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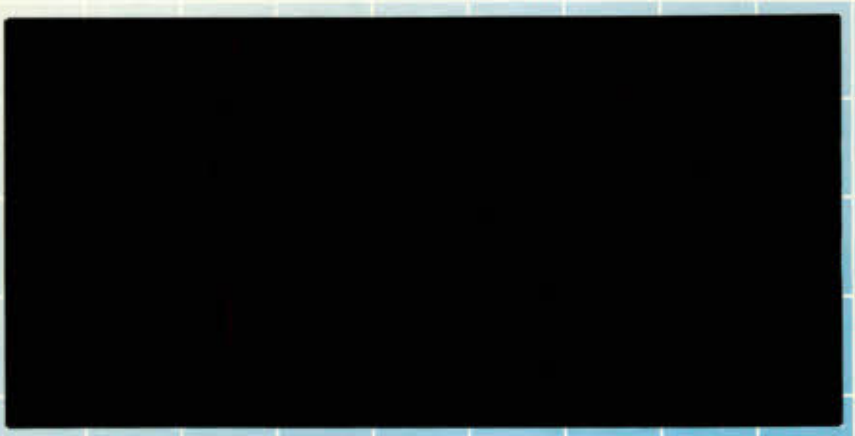

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Young Workers in the Service Economy

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The findings of this paper are the personal responsibility of the authors and, as such, have not been endorsed by the Members of the Economic Council of Canada.

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Foreword

While the service sector has become a significant employer for all types of Canadians, it is a particularly dominant source of jobs for young people. Despite the importance of this trend, we do not know a great deal about the quality of service jobs that Canada's new generation of workers are getting, nor about the extent to which their skills and abilities are being tapped.

This working paper addresses that issue by examining the transition from school to work in a service economy. Using panel data covering a 24-month period, the authors track the experiences of a sample of high-school and university graduates in three Canadian cities following their graduation. They document the patterns of transition out of the education system and into the labour market, the occupations and industries where the recent graduates found work, and the quality of those jobs in terms of content, rewards, and job satisfaction.

This study, undertaken by Professors Krahn and Lowe, of the Department of Sociology at the University of Alberta, was commissioned by the Economic Council as part of a project on employment and the service economy. The material in this paper, *Young Workers in the Service Economy*, served as an important analytical input into the Council's Statement on employment and services, *Good Jobs, Bad Jobs*, published in 1990, as well as into a major research report that will be released shortly.

Judith Maxwell
Chairman

Introduction

This paper examines the relationship between education and youth employment within a rapidly changing service-based economy. Today, the service sector accounts for over 70 per cent of Canada's labour force, and the proportion of young people employed in service jobs is even higher. Yet we know little about whether the skills and education of Canada's new generation of workers are being fully utilized – a matter of vital importance for the country's future economic development. Indeed, our understanding of the quality of the service-sector jobs held by young people remains largely impressionistic.

According to the "polarization thesis," the growth of the service sector and the relative decline of manufacturing, coupled with increasing workplace automation and the rise of flexible employment practices, are creating a bipolar distribution of skills and wages, with a consequent shrinkage of the middle class [see Kuttner, 1983; Myles, 1988; Beach, 1988]. This raises a crucial question: Is the service sector creating more "bad" than "good" jobs? The rapid growth of low-paid, unskilled, part-time, and otherwise insecure employment – conditions associated with commercial services, in particular – fuels the "bad jobs" scenario [see, for example, International Labour Organization, 1988; Economic Council of Canada, 1987]. Reinforcing the "good jobs" scenario is the growth of managerial and professional occupations to fully 35 per cent of all service-sector jobs by 1987 [Lindsay, 1989].

Young people could be major losers in this polarization of job opportunities. Radwanski's [1986*b*] study of the Ontario service sector found that youth were concentrated in industries (such as retail trade, accommodation services, and food and beverage services) that tend to provide low-wage, casual, and part-time jobs, with limited career prospects. A Statistics Canada study of the changing wage distribution of jobs in Canada between 1981 and 1986 shows that job growth during that period was concentrated at the very bottom and at the upper-middle levels in the wage distribution [Myles et al., 1988]. The most striking feature of this trend is a pervasive decline in the average wages (relative and real) paid to young workers (i.e., those aged 16 to 24).

During the 1970s and early 1980s, employment opportunities were favourable for college and university graduates [Picot et al., 1987]. But the labour-market returns to higher education may diminish in the future. According to one projection, occupations requiring a high-school education – such as salespersons, secretaries, cooks, cashiers, and janitors – will account for most of the employment growth to 1995 [Krahn and Lowe, 1988]. However, a more recent projection identifying rising educational and skill requirements predicts rapid growth in managerial and administrative occupations [Employment and Immigration Canada, 1989*a*], and thus a pressing question remains unanswered: Will recent graduates be able to find

jobs that adequately utilize their education and training, as seems to have been the case in the past [Hunter, 1988]? If not, the result could be a serious underemployment problem similar to that predicted for the United States [Burris, 1983; Clogg et al., 1986; Rumberger, 1981].

Recent discussions of how the Canadian labour force can adapt to the increasingly competitive and technologically sophisticated global service economy have focused on the importance of human-capital development [Radwanski, 1986*a*]. A key concern is how to ensure that education and training meet the needs of the new service economy [Canada, 1985; Employment and Immigration Canada, 1989*a*]. Underemployment, however, has received scant attention. Instead, in less than 10 years the focus of public policy has shifted from youth unemployment [e.g., Denton et al., 1980; Fortin, 1984; Gunderson, 1981; Foot and Li, 1986] to skill development [Rush and Evers, 1986], skill shortages, and a looming scarcity of young workers [Employment and Immigration Canada, 1989*a* and 1989*b*; Statistics Canada, 1989].

In sum, the future working lives of today's teenagers and young adults will be shaped by developments in the service economy. If sizable numbers of the present youth cohort begin their working lives in "bad" service-sector jobs, they could face long-term occupational disadvantages, compared with preceding generations [Blossfeld, 1987]. It is essential, therefore, to document the unique conditions prevailing in the post-recession labour market for teenagers and young adults.

Using data from a 24-month panel study of high-school and university graduates in three cities [for overviews, see Krahn, 1988; Krahn and Lowe, 1990], we provide a comprehensive analysis of youth employment in the service economy. The basic objective of this study is to explain changing school-to-work transitional processes and the restructuring of youth labour markets in the latter part of the 1980s. Distinguishing between full-time students and full-time labour-force participants, and between high-school and university graduates, we identify the labour-market situations of young people at different stages in the school-to-work transition. We also examine how various employment outcomes in the service sector are influenced by sociodemographic characteristics, local labour-market conditions, pre- and post-graduation employment experiences, and educational attainment. Three general sets of questions guide our analysis:

– Are there different patterns of transition out of the education system and into the labour market?

– In which service-sector occupations and industries are young people employed two years after their graduation from high school or university? Do

employment outcomes vary by gender, education level, type of program or degree, and the transitional route followed after graduating in 1985?

– What is the quality of service-sector employment for high-school and university graduates, in terms of task content, economic rewards, and job satisfaction? How much variation is there in job rewards? In general terms, how well matched are young people in terms of their education and the demands of typical entry-level service-sector jobs?

Data and Methods

Base-line data (Year 1) were collected in the spring of 1985 from graduating high-school and university students in the cities of Edmonton, Toronto, and Sudbury. The first major follow-up survey was completed in May 1986 (Year 2), and a second one took place in May 1987 (Year 3). Thus the data analysed in this paper cover a 24-month period following graduation.[1]

A longitudinal research design is the most appropriate method for documenting the dynamics of the transitional process. Few previous Canadian studies of education and labour markets have used longitudinal panel designs [major exceptions are Porter et al., 1982; Anisef et al., 1980 and 1986]. However, many of the issues that we examine have been addressed in more narrowly focused, cross-sectional studies and policy discussions [e.g., Gaskell, 1987; Looker, 1985; Radwanski, 1987; Picot et al., 1987; Davis et al., 1984; Senate of Canada, 1986; Foot and Li, 1986; Canada, 1985; Rush and Evers, 1986].

