 1987) occurs approximately five years following graduation and four and a half years into a period of sustained economic growth.

Half a year after graduation (January 1983)

Upon graduation, the class of '82 faced the worst economic recession since World War II. But despite the bleak job market, a high proportion had already established themselves in a job within half a year. For example, approximately three-quarters of both the university and community college graduates held a job in January 1983, compared with 64% of all Canadians in a similar age group (20-30 years). (4)

Despite their overall high employment rate, there were marked differences by field of specialization, even at this early stage. Among the university graduates, for example, the percentage holding a job was highest among those who specialized in education, or in medicine and health sciences (over 80% each); the least employed were graduates in fine arts and humanities, and agriculture and biological sciences (about 60% each). Of the college graduates the highest employment/population ratios were found among students from the health and social science faculties (about 80% each); the lowest was recorded for those specializing in natural sciences and primary industries (62%).

Unemployment rates by field study generally reflected the same pattern as the employment/population ratios (Table 2). For the university graduates, the overall unemployment rate was 10.7%, and for the college graduates, it was 16.3%. High though these two rates were, they were nevertheless below the 17.9% recorded for the overall national work force of similar age.

VIEW ▶ Table 2 **Unemployment rate by field of study**

Sources: *National Graduates Survey and Follow-up Survey of 1982 Graduates*

Approximately 18% of the university graduates and about 10% of the community college graduates reported they were not in the labour force half a year following graduation. Some of these had returned to school.

Two years after graduation (May-June 1984)

Two years following graduation, the proportion of these former students in jobs had risen by about 10 percentage points each for the university graduates (to 84%) and community college graduates (to 87%). Graduates from all disciplines recorded increases in employment/population ratios. The unemployment rate was down marginally for the university graduates, but dramatically for the community college graduates. The result was an almost identical unemployment rate for the two groups (9.4% for university graduates versus 9.9% for the college graduates). For the national population of the same age, the employment/population ratio was lower (72%) and the unemployment rate was higher (12.7%).

By field of study, the differences in employment/population ratios noted shortly after graduation persisted, but they were noticeably smaller by this time. In effect, those graduates who had not fared that well during the recession - that is, university graduates in fine arts and humanities and other social sciences, and college graduates in engineering, natural sciences and primary industries - witnessed significant improvements in employment opportunities during the early phase of the economic recovery.

VIEW ▶ Chart A **Unemployment rate of 1982 graduates**

Sources: *Labour Force Survey, National Graduates Survey and Follow-up Survey of 1982 Graduates*

Approximately 5% of the university graduates and 1% of the college students reported being back in school on a full-time basis.

Five years after graduation (March 1987)

About five years following graduation, nine in ten of the university and community college graduates had a job. University graduates recorded a five percentage point employment gain during the three year period following the June 1984 survey but the gain for the college graduates was marginal. Differences

in employment/population ratios by field of study had also narrowed much further by this time.

The overall unemployment rate for the university graduates (3.7%) and for the college graduates (5.4%), following four and a half years of continuous economic expansion, had fallen to about one-third of the level recorded at the end of the recession. For the Canadian work force of similar age (25-35), the unemployment rate was much higher, at 10.5%. Very little unemployment existed at this time among the university graduates from the health, education, engineering, and commerce, economics and law fields. Graduates from these fields experienced unemployment rates of less than 4%. The same was roughly true for the college graduates from the health science, electronics and computer science faculties.

In March 1987, approximately 3% of the 1982 university and college graduates reported they were pursuing further full-time studies. At the same time, the proportion of graduates outside the labour force but not in school had roughly doubled from the 1984 level, from 2% to 4%. Approximately 80% of these graduates who were not in the labour force but had not returned to school were women, many of whom may have left the labour force for family or childrearing reasons.

Education/job match and job satisfaction

How well-matched were the jobs of the 1982 graduates relative to their area of educational specialization? The notion of field of study/job match is complex and often difficult to measure. Occupational concentration ratios - that is, the proportion of graduates from a field of specialization directly employed in that field - may provide a partial answer. It cannot give us the whole answer because while some fields, such as education, are directly linked to certain occupations (such as teaching), other specializations, such as fine arts and humanities, can be widely applied across occupations. To circumvent this problem, researchers often measure the connection between the two through self-assessment evaluations, that is, the degree to which graduates perceive their jobs as matching their educational specializations. The 1984 and the 1987 follow-up surveys provided occupational concentration ratios and self-assessment indexes that showed a high degree of connection between a graduate's field of study and his or her subsequent job.