A key feature of the study is a comparison of three diverse urban labour markets. While these three cities obviously are not representative of the country as a whole, we believe that they reflect many of the major similarities in young people's school and work experiences in major urban centres, as well as some of the regional and metropolitan variations. During the study period, Toronto's economy was booming, while Edmonton's energy-based economy was still in a recovery phase, given low world oil prices. Sudbury is a smaller city, dependent on nickel mining and representative of the many resource-based communities in Canada.

Other important points of comparison are level of education, age, and gender. We compare the employment experiences of high-school and university graduates. These two groups bring very different educational credentials to the labour market. Furthermore, they represent distinct age cohorts. The average age of high-school sample members in Year 1 was 18, compared with 23 for university sample members. These educational and age differences underscore the importance of differentiating among individuals in the 15-24

age group. The university and high-school samples contain similar numbers of each sex. This enables us to examine gender differences in transitional patterns and labour-market outcomes, and their implications for traditional patterns of gender-based occupational segregation.

The university sample contains a mix of graduates from arts, science, and professional faculties at the University of Alberta, the University of Toronto, and Laurentian University. While faculties such as law, medicine, and dentistry were excluded from the study because of their small enrollments and unique labour markets, the faculties of engineering, education, and business were included. A systematic sample was generated by choosing every third name on lists of graduands in the designated faculties. Questionnaires were mailed to those selected in April 1985 and followed up by mail and phone.

Given the difficulties involved in obtaining a random sample of graduating high-school students in the three cities, we used a strategic sampling design, with the school as the primary sampling unit. Within each school, a diverse range of classes in both vocational and academic programs were chosen. Once permission had been obtained from school officials and from the parents of eligible students under the age of 18, researchers administered the questionnaire in classrooms in May 1985.

The Year 2 and Year 3 questionnaires were administered through the mail. Prior to each of these follow-up surveys, newsletters were sent to the respondents to keep them informed about the progress of the study and to report preliminary findings. Both the Year 2 and Year 3 surveys (and the Year 1 university survey) utilized a four-stage data collection procedure [see Heberlein and Baumgartner, 1978], consisting of an initial questionnaire package and covering letter, a reminder letter, a second questionnaire package, and, where necessary, telephone contact with an offer to send out a third questionnaire. We succeeded in contacting all but a few sample members by mail or by phone.

Sample sizes and response rates are reported in Table 1. There were 3,564 respondents in Year 1. Almost two thirds (64 per cent) of the original sample (N = 2,289) responded in Year 2. Attrition further reduced the sample in Year 3. The final high-school sample contains 54 per cent of those who gave their name and address on the 1985 questionnaire, compared with 74 per cent for the university sample. The overall response rate in Year 3 was 62 per cent of those giving contact information in Year 1, providing a panel of 1,905 young people (1,030 of the original high-school graduates and 875 of the original university graduates) for whom information pertaining to 24 months of post-graduation education and/or labour-market experience is available.

A comparison of Year 1 respondents who subsequently dropped out of the study (in either Year 2 or Year 3) with those who participated in all three

Table 1

Sample Sizes and Response Rates, by City and by Education Level, 1985-87

	May 1985		May 1986		May 1987	
	High school	University	High school	University	High school	University
Edmonton	983	589	665	458	547	421
	[894]	[533][1]	68%[2]	78%	56%	71%
					61%[3]	79%
Toronto	754	519	412	358	296	326
	[674]	[433]	55%	69%	39%	63%
					44%	75%
Sudbury	492	227	240	156	187	128
	[338]	[221]	49%	69%	38%	56%
					55%	58%
Subtotal	2,229	1,335	1,317	973	1,030	875
	[1,906]	[1,187]	59%	73%	46%	66%
					54%	74%
Total	3,564		2,289		1,905	
	[3,093]		64%		53%	
					62%	

1 Number of Year 1 respondents who provided their name and address for follow-up purposes.
2 Response rate: proportion of total Year 1 sample re-interviewed.
3 Response rate: proportion of Year 1 respondents who gave their name and address, signifying their willingness to participate in the panel study.

years identified several possible sources of sample attrition bias [Krahn, 1988]. In both the high-school and university samples, males had a higher attrition rate, as did members of racial/ethnic minorities. Within the high-school sample, individuals with previous labour-market experience were somewhat more likely to drop out. Academically oriented high-school youth and those from more affluent socio-economic backgrounds were more likely to continue participating. In the university sample, labour-market experience and socio-economic background had a negligible effect on attrition. In addition, there were marked differences in response rates across the three cities for both samples. These sources of attrition bias must be kept in mind when interpreting our results.

The School-to-Work Transition in the 1980s

One of the major findings to emerge from this research project is that the movement of young people out of the educational system and their integration into the labour market form a process that is becoming more prolonged, uncertain, and circuitous. In this section, we summarize from previous analyses several important aspects of the changing school-to-work transition in the mid-1980s [see Krahn and Lowe, 1990].

Growing labour-force activity by young people prior to leaving school has blurred the boundaries between student and worker roles. One reason for this is the high level of part-time labour-force participation by students in Canada, which increased from 35 to 48 per cent among those aged 15-19 and from 40 to 49 per cent for the 20-24 age group between 1977 and 1987 [Cohen, 1989]. In our study, a total of 68 per cent of the high-school sample and 62 per cent of the university sample had held a paying job at some time during the school year prior to our base-line survey. At the time of the survey, just prior to graduation, 57 per cent of the high-school sample and 50 per cent of the university students had jobs and worked an average of 17.0 and 24.8 hours per week, respectively.

Table 2 shows that virtually none of the high-school sample reported managerial or administrative occupations, and few (mainly males) worked in blue-collar manufacturing or construction jobs while attending high school. The vast majority were in clerical, sales, or service jobs. About half of the university sample members worked in similar occupations while finishing their degree. Compared with the high-school sample, university graduates were more likely to be employed in professional occupations, mainly because some education, engineering, and science students found part-time work related to their specializations. In observing this concentration of students in lower-status white-collar occupations, it must be recalled that students are more likely to have an instrumental approach to such employment, generally viewing it as a temporary source of income rather than as an initiation into their future career.

It is also worth noting that the traditional sequence of completing one's formal education and then moving into more or less continuous employment – to the extent that it typifies the patterns observed in earlier decades [cf. Rindfuss et al., 1987; Osterman, 1980; Denton et al., 1980] – is giving way to a somewhat different situation, where education is prolonged and co-exists with employment. This new orientation is reflected in growing part-time postsecondary enrollments among individuals over the age of 30 [Bélanger and Omiecinski, 1987]. As well, rising numbers of youth are staying in school longer or returning to school after several years in the labour force.

Table 2

Occupation of Employment during School Term, by Gender and by Education Level, 1984-85

	High school[1]			University[1]		
	Females	Males	Total	Females	Males	Total
	(Per cent)					
Occupations[2]						
Managerial/ administrative	–	–	–	4.3	2.9	3.7
Science/ engineering/math	0.3	0.6	0.4	6.1	18.4	10.9
Social sciences	1.1	–	0.6	6.4	1.9	4.7
Teaching	1.7	0.3	1.0	16.2	14.5	15.5
Medicine/health	1.9	0.6	1.3	2.4	1.9	2.2
Artistic/literary/ recreational	3.6	5.3	4.4	6.7	6.8	6.7
Clerical	29.5	13.9	22.0	32.7	15.0	25.8
Sales	27.9	21.9	25.0	12.5	14.0	13.1
Services	32.9	40.5	36.6	10.1	14.5	11.8
Primary	–	1.8	0.9	0.3	0.5	0.4
Manufacturing/ processing/ fabricating	0.3	7.4	3.7	–	2.4	0.9
Construction	–	2.1	1.0	0.3	3.4	1.5
Transport/ communication	0.8	5.6	3.2	1.8	3.9	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
(N)	(359)	(338)	(697)	(327)	(207)	(534)

NOTE The single dash (–) represents nil or zero.

1 Gender differences are statistically significant ($p<.01$, Chi-square test).

2 Job held at time of interview (May 1985) or most recent job during the winter term, if not employed at time of interview.

A surprisingly high proportion of both high-school and university graduates in our samples remained in the educational system after their graduation. Of the high-school graduates, 77 per cent continued their education in some form during the year following the first survey. Many returned for another full or partial year of high school, while others went into postsecondary programs. By May 1987, nonstudents still only made up 28 per cent of this sample. In both years, full-time students outnumbered part-time students. Gender differences were largely non-existent in Year 2, but by Year 3 young men were slightly more likely to have left school.

About half of the university sample returned to school in Year 2. In Year 3, 53 per cent were reporting some kind of educational activity, and part-time students outnumbered full-time students. Among these university graduates continuing their education, 80 per cent of the males and 70 per cent of the females remained in the university system in Years 2 and 3, the majority going into graduate studies. A minority (8 per cent and 12 per cent in Years 2 and 3, respectively) entered a community college or technical school program.

Within the high-school sample, 14 per cent were attending school in Year 2, but not in Year 3. Conversely, 9 per cent had not attended in Year 2, but returned to school a year later. In the university sample, 11 per cent left school after Year 2 while in the same period almost 16 per cent re-entered.

This considerable movement in and out of the education system prolongs the transition from school to work. Only a minority of students terminated their education and entered the labour force upon graduation. Indeed, there is no single or even predominant pattern of labour-force entry for either high-school or university graduates. What distinguishes graduates in the 1980s from those in earlier decades are these diverse combinations of education and work. This is captured in our typology of four transition groups (Table 3). Only the last of these corresponds to the traditional image of the graduating student leaving the educational system for a new phase in life characterized by full-time employment.

Table 3 classifies individuals according to their educational activity. Transition Group 1 (TG1) contains traditional students – respondents who reported seven or more months of full-time education in each of the two years following their 1985 graduation. Their employment was restricted mainly to part-time jobs during the school term and full-time summer jobs. At the other end of the continuum, Transition Group 4 (TG4) includes only those respondents who left school promptly after graduating, reporting no full-time education and no more than two months of part-time education, in either Year 2 or Year 3 of the study.

The two middle groups (TG2 and TG3) reflect the trend towards an extended transition from school to work. Those in TG3 were in the education system in Year 2 but had left by Year 3. Their activity pattern in Year 3 closely resembled that of TG4 a year earlier. Thus TG2 becomes a residual category for those who mixed school and employment over the 24 months of the study, including those who left school in Year 2 and returned in Year 3.

Table 3 also reports average months of unemployment. In both samples, TG1 experienced the least unemployment. For all transition groups, unemployment declined somewhat during Year 2 and Year 3. But overall, the differences across the four transition groups, between the two samples, and between the two follow-up years are not substantial.

Table 3

Typology of Transitions from School to Work for 1985 High-School and University Graduates:[1] Education, Work, and Unemployment Experiences

	Full-time education, both years [TG1]	Education and work, both years [TG2]	Education in Year 2, not Year 3 [TG3]	Employment, both years [TG4]
		(Average number of months)		
High-school sample				
Year 2 (1985-86)				
FT education	8.8	3.6	5.9	0.0
PT education	0.1	1.7	2.6	0.3
FT employment	1.1	3.5	3.0	7.0
PT employment	5.5	4.8	5.4	2.8
Unemployment	1.4	1.7	2.0	1.5
Year 3 (1986-87)				
FT education	8.8	4.7	0.0	0.0
PT education	0.1	1.6	0.1	0.1
FT employment	2.1	4.1	7.0	8.8
PT employment	5.2	4.2	3.7	1.8
Unemployment	0.8	1.3	1.5	1.4
(N)	(375)	(331)	(160)	(164)
		(Per cent)		
Proportion	36.4	32.1	15.5	15.9
		(Average number of months)		
University sample				
Year 2 (1985-86)				
FT education	8.7	1.9	2.9	0.0
PT education	0.1	1.8	3.8	0.1
FT employment	2.5	6.9	6.7	9.0
PT employment	4.0	2.6	3.0	1.6
Unemployment	0.5	1.0	1.1	1.2
Year 3 (1986-87)				
FT education	9.4	2.6	0.0	0.0
PT education	0.2	3.7	0.1	0.1
FT employment	1.7	7.4	9.5	10.2
PT employment	4.8	2.4	1.8	1.2
Unemployment	0.3	0.6	0.7	0.6
(N)	(140)	(236)	(136)	(363)
		(Per cent)		
Proportion	16.0	27.0	15.5	41.5

NOTE PT = part-time; FT = full-time.

1 TG1 = 7+ months of full-time education in both years; TG2 = mixed school/labour market in both years; TG3 = mixed school/labour market in Year 2, no full-time but up to two months part-time education in Year 3; TG4 = no full-time, but up to two months of part-time education in both years.

Further analysis [Krahn, 1988] shows that roughly one third of the high-school sample reported some unemployment in each follow-up year. Comparable figures for the university sample were 31 per cent and 20 per cent in the two follow-up years, respectively. Many respondents experienced unemployment in one year and not the other. Consequently, 48 per cent of the high-school sample and 40 per cent of the university sample reported at least one spell of unemployment over the 24 months of this study. Of those reporting unemployment, the average duration was 4.7 months in Year 2 and 3.7 months in Year 3 for high-school respondents and, in the university sample, 3.4 and 2.9 months. Overall, then, periods of joblessness were quite typical of the school-to-work transition in the 1980s.

Young Workers in Service Industries

Three quarters of the high-school sample was employed when contacted again in May 1987. An additional 19 per cent had worked at some time during the previous year; only 5 per cent had not been employed at any time. Since fewer university graduates had continued their education, a higher proportion of them (85 per cent) had a paying job in May 1987. Another 12 per cent had held a job earlier in the year; and, again, only a few (4 per cent) had not worked for pay. The analysis of labour markets and job rewards that follows is based on information provided by the subsamples of 777 high-school and 740 university graduates who were employed when surveyed in May 1987.

We begin by examining the industry of employment. Following Myles et al. [1988], we define the goods-producing sector as consisting of manufacturing, construction, mining, forestry, fishing, and agriculture.[2] The service sector is divided into commercial and non-commercial services. There are three types of industries in the commercial-service category: distributive (transportation, storage, communications, wholesale trade), consumer services (retail trade, accommodation and food services, personal services, amusement and recreation services), and producer or business services (accounting, legal and management consulting, the finance, insurance, and real-estate group). The two major noncommercial-service industries are the health, education, and welfare group, and public administration.

Table 4 shows that, while 70 per cent of the 1986 Canadian labour force was employed in services,[3] well over 80 per cent of both the high-school and university samples were employed in those five industries. Clearly, only a small minority of young workers are not service-sector employees.

Assuming for the time being that "bad" jobs are concentrated in consumer services (a hypothesis that we test empirically below), Table 4 suggests that generalizations about young people being employed in service-sector "job

Table 4

Industry of Employment, by Gender and by Education Level, 1987; and Total Employment,[1] by Industry, Canada, 1986

	High school[2]			University[2]			Total employment
	Females	Males	Both	Females	Males	Both	
	(Per cent)						
Nonservice industries							
Resource-based (including agriculture)	2.7	4.0	3.3	2.7	12.3	6.6	7.7
Manufacturing	2.1	12.5	7.5	5.9	11.9	8.4	16.8
Construction	1.6	8.8	5.3	0.9	4.3	2.3	5.7
Subtotal	6.4	25.3	16.1	9.5	28.5	17.3	30.2
Services							
Distribution	3.7	5.3	4.5	3.0	7.3	4.7	10.9
Consumer	54.1	55.2	54.7	14.4	13.2	13.9	23.6
Business	15.6	5.0	10.2	15.6	19.2	17.1	9.9
Education/health/ welfare	11.4	2.5	6.8	46.1	20.2	35.5	14.7
Public administration	8.8	6.7	7.7	11.4	11.6	11.5	7.4
Subtotal	93.6	74.7	83.9	90.5	71.5	82.7	66.5
Industry undefined	–	–	–	–	–	–	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(N)	(377)	(400)	(777)	(437)	(302)	(739)	

NOTE The single dash (–) represents nil or zero.

1 Experienced labour force only – i.e., the labour force minus the unemployed who have never worked, or who had worked only prior to 1 January 1985.