The 1982 graduates were employed in a wide range of occupations, but there were noticeable concentrations by field of study. For example, two years following graduation, about 85% of the employed university graduates specializing in health sciences were in medical and health occupations; about 72% of the education graduates were in teaching; and 70% of the engineering graduates were in natural science and engineering jobs. Compared with university graduates, community college graduates were more widely dispersed across occupations. Despite this, large proportions of college graduates in health sciences, and in secretarial/merchandising science ended up in the same occupations. Similar, and in a few cases even larger, occupational concentration patterns were observed when the graduates were reinterviewed in 1987.

A large majority of the graduates perceived their jobs to be related (directly or partially) to their area of specialization. Approximately 77% of the university graduates and 79% of the college graduates

expressed this sentiment in May-June 1984. Three years later (March 1987), these indexes had risen to 87% and 85%, respectively. Differences existed by field of study, however. For example, the proportion expressing some connection between their educational background and their job in 1987 ranged from a low of 78% for the university fine arts and humanities graduates to 95% for graduates from the medicine and health faculties. Among the college graduates, it ranged from 75% for natural sciences and primary industries to 94% for health sciences.

An overwhelming majority of the graduates were satisfied with their jobs. About 91% of the university graduates and 90% of their college counterparts reported being satisfied or very satisfied with their job in March 1987.

Earnings

The 1982 graduates were asked to estimate their annual earnings based on the job they held at the time of the 1984 and 1987 interviews. Earnings differentials are a function of many factors, among them the level of education, experience, the demand for and supply of the skill in question. Bearing these in mind, how did the 1982 graduates fare by field of study? How did their earnings compare to the earnings of all Canadian workers in a similar age group? To ensure more meaningful comparisons, the results reported in this study pertain to persons working full-time at the time of the interviews. (5)

Two years following graduation, the estimated annual earnings of the university graduates working full-time averaged $25,200. There were, however, marked differences by field of study and sex. Average annual earnings ranged from a low of $21,200 for the fine arts and humanities graduates to a high of $31,800 for those who specialized in medicine and health science (Table 3). Male graduates, on average, earned more than their female counterparts ($26,900 vs. $23,500). This earnings gap between the sexes prevailed in all disciplines. (6)

VIEW ▶ Table 3 **Average salary of full-time workers by field of study, 1982 graduates**

Sources: *National Graduates Survey and Follow-up Survey of 1982 Graduates*

Three years later, in 1987, the average earnings of the university graduates had risen by 35% to $34,100. However, differences in pay by field of study and by sex persisted. Graduates from the fine arts and humanities field continued to draw the lowest earnings ($27,900), and those from the medical and health faculties continued to lead ($48,300). The pay gap between the two groups had essentially doubled over the three years. Similarly, the earnings differential had doubled between the men ($37,500) and women

($30,500).

Earnings of college graduates showed a similar pattern. In 1984, their annual earnings averaged $18,700. Three years later, the average had risen by the same proportion (35%) as experienced by their university counterparts to $25,300. In 1984, the average earnings had ranged from a low of $15,500 for the secretarial science and merchandising graduates to a high of $22,100 for the health science graduates. By 1987, graduates in electronics, mathematics and computer science had replaced those in health science as leaders in earnings ($28,800), but secretarial science graduates maintained their position as the lowest paid workers ($21,500). Women continued to experience lower earnings than men ($22,300 vs. $28,600 in 1987).

The estimated average annual earnings of Canadian workers aged 25-35 years in 1987 was $24,400. (7) This was lower than the averages for the 1982 university and college graduates during that same year. Thus, in terms of both employment and earnings performances, the two 1982 graduate cohorts demonstrated that higher education has significant pay-offs.

Self-employment

Five years after graduation, approximately 8% of the university graduates and 5% of their college counterparts were self-employed. These ratios are remarkably high considering the group's brief experience in the labour market and the fact that many - such as the engineers, doctors, accountants and lawyers - could set up shop only after meeting the provincial accreditation requirements (for example, articling, internship, residency). Despite this, the incidence of self-employment among the 1982 graduates compared well with the 11% ratio for all 25-35 year-old Canadian workers in March 1987.