2 Gender differences are statistically significant ($p<.01$, Chi-square test).

SOURCE For the industrial classification, Myles et al. [1988]; for the data on total employment, Statistics Canada [1988].

ghettos" oversimplify matters. Considering first the university sample, about 12 per cent had found employment in public administration, and 17 per cent were working in business services. Over one third were employed in the

education/health/welfare industries. In short, employed university graduates were distributed across a wide range of service industries. Nevertheless, a sizable minority (14 per cent) had jobs in consumer services two years after receiving their undergraduate degrees.

By comparison, a much larger proportion of graduates in the high-school sample were employed in consumer services. Relatively few reported jobs in the other four major service industries. The concentration of these teenagers in consumer services reinforces negative stereotypes about "youth job ghettos" in the service sector. Moreover, a parallel study that we conducted in Edmonton revealed that, with the exception of some males employed in construction, most high-school dropouts found jobs in consumer services [see Krahn et al., 1985].

While youth generally are overrepresented in service industries, that is especially true of young women. Over 90 per cent of young female workers in both of our samples were employed here. In the university sample, the gender difference resulted mainly from the presence of large numbers of female graduates in education faculties and the high proportion of men in the natural-resource and manufacturing industries (mainly engineering graduates). In the high-school sample, outside of consumer services, women tended to be employed in business services or in the education/health/welfare group, whereas men were concentrated in the traditionally male-dominated manufacturing and construction sectors.

The Occupations of Young Workers

Employment patterns can be further illuminated by examining the occupations reported by these young workers (Table 5). The university sample members were considerably more likely than the Canadian labour force as a whole to be employed in managerial or professional occupations. This occupational distribution of university graduates is partly a function of our sampling design (for example, 28 per cent were in teaching occupations). Nonetheless, three out of four university sample members did obtain higher-status jobs within two years of graduating. Yet about one fourth were still employed in lower-status clerical, sales, and service occupations. In contrast, few of the high-school graduates reported managerial or professional occupations, while 68 per cent were working in clerical/sales/service occupations.

Again, there are prominent gender differences. Almost half of the female high-school graduates were in clerical occupations, and another 39 per cent were in sales and service occupations. High-school-educated males were somewhat overrepresented in service occupations and in male-dominated manufacturing and construction occupations. In the university sample, few males were in clerical occupations. Substantial gender differences, largely

Table 5

Occupation by Gender and by Education Level; and Total Employment, by Occupation, Canada, 1987

	High school[1]			University[1]			Total employment
	Females	Males	Both	Females	Males	Both	
	(Per cent)						
Occupations							
Managerial/ administrative	0.8	2.0	1.4	13.3	20.5	16.2	11.6
Science/ engineering/ math	0.5	3.5	2.1	8.7	31.4	18.0	3.4
Social sciences	2.9	0.3	1.5	9.8	4.3	7.6	1.9
Teaching	1.6	0.3	0.9	35.9	15.8	27.7	4.2
Medicine/health	3.7	1.0	2.3	3.7	0.7	2.4	4.8
Artistic/literary/ recreational	2.6	2.3	2.4	2.3	2.3	2.3	1.9
Clerical	43.9	13.5	28.3	13.5	4.6	9.9	16.5
Sales	21.2	15.0	18.0	7.3	9.9	8.4	9.4
Services	17.7	24.8	21.4	3.9	5.3	4.5	13.7
Primary	2.4	4.3	3.4	0.2	1.0	0.5	5.4
Manufacturing/ processing/ fabricating	1.3	16.5	9.1	0.2	2.0	0.9	14.6
Construction	0.3	8.0	4.2	0.2	1.3	0.7	6.2
Transport/ communication	1.1	8.5	4.9	0.9	1.0	0.9	6.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(N)	(378)	(399)	(777)	(437)	(303)	(740)	

1 Gender differences are statistically significant ($p<.01$, Chi-square test).
SOURCE For the employment data, Statistics Canada [1987].

reflecting the male/female ratios of students in education and engineering faculties, were observed in teaching and in science/engineering occupations.

In addition, university-educated young women were less likely than their male peers to enter managerial/administrative occupations. Since our sample has similar numbers of male and female business graduates, this difference does not originate in the student sex ratio in business faculties. Rather, it reflects gender biases in employer recruitment and, more generally, the persistence of entrenched patterns of gender-based occupational segregation.

City Differences in the School-to-Work Transition and Employment Patterns

Some of these variations in employment no doubt result from the distinctive features of the three urban labour markets in the sample. Indeed, our main reason for studying Edmonton, Sudbury, and Toronto was to determine the impact of local labour-market and economic conditions on transitional patterns and outcomes.

The unemployment experiences of graduates mirrored inter-city differences in unemployment rates, which were considerably higher in Sudbury and Edmonton than in Toronto during the 1985-87 period [Krahn and Lowe, 1990]. As for industry-of-employment patterns within our high-school and university samples, these were shaped by the economic structures of the three cities. Specifically, within the high-school sample there was a greater concentration of employment reported by Toronto respondents in manufacturing and construction, compared with the other cities. Similarly, Sudbury respondents were more likely to report employment in natural resources. Respondents in both Sudbury and Edmonton were more likely to be employed in consumer-service industries than were their Toronto counterparts. For the university sample, Toronto respondents tended to report more employment in manufacturing. As well, there was a greater concentration of Toronto university graduates in business services and a comparatively smaller number in public administration. Occupational differences across the three cities were consistent with these industrial patterns.

Some of those inter-city employment variations may be due to our sample composition. Still, these differences do tend to confirm what is common knowledge about Canada's regionalized economic structure. In this respect, "good" and "bad" service jobs are not evenly distributed across the three cities. Youth employment trends are mainly a product of each city's economic environment. Toronto's economy is more buoyant and diversified, with relatively large manufacturing and business-service sectors. Despite their resource-based economies, Edmonton and Sudbury seem to have more youth jobs in service occupations and consumer-service industries. This suggests that a higher proportion of "good" jobs is available to Toronto graduates. But at the same time, it is also clear that city differences are less important determinants of employment outcomes than are gender, educational level, or age.

Youth Labour Markets

Examining only occupational or industrial data provides an incomplete picture of youth employment patterns. A labour-market segmentation perspective is useful in providing a more comprehensive view [Clairmont et al.,

1983; Ashton, 1988]. We assume that there is not a single open, competitive labour market in Canada; rather, there are distinct segments, defined mainly in terms of unequal returns to similar levels of human capital, barriers to inter-segment mobility, and varying degrees of bargaining power to change employment conditions.

We recognize that the segmentation perspective requires theoretical and empirical refinement before it can fully account for the patterns observed for young workers. There is good evidence to show that the types of jobs held by teenagers and young adults differ from those held by older workers [Reubens, 1983]. However, to argue that there is a youth labour market, distinct from an adult labour market, would be simplistic. Certainly, some teenagers work in "youth jobs," and there are entry-level positions into which employers recruit young, inexperienced workers. Yet young workers can also be found in certain occupations (such as clerical jobs) alongside adults.

Combining occupational and industrial classification systems, as we have done in Table 6, yields a more complete description of the specific labour-market segments (LMS's) in which young people are located. This table collapses resource-based, manufacturing, and construction industries into a goods-producing sector for purposes of comparison with the five service industries. The industry of employment in 1987 is then cross-tabulated by occupation for both the high-school and university samples. The results show a number of distinct LMS's for youth labour.

Before discussing these LMS's in detail, several points must be made. First, while traditional distinctions between goods-producing and service industries are maintained to some extent, occasionally we find it useful to cross those boundaries when discussing the labour-market location of young workers. Second, because our samples contain only youth, we cannot demonstrate the existence of "youth labour markets" where employees are mainly or exclusively young people. Third, we are aware that our original sampling design does not permit generalizations about the relative size of different youth LMS's. However, we do believe that our samples are sufficiently representative to allow comments about industrial/occupational intersections within the larger labour market where high-school- and university-educated youth are typically employed.

One of the most substantial groupings of young workers observed in Table 6 consists of the 355 high-school graduates employed in clerical/sales/service occupations in consumer services (Group A). A total of 46 per cent of the employed high-school respondents were located in this consumer-service LMS. Sales clerks were the most common occupation within this group, followed by food- and beverage-serving occupations, cashiers and tellers, stock clerks, and sales supervisors. These are the types of jobs that commentators have in mind when talking about a "hamburger economy."

Table 6

Occupation, by Industry of Employment and by Education Level, 1987[1]

		Service industries							
		Goods production	Distribution	Consumer	Business	Education/ health/ welfare	Public administration	Total (N)	Total (Per cent)
Managerial/ administrative	H	F 1	1	6	3	–	–	11	1.4
	U	26	7	9	62	4	12	120	16.2
Science/ engineer/ math	H	6	2	1	4	–	3	16	2.1
	U	68	9	1	15	18	22	133	18.0
Social sciences	H	–	–	–	3	4	4	11	1.4
	U	2	–	10	10	13	21	56	7.6
Teaching	H	1	–	–	–	E 5	1	7	0.9
	U	–	–	4	1	200	–	205	27.7
Medicine/ health	H	2	–	1	–	15	–	18	2.3
	U	–	–	1	–	15	2	18	2.4
Artistic/ literary/ recreational	H	2	–	10	2	–	5	19	2.5
	U	5	3	5	1	1	2	17	2.3
Clerical	H	15	16	93	54	18	22	218	28.2
	U	9	5	16	23	6	14	73	9.9
Sales	H	3	2	132	1	–	2	140	18.1
	U	6	6	37	11	–	1	61	8.3
Services	H	2	2	130	9	8	15	166	21.5
	U	1	1	14	3	5	9	33	4.5
Primary	H	15	1	2	1	3	4	26	3.4
	U	3	–	–	–	–	1	4	0.5
Manufacturing/ processing/ fabricating	H	30	3	35	–	–	2	70	9.1
	U	2	1	3	–	–	1	7	0.9
Construction	H	28	2	2	–	–	1	33	4.3
	U	5	–	–	–	–	–	5	0.7
Transport/ communication	H	19	6	11	1	–	1	38	4.9
	U	1	3	3	–	–	–	7	0.9
Total	H	124	35	423	78	53	60	773	
		16.0%	4.5%	54.7%	10.1%	6.9%	7.8%		100.0
	U	128	35	103	126	262	85	739	
		17.3%	4.7%	13.9%	17.1%	35.5%	11.5%		100.0

A, B, C, D, E, F, G

NOTE The single dash (–) represents nil or zero.

1 The first entry in each cell is the number of high-school graduates (H) in the corresponding industry/occupation grouping; the second entry is the equivalent number for the university graduate (U) sample.

In the university sample, a smaller proportion of graduates (9 per cent) were still employed in this particular LMS. Among the university-educated service-sector employees, the most common occupations were, again, sales clerks, sales supervisors, and food and beverage servers. As Table 7 demonstrates, arts graduates were considerably more likely than graduates of the other four faculties surveyed to be employed in this market.

Given the similarity between clerical occupations in the goods- and service-producing industries, we identified a second clerical/sales/service LMS (Group B), incorporating these three occupations in industries other than consumer services (see Table 6). In the high-school sample, this LMS accounts for a smaller share of those working than does the consumer-service LMS. The most common occupations for high-school graduates within this LMS were general office clerks, secretaries and stenographers, receptionists, and cashiers and tellers.

Table 7

Labour-Market Location of University Graduates, by Faculty,[1] 1987

	Arts	Business	Education	Engineering	Science
			(Per cent)		
Labour market					
Managerial/professional (business services)	8.5	43.3	1.2	5.8	10.8
Managerial/professional (other services)	30.6	13.5	4.7	19.8	35.4
Teaching	10.9	2.9	86.0	5.8	13.1
Managerial/professional (goods-producing industries)	2.4	18.3	–	59.3	13.8
Clerical/sales/services (consumer services)	17.3	8.7	2.9	–	7.7
Clerical/sales/services (other services)	23.8	11.5	3.5	7.0	13.1
Blue-collar	2.8	1.0	1.7	2.3	3.8
Other	3.6	1.0	–	–	2.3
Total	100.0	100.0	100.0	100.0	100.0
(N)	(248)	(104)	(172)	(86)	(130)

NOTE The single dash (–) represents nil or zero.

1 Faculty differences are statistically significant ($p<.01$, Chi-square test).

In comparison with the high-school sample, fewer university graduates worked in this LMS. But considering only the university sample, proportionately more were located here than in the consumer-service LMS. University graduates in this area also occupied clerical jobs, but a few somewhat higher-status occupations were also reported (e.g., commercial travellers, bookkeepers and accounting clerks, real-estate salespersons). Again, arts graduates were much more likely than those with other university degrees to have found work in this LMS (see Table 7).

Given the concentration of high-school graduates in these two LMS's, only 9 per cent reported jobs in the various professional LMS's defined in Table 6. Consequently, those individuals are treated as a single managerial/professional group. Among university graduates, the largest cluster of professionals was in the "teaching" LMS (Group E), which contained 200 (27 per cent) of the respondents employed in Year 3 (Table 8). While the size of this group reflects our initial sampling design, it is clear that graduates of education faculties move into a distinct LMS. In our sample, 86 per cent of the education graduates were employed in this LMS two years after graduation (see Table 7). The largest single occupation within this grouping was elementary or kindergarten teachers. About half as many were employed as secondary-school teachers.[4]

The university graduates employed in managerial or professional occupations within the business-service sector warrant separate examination, on the assumption that this group might be in a more-advantaged LMS. Accountancy was the most common occupation in this LMS (Group C), revealing that almost half of the business-faculty graduates in our sample had found employment in this area (see Table 7).

The next group – Group D, which includes managerial/professional occupations in other services – was more diverse (see Table 6), containing substantial proportions of the arts (31 per cent) and science (35 per cent) graduates in our sample, as well as graduates from other faculties (see Table 7). The largest single occupation of university graduates employed in this LMS was social worker, followed by systems analyst and life-sciences technician.

Managers and natural-science professionals in the goods-producing sector comprise a sixth LMS (Group F in Table 6), which, once again, contained only a handful of high-school sample members. Three out of five engineering graduates in our university sample were employed here (see Table 7). Typical occupations included petroleum engineer, accountant, geologist, civil engineer, electrical engineer, and systems analyst.

Finally, while almost one fifth of high-school graduates were employed in a blue-collar LMS (Group G in Table 6), few university sample members reported jobs of this type. Typical occupations of high-school graduates in

Table 8

Labour-Market Location, by Gender and by Education Level, 1987

	High school[1]			University[1]		
	Females	Males	Total	Females	Males	Total
	(Per cent)					
Labour market						
Managerial/ professional (business services)	10.6	7.5	9.0	9.6	14.9	11.8
Managerial/ professional (other services)				22.0	21.5	21.8
Teaching				35.2	15.2	27.0
Managerial/ professional (goods production industries)	0.5	1.3	0.9	5.5	23.1	12.7
Clerical/sales/services (consumer services)	50.8	40.9	45.7	10.1	7.6	9.1
Clerical/sales/services (other services)	31.5	12.5	21.8	14.6	11.9	13.5
Blue-collar	1.9	32.3	17.5	1.4	4.0	2.4
Other	4.8	5.5	5.1	1.6	2.0	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
(N)	(378)	(399)	(777)	(437)	(303)	(740)

1 Gender differences are statistically significant ($p<.01$, Chi-square test).

this LMS, which spans the goods/services boundary, were motor-vehicle mechanics, construction electricians, printers, bakers, and construction labourers.

Table 8 summarizes the distribution of high-school and university graduates across these seven distinct LMS's. It also elaborates the patterns of gender segregation outlined in Tables 4 and 5. Looking first at the high-school sample, young women are somewhat overrepresented in the consumer-service LMS and highly overrepresented in the clerical/sales/service LMS. Table 8 shows that over 80 per cent of employed female high-school graduates work in these two LMS's. A third of the male high-school graduates have found jobs in the blue-collar labour market, an area where almost no female respondents are employed.

In the university sample, women are concentrated in teaching and are somewhat more likely than their male peers to have found employment in the two lower-tier service-sector LMS's. Men are more frequently employed as managers or professionals in business services, and in the goods-producing industries. As observed in Table 7, the faculty that one graduates from influences the probability of finding work in these LMS's. Thus some of the patterns of gender segregation are a function of the male/female student ratios in the university faculties in our sample.