Not surprisingly, the highest incidences of self-employment among the university graduates were found among medicine and health graduates (23%), agriculture and biological science graduates (12%), and commerce, economics and law graduates (12%). It was lowest among the education graduates (3%). Of the college graduates, self-employment was highest among graduates in arts and humanities (15%), natural sciences and primary industries (10%) and mechanical, architectural and construction engineering (8%). It was lowest among the secretarial science and merchandising graduates (3%).

Post-graduation interprovincial mobility

By comparing the home province with the province of residence at the time of the 1984 and 1987 interviews, it is possible to determine the degree and pattern of inter-provincial mobility of the 1982 graduates and to provide a profile of the migrants.

Two years after graduation

At the time of the May-June 1984 survey, approximately 12.8% of the 1982 university graduates and 5.9% of their college counterparts had settled in a province other than their own. Who were these migrants?

VIEW ▶ Chart B **Inter-provincial mobility of 1982 graduates**

Sources: *National Graduates Survey and Follow-up Survey of 1982 Graduates*

VIEW ▶ Map **Six largest inter-provincial migration flows: home province versus province of residence in 1987**

Sources: *National Graduates Survey and Follow-up Survey of 1982 Graduates*

Women were about as likely as men to move from their home province following graduation; they accounted for about 48% of the university and 53% of the college graduates who relocated. Among the university graduates, the most likely individuals to move to another province were those who specialized in agricultural and biological sciences, engineering, mathematics and physical science. Of the college graduates, those from the chemical, general, aeronautical and industrial engineering faculties were most likely to do so.

The surveys did not seek reasons for inter-provincial mobility. However, migrants generally experienced lower unemployment rates than those who remained in their home provinces. Better job prospects might have been an important motivation for moving.

Most provinces lost university graduates to, and received graduates from, other provinces. On balance, however, the movement was westward. Indeed, only Alberta and, to a much lesser extent, British Columbia took in more graduates than they lost (Table 4). These two provinces had been net "exporters" of students for university education. The remaining provinces and territories all "lost" university graduates, the largest losers being Quebec, Manitoba and Saskatchewan.

VIEW ▶ Table 4 **Provincial distribution of 1982 graduations**

Sources: *National Graduates Survey and Follow-up Survey of 1982 Graduates*

Alberta and the territories were the only areas that gained more college graduates than they lost. (Alberta had also been a net receiver of college students into its educational system.) New Brunswick and Manitoba came out even. All the other provinces were net losers - they lost more college graduates than they gained - the largest ones being Ontario, Quebec and Prince Edward Island. Ironically, Ontario and Prince Edward Island, like Alberta, had been "net educating" provinces of these graduates.

Alberta's ability to attract qualified young workers during the period covered by the surveys is not surprising. As noted earlier, the incidence of interprovincial migration was high among engineering, agricultural and primary science students. Alberta's mining, exploration and primary (forestry and related) industries seem to have attracted many of these graduates. Also, the attraction to Alberta partly reflected the delayed timing of the recession in that province.

Five years after graduation

In March 1987, the proportion of the class of '82 residing outside their home provinces had risen to 15.6% for university graduates and 7.4% for college graduates. These migration rates were higher than the inter provincial migration rate of Canadians of similar age during the 1981-1986 period (6.8%). (8)

Women still comprised about half of the university graduate migrants, but formed a slight majority of the community college graduate migrants (56%).

University graduates trained in agricultural and biological sciences, in mathematics and physical sciences, and in engineering continued to have the largest proportion of migrants - about one in five had moved outside their home province at this time. The education graduates were the least ten did. Among the community college graduates, the incidence of migration was still highest among graduates from the chemical, general, aeronautical and industrial engineering faculties (11%), and lowes among the secretarial science and marketing graduates (5%).

By March 1987, the net migration of university graduates into Alberta and British Columbia had increased, and prosperous Ontario had also become a net receiving province, drawing most of its in - migrants from Quebec and Atlantic Canada. All the other provinces and the territories were net losers.

Of the community college graduate migrants, Alberta and the territories turned out to be the largest net gainers. Nova Scotia ended up with a marginal net inflow of graduates, and British Columbia and Manitoba came out even. The rest of the provinces lost more graduates than they received.