Transition Groups and Youth Labour Markets

Clerical, sales, and service occupations were the major source of jobs for our respondents during their graduating year (see Table 2). Two years later, a large number still had not completely left school. Possibly many of those employed in the consumer-service LMS in 1987 were still students. Assuming that most students view part-time and summer employment as temporary, their concentration in less-rewarding service-sector jobs may not be a serious problem, especially if they move into better jobs after graduation.

A direct test of this hypothesis is presented in Table 9, which displays the distribution across the seven LMS's of individuals within each transition group. The high-school sample shows some movement out of the consumer-service LMS and into the clerical/sales/service LMS as individuals leave school. This mobility, however slight, into somewhat higher-status and perhaps more-rewarding service-sector employment occurs primarily among young women. The parallel process for male respondents is the greater participation in the blue-collar LMS by those who left school completely in either Year 1 (TG4) or Year 2 (TG3) of our study. However, almost 40 per cent of the high-school graduates who had not returned to school at all (TG4) were still working in consumer services two years later.

An unusual finding is the declining percentage, across transition groups, of high-school graduates in the managerial/professional LMS. Recall that TG1 includes those who attended school full-time during the two years of the study. A larger proportion (13 per cent) of this transition group had access to professional jobs, albeit temporary or part-time, through their college or university education. By contrast, only 5 per cent of TG4 (those in the labour force for two years) were in this higher-status LMS.

In the university sample, LMS differences by transition group reveal some improvement in labour-market location as these graduates leave the education system (see Table 9). But 9 per cent of TG4, compared with 13 per cent of TG1, were still employed in the consumer-service LMS. Thus, even among those university graduates who had left school completely (TG4), the movement into managerial/professional labour markets was not guaranteed.

Table 9

Labour-Market Location, by Transition Group[1] and by Education Level, 1987

	High school[2]				University[2]			
	TG1	TG2	TG3	TG4	TG1	TG2	TG3	TG4
	(Per cent)							
Labour market								
Managerial/ professional (business services)					10.7	14.2	15.0	9.4
Managerial/ professional (other services)	13.2	8.1	6.7	4.9	20.0	23.9	20.5	21.4
Teaching					24.0	25.9	29.9	27.3
Managerial/ professional (goods production industries)	1.5	1.3	–	–	8.0	7.1	8.7	18.5
Clerical/sales/ services (consumer services)	45.3	49.8	46.7	38.7	13.3	9.6	6.3	8.8
Clerical/sales/ services (other services)	21.9	20.9	17.8	26.8	12.0	14.7	16.5	12.0
Blue-collar	10.2	14.9	25.2	28.2	8.0	2.0	2.4	1.5
Other	7.9	5.1	3.7	1.4	4.0	2.5	0.8	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(N)	(265)	(235)	(135)	(142)	(75)	(197)	(127)	(341)

NOTE The single dash (–) represents nil or zero.

1 See Table 3 for the definition of the transition groups.

2 Differences between transition groups are statistically significant ($p<.01$, Chi-square test).

In short, university graduates are much less likely to be employed in low-level consumer services. In addition, there is some evidence that as these older and better-educated youth finally leave school completely, they tend to move into higher-status jobs. However, despite having a university degree, a sizable minority of this sample was still employed in the consumer-service LMS. Further research is needed to determine whether this initial postgraduation employment location becomes a barrier to subsequent upward mobility.

There is little evidence to show that high-school students move out of consumer services after graduating. Whether continuing their education or not, high-school graduates have a limited range of work opportunities. A higher degree or diploma will be required to open up further career options. And given the fact that a sizable minority of university graduates are employed in consumer services, high-school graduates are not even next in line for higher-status service jobs. Moreover, employment prospects in manufacturing, construction, or other traditionally better-paying blue-collar areas are generally decreasing. It appears, then, that many youths with only a high-school education may be trapped in lower-level jobs in consumer-service industries.

Employment Outcomes across Labour Markets

Up to this point, we have assumed that jobs in consumer services are less desirable. We now test this hypothesis directly, continuing to examine high-school and university samples separately, given their differences in terms of educational qualifications, school enrollment, and the development of career plans. In simple terms, the argument is that high-school graduates may not find lower-level LMS's as dissatisfying as might university graduates.[5]

We also have observed young workers at different stages of the school-to-work transition, even though nonstudents were somewhat less likely to be employed in the lower-level LMS's (see Table 9). Hence, it is important to compare the job evaluations of different transition groups within each LMS. In the following analysis, TG3 and TG4 are combined into a nonstudent category, while TG1 with TG2 form an "other" category.[6] While small cell sizes require cautious interpretation, these additional comparisons clearly document the job evaluations of young workers who have left school completely.

Table 10 presents employment outcomes for respondents in the four major high-school LMS's. It also provides comparisons, within each LMS, between nonstudents and those who continued their education. Summarizing the many results displayed, we note that part-time jobs are most common in the consumer-service LMS, which accounts for almost half of the employed high-school sample (Table 8). Over half of the part-time workers would have preferred a full-time job. Young people who have not left school completely are more likely to be in those part-time jobs, but one in four nonstudents in this LMS also worked part-time. Comparisons of average hours worked per week across these LMS's, and between nonstudents and other respondents within them, reflect these full-time/part-time patterns.

While differences in weekly take-home pay across high-school LMS's are not large, they are statistically significant (see Table 10). The lowest average

Table 10

Employment Outcomes, by Labour-Market Location and by Transition Group, High-School Graduate Sample, 1987[1]

		Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Blue-collar	Managerial/ professional (services)
			(Per cent)		
Part-time (less than 30 hours/week)	*	49.0 [24.6] (61.2) †	26.6 [16.1] (32.7) †	11.0 [6.8] (16.1)	28.6 [25.0] (29.6)
Part-time, involuntary		52.9 [65.5] (50.3) †	62.2 [80.0] (57.1)	60.0 [80.0] (50.0)	55.0 [100.0] (43.8)
			(Number of hours)		
Average working week	*	29.1 [35.4] (26.0) †	33.9 [35.9] (32.7)	40.3 [41.5] (38.8)	32.7 [36.9] (31.4)
			(Dollars)		
Average weekly take-home pay	*	176 [222] (154) †	228 [250] (215)	288 [281] (296)	219 [225] (217)
Full-time only	*	233 [239] (227)	268 [275] (263)	367 [290] (330)	262 [257] (263)
		+	+	+	+
Part-time only		116 [166] (106)	122 [123] (122)	139 [173] (122)	119 [145] (113)
			(Number)		
Average promotions		0.72 [1.02] (0.58) †	0.59 [0.77] (0.48)	0.70 [0.69] (0.72)	0.66 [1.06] (0.54)
			(Per cent)		
On-the-job computer use	*	10.1 [9.3] (10.6)	40.5 [32.3] (45.3)	11.3 [11.3] (11.3)	24.3 [12.5] (27.8)
			(Score)		
Average occupational status[2]	*	29.9 [29.7] (30.0)	36.4 [35.6] (36.8)	37.5 [37.7] (37.2)	45.4 [42.7] (46.2)

Table 10 (cont'd.)

	Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Blue-collar	Managerial/ professional (services)
		(Score)		
Occupational-status discrepancy[2] *	25.2	18.7	13.4	13.0
	[19.1]	[13.0]	[9.0]	[9.3]
	(28.4)†	(21.6)†	(18.4)†	(14.2)
Approximate N	354	168	135	70
	[118]	[62]	[73]	[16]
	(236)	(106)	(62)	(54)

*Differences between labour-market locations are statistically significant (one-way analysis of variance or Chi-square test, $p<.01$).

†Differences between transition groups are statistically significant (one-way analysis of variance or Chi-square test, $p<.05$).

+Differences between full-time and part-time employment incomes are statistically significant (one-way analysis of variance, $p<.01$).

1 Only the four labour-market locations in which substantial numbers of high-school graduates were employed (see Table 8) are examined. Transition groups 3 and 4 (see Table 3) are combined into the "nonstudent" category (the second entry in each cell). Transition groups 1 and 2 form the residual "other" category (the third entry in each cell).