Conclusion

Data from the two surveys of the 1982 university and community college graduates clearly demonstrate

that there are pay-offs to higher education. While differences existed by field of specialization, the class of '82 clearly fared much better, in terms of employment opportunities and earnings, than other workers in the same age group. The high employment/population ratio and the low unemployment rate experience of the group, coupled with the strong match between their fields of study and jobs, also suggest that the education system was in tune with the needs of the labour market. Furthermore, the graduates demonstrated an early sense of entrepreneurship, an important asset in an ever-changing and more competitive economy.

Discussions of Canadian labour markets, especially regarding young Canadian workers, over the past year or so, appear to be shifting from the subject of unemployment to that of skill shortages and skill development. In this context, the higher-than-average interprovincial mobility rates among highly educated young workers could help reduce some geographical imbalances in the demand for and supply of skilled labour. However, interprovincial migration alone may prove to be an insufficient remedy for skill shortages. Part of the solution can come from an increased supply of well-educated labour. This, unfortunately, is not without cost. And results from the follow-up surveys of the 1982 graduates show that the net educating provinces of highly qualified workers are not necessarily the provinces where these graduates reside upon completion of their studies.

The National Graduates Survey (1984) and the Follow-up Survey of 1982 Graduates (1987)

The National Graduates Survey was conducted by Statistics Canada in June and July 1984 on behalf of the Department of the Secretary of State and Employment and Immigration Canada. It covered all students who had completed their university, college or trade/vocational program in 1982. The survey assessed, among other things, the labour market and interprovincial mobility experiences of these graduates during the two years following completion of their studies.

To obtain a longer-term perspective of the labour market integration of these graduates, the survey (Follow-up of 1982 Graduates) was repeated in March 1987, about five years following graduation. In total, the two surveys collected information for five reference periods: January 1983, October 1983, May-June 1984, January 1986 and March 1987. However certain data, such as earnings, class of worker and occupation, were collected only for May-June 1984 and March 1987. For a number of reasons (see Note 1) the trade/vocational graduates of 1982 are excluded from this study.

Of the estimated 94,000 university graduates of 1982, approximately 7.5% obtained their degree/diploma from a university in a province other than their home province (the latter being their province of residence before enrolment in university). The comparable proportion for the 53,000 community college graduates was 3.4%. An almost equal number of men and women left their home province to study elsewhere in Canada.

Migration to another province to obtain a university degree was least common among Ontario residents (2%) and most common among those from Prince Edward Island (48%). Ontario also recorded the lowest proportion of its community college graduates obtaining their diploma from another province (less than 1%), and New Brunswick the highest (25%).

Each province experienced an outflow and an inflow of students. On balance, however, only Ontario and Nova Scotia gained more university students than they lost. Similarly, only three provinces received more community college students than they lost: Ontario, Alberta and Prince Edward Island.

Detailed information on these surveys is available from Phil Stevens at (613) 951-9481 or Bill Magnus at (613) 951-4577, Household Surveys Division of Statistics Canada.

Notes

Note 1
The surveys also covered the 54,900 1982 trade/vocational graduates, but these individuals were excluded from this study for a number of reasons: entrance requirements and course duration for the various fields of study differed greatly; also the data are subject to high sampling variability. Graduates from foreign countries as well as Canadian graduates residing abroad were also excluded for obvious reasons.

Note 2
The field of study groupings reported in this study are in line with the questionnaire and data capture design. Commerce graduates comprised 65% of the university commerce, economics and law group; the rest were equally split between economics and law. Similarly, secretarial science college graduates accounted for 68% of their combined group, merchandising and sales (22%) and service industry technology (10%).

Note 3
In 1980, electronics, mathematics and computer science graduates accounted for almost 9% of all community college graduates; by 1982, the proportion had risen to 11%. During the same period, the number of university students graduating with a computer science bachelor degree rose by 42%. Similarly, the proportion of university women graduating at the bachelor degree level in commerce and business doubled from 4% in 1977 to approximately 8% in 1982.

Note 4

About 80% of the 1982 university graduates and 87% of their community college counterparts were between the ages of 20 and 30 at the time of graduation.

Note 5
Full-time workers comprised 89% of the employed university graduates in both 1984 and 1987; among the community graduates, the corresponding proportions were 89% and 87%.

Note 6
A forthcoming article in this publication seeks answers to these gender-based pay differentials.

Note 7
The earnings data for the 25-35 year old Canadian work force come from Statistics Canada's Labour Market Activity Survey (1986), unpublished data.

Note 8
Based on results from the 1986 Census of Population.

References

- Statistics Canada. ***Education in Canada: A Statistical Review for 1977-78*** (81-229). Minister of Industry, Trade and Commerce, Ottawa, 1978.
- Statistics Canada. ***Education in Canada: A Statistical Review for 1984-85*** (81-229). Minister of Supply and Services Canada, Ottawa, 1985.
- Statistics Canada. "1986 Census of Population: Mobility, Labour Force, Education", ***The Daily*** (11-001). Ottawa, March 1, 1988.
- Clark, W., M. Laing and E. Rechnitzer. ***The Class of 82: Summary report on the findings of the 1984 National Survey of the Graduates of 1982*** (S2-168-1986E). Minister of Supply and Services Canada, Ottawa, 1986.

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Source

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Table 1

Distribution of 1982 graduates by field of study and sex

	Both sexes	% Female
University graduates	**94,400**	**51**
Education	17,800	67
Fine arts & humanities	14,600	64
Commerce, economics & law	18,000	34
Other social sciences	17,000	60
Agriculture & biological sciences	5,800	51
Engineering	7,800	10
Medical & health professions	7,000	67
Mathematics & physical sciences	5,300	26
Community college graduates	**53,100**	**57**
Arts & humanities	5,000	63
Health sciences & related	9,700	88
Chemical & transportation technologies; general engineering, aeronautical engineering & industrial engineering	3,600	18
Electrical & electronics; mathematics & computer science	6,000	22
Mechanical engineering; architectural & construction engineering	3,300	8
Natural sciences & primary industries	3,000	27
Social sciences & services	6,300	74
Secretarial science; merchandising; sales & service industry technology	7,700	83
Management & administration	8,300	54

Source: National Graduates Survey

Table 2

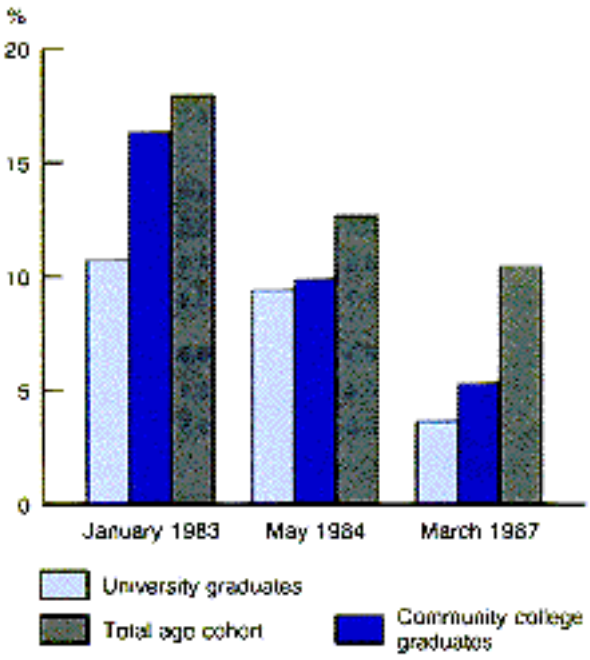
Unemployment rate by field of study

	Jan. 1983	May 1984	Mar. 1987
	%		
University graduates	**10.7**	**9.4**	**3.7**
Education	6.2	7.3	3.0
Fine arts & humanities	13.1	11.2	4.5
Commerce, economics & law	12.2	10.2	3.2
Other social sciences	12.6	10.7	5.0
Agriculture & biological sciences	15.1	13.6	6.4
Engineering	13.1	9.0	3.1
Medical & health professions	3.6	4.7	1.6
Mathematics & physical sciences	11.7	8.4	4.1
Community college graduates	**16.3**	**9.9**	**5.4**
Arts & humanities	15.4	15.1	6.4
Health sciences & related	12.8	5.5	3.0
Chemical & transportation technologies; general engineering, aeronautical engineering & industrial engineering	22.0	13.1	6.5
Electrical & electronics; mathematics & computer science	21.0	10.1	4.3
Mechanical engineering; architectural & construction engineering	22.1	10.8	7.7
Natural sciences & primary industries	30.8	10.8	12.4
Social sciences & services	11.6	10.1	4.6
Secretarial science; merchandising; sales & service industry technology	12.6	8.5	4.7
Management & administration	15.0	10.6	5.7

Sources: National Graduates Survey and Follow-up Survey of l982 Graduates

Unemployment rate of 1982 graduates

At each time of observation, the 1982 university and community college graduates fared better than their contemporaries in terms of the unemployment rate.