2 Occupational-status scores are drawn from Blishen et al. [1987]; the discrepancy score is the difference between the status of occupation aspired to prior to graduation (1985) and the status of the actual occupation in 1987.

weekly net pay ($176) is in the consumer-service LMS. Adding 20 per cent to this figure to approximate average gross pay, we estimate a weekly income of $211, or just under $11,000 annually. For self-supporting individuals, this income falls slightly below the poverty line.[7] Clerical/sales/service jobs in other industries, and managerial/professional jobs in the service sector, provide high-school graduates with higher incomes, but blue-collar jobs pay the most ($288 weekly). Since the latter are male-dominated, female high-school graduates are disadvantaged by not having access to them. However, the historical trend of shrinking blue-collar employment does not bode well for recent male high-school graduates.

As one might expect, in each of these LMS's part-time workers bring home significantly lower weekly incomes than do full-time workers. Taking into account the varying proportions of part-time workers in these sectors, it is apparent that the three service LMS's offer similar pay, with workers in the blue-collar LMS reporting somewhat higher incomes. Thus even the few high-school graduates who became "managers" in service firms did not receive appreciably better job rewards. Employees in the consumer-service LMS were

paid even less, because more of them worked part-time. Finally, within each LMS the differences between the average weekly net pay of nonstudents and those retaining ties to the education system are not significant, when one controls for full-time/part-time status.

In general, few respondents had received promotions in their current jobs, perhaps because of their limited time on the job. Nonstudents were more likely to have received promotions, but the difference was significant only in the consumer-service LMS.

Computer use on the job is one indicator of rising knowledge requirements in a service economy. Table 10 also indicates limited computer use in all but the clerical/sales/service LMS. The 41 per cent of employees in this LMS who used computers mainly worked with micro-electronic office equipment [Lowe and Krahn, 1989]. Differences between students and nonstudents in computer use were insignificant.

Table 10 documents a linear increase in the average occupational status of jobs reported by workers in each of the four high-school LMS's, with the lowest-status score being found in the consumer-service LMS. Differences between students and nonstudents were insignificant. Thus, while nonstudents were somewhat more likely to be working full-time in these high-school LMS's and were consequently slightly better-paid, they essentially had the same socio-economic position.

More interesting, perhaps, is the average discrepancy between the occupational status of the job held in 1987 and the job to which these individuals aspired when first surveyed prior to graduation from high school in 1985. The average discrepancy score of 25.2 for employees in consumer services is large, suggesting considerable subjective underemployment in this LMS. However, it is also apparent that those respondents who had not yet left school were reporting the greatest discrepancy. These individuals obviously had higher occupational aspirations at the outset of the study. But even among those who left the education system completely, the discrepancy between the status of their present consumer-service job and that of the job they aspired to several years earlier is very high.

Comparing the employment outcomes of high-school and university graduates (Tables 10 and 11), we observe less part-time work, higher incomes, and higher occupational status among the latter. Relatively fewer university students were employed in the lower-level LMS's. Those who were tended to have somewhat better-paying and higher-status positions.

But there are also many similarities. Table 11 shows that the consumer-service LMS, followed by the clerical/sales/service LMS, had the most part-time work, the lowest incomes, the least computer use, the lowest occupational status, and the largest occupational-status discrepancy. Again, nonstudents reported somewhat better employment outcomes, even though a

Table 11

Employment Outcomes, by Labour-Market Location and by Transition Group, University Graduate Sample, 1987[1]

		Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Managerial/ professional (business)	Managerial/ professional (other services)	Managerial/ professional (goods)	Teaching
				(Per cent)			
Part-time (less than 30 hours/week)	*	37.3	19.0	4.6	11.8	–	20.5
		[23.7]	[9.7]	[5.9]	[6.1]	–	[13.0]
		(55.2)†	(34.2)†	(2.8)	(21.0)†	–	(34.8)†
Part-time involuntary		80.0	52.6	25.0	63.2	–	56.1
		[88.9]	[66.7]	[33.0]	[100.0]	–	[82.4]
		(75.0)	(46.2)	(0.0)	(46.2)	–	(37.5)†
				(Number of hours)			
Average working week	*	33.7	36.7	40.8	37.3	43.9	37.2
		[38.6]	[39.2]	[40.6]	[38.5]	[44.6]	[39.6]
		(27.2)†	(32.6)†	(41.1)	(35.4)†	(41.6)	(32.6)†
				(Dollars)			
Average weekly take-home pay	*	250	328	372	338	465	333
		[264]	[355]	[383]	[360]	[479]	[347]
		(232)	(285)	(357)	(306)	(417)	(307)
Full-time only		314	364	382	361	465	363
		[351]	[372]	[396]	[370]	[479]	[367]
		(298)	(346)	(364)	(347)	(417)	(357)
		+	+	+	+		+
Part-time only		134	182	172	159	–	210
		[145]	[204]	[193]	[176]	–	[217]
		(128)	(171)	(110)	(152)	–	(206)
				(Number)			
Average promotions	*	0.56	0.62	0.78	0.53	0.79	0.08
		[0.50]	[0.65]	[0.92]	[0.66]	[0.94]	[0.07]
		(0.63)	(0.58)	(0.57)†	(0.32)†	(0.76)	(0.10)
				(Per cent)			
On-the-job computer use	*	20.0	42.0	59.3	39.8	* 72.3	29.0
		[23.7]	[41.9]	[58.0]	[43.4]	[71.6]	[27.5]
		(14.8)	(42.1)	(61.4)	(34.4)	(75.0)	(31.9)
				(Score)			
Average occupational status[2]	*	35.1	42.0	58.8	56.3	66.0	59.6
		[36.7]	[43.2]	[58.9]	[57.1]	[67.2]	[61.0]
		(32.9)†	(40.0)	(58.7)	(55.1)	(61.8)†	(56.8)

Table 11 (cont'd.)

	Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Managerial/ professional (business)	Managerial/ professional (other services)	Managerial/ professional (goods)	Teaching
			(Score)			
Occupational-status discrepancy[2] *	25.1 [22.4] (28.6)	19.2 [18.2] (20.9)	3.2 [2.2] (4.5)	5.7 [4.4] (7.7)	1.0 [–0.9] (7.2) †	5.3 [3.4] (9.1) †
Approximate N	66 [38] (28)	100 [62] (38)	86 [50] (36)	159 [97] (62)	94 [74] (20)	200 [131] (69)

NOTE The single dash (–) represents nil or zero.

*Differences between labour-market groups are statistically significant (one-way analysis of variance or Chi-square test, $p<.01$).

†Differences between transition groups are statistically significant (one-way analysis of variance or Chi-square test, $p<.05$).

+Differences between full-time and part-time employment incomes are statistically significant (one-way analysis of variance, $p<.01$).

1 Only a handful of university graduates were employed in the blue-collar labour market (see Table 8); they are excluded in this table. Transition groups 3 and 4 (see Table 3) are combined into the "nonstudent" category (the second entry in each cell). Transition groups 1 and 2 form the residual "other" category (the third entry in each cell).

2 See footnote 2 of Table 10.

substantial number of them were still found in the lower-level service LMS's. As in the high-school sample, the differences between average incomes in the various service-sector LMS's were reduced when controlling for full-time/ part-time status.

In the high-school sample, occupational-status discrepancies were highest in the two lower-level LMS's, but still sizable in the other LMS's. In the university sample, the average discrepancy scores were equally high in the two lower-tier LMS's, but of little consequence in the other four LMS's. On average, university graduates employed in these areas had found jobs that were fairly consistent with their aspirations two years earlier. However, underemployment was common among university graduates employed in the consumer-service or the clerical/sales/service LMS's.

Job Evaluations in Different Labour Markets

Table 12 compares self-reported job evaluations across the four main LMS's employing high-school graduates. Some of the more pronounced differences deserve comment.