Source: Labour Force Survey, National Graduates Survey and Follow-up of 1982 Graduates

Table 3

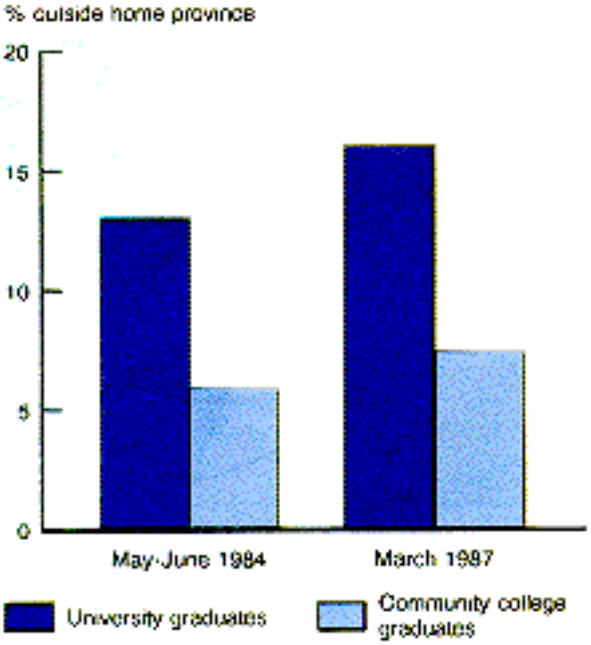
Average salary of full-time workers by field of study, 1982 graduates

	1984	1987
	$	
University graduates	**25,200**	**34,100**
Education	26,600	32,200
Fine arts & humanities	21,200	27,900
Commerce, economics & law	25,400	37,500
Other social sciences	23,500	30,700
Agriculture & biological sciences	21,300	31,200
Engineering	26,800	36,600
Medical & health professions	31,800	48,300
Mathematics & physical sciences	26,100	34,900
Community college graduates	**18,700**	**25,300**
Arts & humanities	15,600	22,100
Health sciences & related	22,100	27,800
Chemical & transportation technologies; general engineering, aeronautical engineering & industrial engineering	20,100	27,900
Electrical & electronics; mathematics & computer science	20,900	28,800
Mechanical engineering; architectural & construction engineering	20,100	27,600
Natural sciences & primary industries	18,700	25,200
Social sciences & services	17,300	23,200
Secretarial science; merchandising; sales & service industry technology	15,500	21,500
Management & administration	17,400	24,500

Sources: National Graduates Survey and Follow-up Survey of l982 Graduates

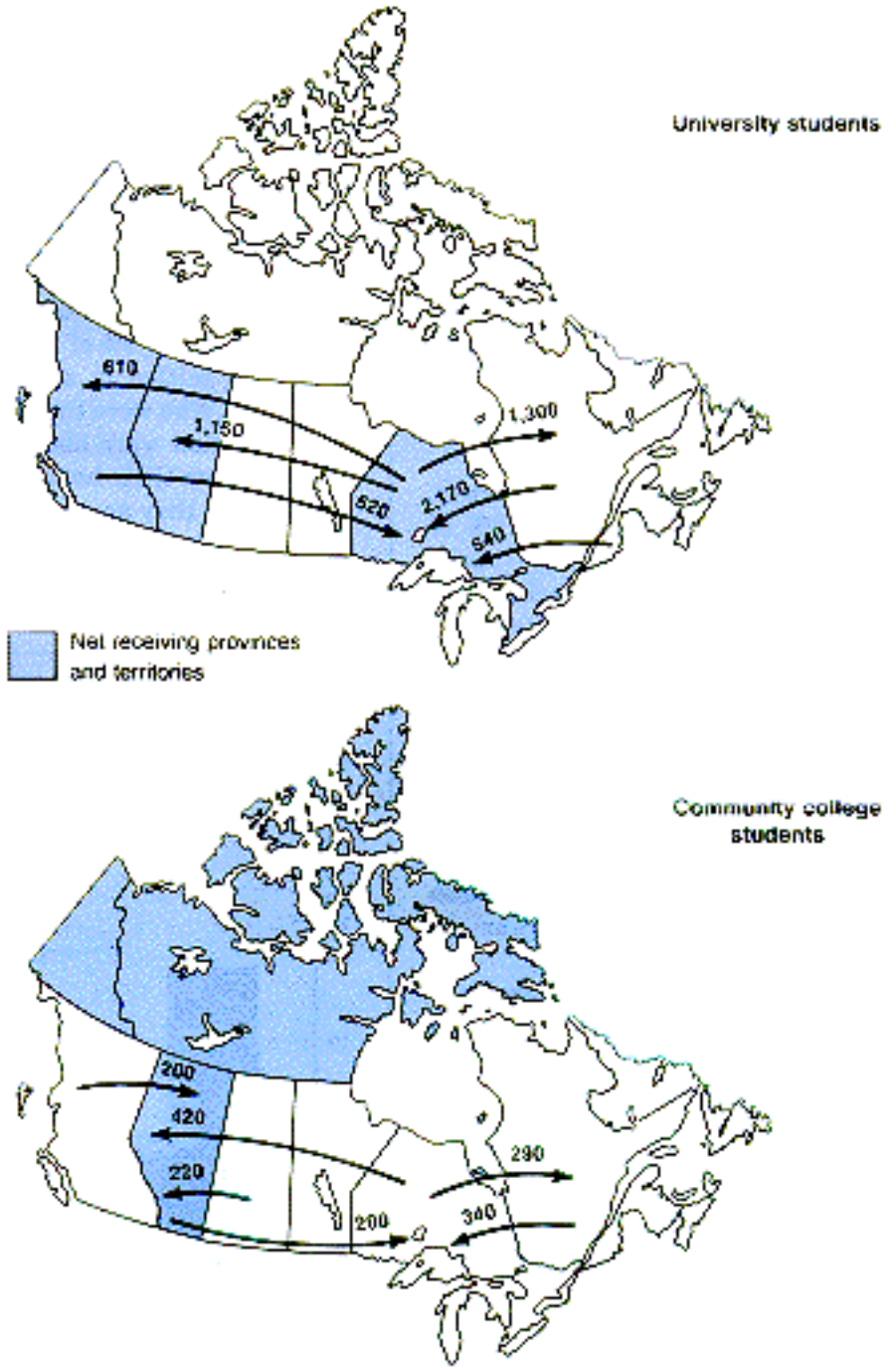
Inter-provincial mobility of 1982 graduates

University graduates were twice as likely as their community college counterparts to migrate.



Source: National Graduates Survey and Follow-up of 1982 Graduates

Six largest inter-provincial migration flows: home province versus province of residence in 1987



Source: National Graduates Survey and Follow-up of 1982 Graduates.

Table 4

Provincial distribution of 1982 graduations

	Province of residence			
	Before enrolment	While enrolled*	After graduation	
			1984	1987
University graduates	**94,400**	**94,400**	**94,400**	**94,400**
Newfoundland	1,630	1,480	1,540	1,560
Prince Edward Island	430	260	390	360
Nova Scotia	3,920	4,480	3,650	3,460
New Brunswick	2,370	2,280	2,120	1,980
Quebec	26,630	25,170	25,550	24,860
Ontario	37,720	39,960	37,600	38,480
Manitoba	4,160	4,100	3,660	3,600
Saskatchewan	3,460	3,450	3,140	3,010
Alberta	6,990	6,780	8,400	8,510
British Columbia	6,510	6,390	6,680	6,930
Yukon/N.W.T.	190	0	160	140
Not stated	360	0	1,480	1,480
Community college graduates	**53,100**	**53,100**	**53,100**	**53,100**
Newfoundland	780	720	710	690
Prince Edward Island	430	520	330	330
Nova Scotia	780	700	720	810
New Brunswick	630	540	630	610
Quebec	14,400	14,190	14,210	14,040
Ontario	24,080	24,710	23,390	23,700
Manitoba	1,380	1,320	1,370	1,360
Saskatchewan	1,200	1,030	1,160	1,120
Alberta	5,410	5,750	5,890	5,910
British Columbia	3,790	3,650	3,700	3,790
Yukon/N.W.T.	60	0	80	100
Not stated	180	0	910	650

Sources: National Graduates Survey and Follow-up Survey of l982 Graduates

** People living in one province and commuting daily to attend school in another province are included in the province in which the school is located.*