Table 12

Job Evaluations, by Labour-Market Location, High-School Graduate Sample, 1987

		Average evaluation score[1]			
		Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Blue-collar	Managerial/ professional (services)
Pay is good	*	2.95	3.44	3.44	3.10
Fringe benefits are good		2.76	3.04	3.10	2.88
Chances for promotion are good	*	2.47	2.92	2.80	2.77
Job security is good		3.35	3.61	3.43	3.47
Job provides feeling of accomplishment	*	3.05	3.38	3.61	3.90
Freedom to decide what I do in job	*	2.87	2.75	2.76	3.34
Work is interesting	*	3.04	3.39	3.41	4.19
Chance to help others	*	3.50	3.48	3.00	3.90
Lets me use skills and abilities	*	2.75	3.12	3.36	3.96
Job related to education/training	*	1.83	2.43	2.60	3.69
Workmates are friendly and helpful		4.09	4.06	3.97	4.25
Supervisor is concerned about workers	*	3.30	3.53	3.57	3.81
Pleasant physical surroundings	*	3.48	3.54	3.08	3.76
(Approximate N)		(354)	(168)	(135)	(70)

*Differences between labour-market groups are statistically significant (one-way analysis of variance, $p<.01$).

1 Respondents evaluated their current job on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Subsample sizes differ slightly, depending on the rate of nonresponse.

Workers in consumer services rated their pay, promotion opportunities, benefits, and job security more negatively than did employees in any of the other three LMS's, although only pay and promotion differences were statistically significant. Managerial/professional workers rated their pay, benefits, and promotion opportunities more negatively, probably because most were still students and almost 30 per cent were in part-time positions with low incomes.

There were also significant differences in evaluations of intrinsic work rewards, but consumer-service jobs ranked the lowest in only two areas: feelings of accomplishment, and interesting work. For both of these job dimensions, clerical, sales, and service occupations in other services had the second lowest rankings. As for the "freedom to decide what I do in my job," consumer-service workers differed little from other clerical, sales, and service employees or from those in the blue-collar LMS's.

The most striking differences across LMS's are found in the matching of education and skills to job demands. Respondents in consumer services report the greatest mismatch – indicating pervasive underemployment – followed by those in the clerical/sales/service group, and those in blue-collar LMS's. Managerial/professional jobs in the service industries are rated most positively in this regard.

In sum, jobs in consumer services ranked the lowest of the four youth LMS's in terms of intrinsic and extrinsic work rewards and utilization of employees' education and skills. Those few high-school graduates who found managerial or professional jobs in the service industries tended to be most positive in their intrinsic job evaluations, but not with regard to pay, promotions, or benefits. Depending on the job characteristic, clerical/sales/service occupations in other service industries and blue-collar jobs were evaluated somewhere in-between.

To what extent are these varying job evaluations a function of different proportions of nonstudents in each labour market? Table 13 documents no significant differences within the consumer-service LMS between high-school graduates who left school and those who continued in the education system. Nonstudents in the clerical/sales/service LMS in other industries evaluated their fringe benefits more positively. Nonstudents were no different from those who had remained in school, in terms of their evaluation of managerial/professional jobs. In brief, controlling for student/nonstudent status does not affect the pattern of relatively negative evaluations of lower-level service-sector employment by high-school graduates.[8]

Table 14 compares the job evaluations of university graduates in the six major university labour markets. The consumer-service LMS is evaluated least positively in terms of extrinsic work rewards. Those employed in clerical/sales/service occupations in other industries responded somewhat more positively, but generally less so than their peers in the four managerial/professional LMS's. There are a few exceptions to this pattern: managers and professionals in business services evaluated their pay rather negatively, and few teachers saw opportunities for promotion. The former may be due to higher pay expectations on the part of business-faculty graduates, while the latter simply reflects the relatively flat organizational structure of schools.

Table 13

Job Evaluations, by Labour-Market Location and by Transition Group,[1] High-School Graduate Sample, 1987

	Average evaluation score[2]							
	Clerical/ sales/ services (consumer)		Clerical/ sales/ services (other)		Blue-collar		Managerial/ professional (services)	
	Non-student	Other	Non-student	Other	Non-student	Other	Non-student	Other
Pay is good	2.81	3.01	3.29	3.53	3.45	3.42	2.56	3.26
Fringe benefits are good	2.91	2.68	3.31 *	2.88	3.41 *	2.74	2.56	2.98
Chances for promotion are good	2.57	2.42	3.08	2.83	3.10 *	2.45	2.44	2.87
Job security is good	3.31	3.37	3.77	3.52	3.53	3.31	3.19	3.56
Job provides feeling of accomplishment	3.03	3.06	3.42	3.36	3.68	3.52	3.50	4.02
Freedom to decide what I do in job	2.97	2.82	2.73	2.76	2.96 *	2.53	3.38	3.33
Work is interesting	2.97	3.07	3.45	3.36	3.49	3.31	4.00	4.24
Chance to help others	3.37	3.56	3.53	3.45	3.00	3.00	3.63	3.98
Lets me use skills and abilities	2.80	2.72	3.15	3.10	3.64 *	3.03	3.94	3.96
Job related to education/ training	1.97	1.76	2.45	2.42	2.96 *	2.18	3.13	3.85
Workmates are friendly and helpful	4.06	4.11	4.13	4.01	3.99	3.95	3.94	4.33
Supervisor is concerned about workers	3.14	3.38	3.74	3.41	3.63	3.49	3.31	3.96
Pleasant physical surroundings	3.45	3.49	3.45	3.59	3.16	2.98	3.44	3.85
(Approximate N)	(118)	(236)	(62)	(106)	(73)	(62)	(16)	(54)

*Differences between transition groups are statistically significant (one-way analysis of variance, $p<.05$).

1 Transition groups 3 and 4 (see Table 3) are combined into the "nonstudent" category; transition groups 1 and 2 form the residual "other" category.

2 See footnote 1 of Table 12.

Table 14

Job Evaluations, by Labour-Market Location, University Graduate Sample, 1987

		Average evaluation score[1]					
		Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Managerial/ professional (business)	Managerial/ professional (other services)	Managerial/ professional (goods)	Teaching
Pay is good	*	2.76	3.06	2.80	3.31	3.49	3.50
Fringe benefits are good	*	2.98	3.25	3.05	3.53	3.88	3.57
Chances for promotion are good	*	2.66	2.64	3.50	2.99	3.51	2.68
Job security is good	*	3.36	3.66	3.69	3.65	3.65	3.09
Job provides feeling of accomplishment	*	3.01	3.19	3.80	3.93	3.99	4.12
Freedom to decide what I do in job	*	2.92	3.04	3.15	3.42	3.70	3.60
Work is interesting	*	3.18	3.18	3.71	4.03	4.03	4.33
Chance to help others	*	3.52	3.34	3.30	3.97	3.12	4.53
Lets me use skills and abilities	*	2.68	2.78	3.80	3.87	3.83	4.34
Job related to education/training	*	2.11	2.08	3.67	3.89	3.69	4.63
Workmates are friendly and helpful		3.95	4.08	3.99	4.11	4.07	4.14
Supervisor is concerned about workers		3.36	3.72	3.51	3.74	3.79	3.85
Pleasant physical surroundings	*	3.39	3.41	3.55	3.58	3.38	3.75
(Approximate N)		(66)	(100)	(86)	(159)	(94)	(200)

*Differences between labour-market groups are statistically significant (one-way analysis of variance, p<.01).

1 See footnote 1 of Table 12.

With the exception of "chance to help others," evaluations of intrinsic job rewards are also lowest in the consumer-service LMS, followed by clerical, sales, and service occupations in other service industries. The same pattern, but much more pronounced, is observed for the indicators of mismatched education/training and job demands.

Table 15 further distinguishes between nonstudents and those who have not completely left school. In the consumer-service LMS, nonstudent university graduates were significantly less positive about their pay. Unlike their student co-workers, these individuals probably saw fewer prospects for improving their pay and working conditions in the immediate future. But they did assess their work as being more interesting, perhaps because of lower expectations. In clerical/sales/service occupations in other industries, nonstudents, compared with their peers still in school, tended to be more positive, which suggests that they may have obtained somewhat better positions within this LMS.

To recap, with few exceptions jobs in consumer services received the most negative evaluations by both high-school and university graduates. These findings parallel those concerning objective employment outcomes (see Tables 10 and 11). Managerial and professional service-sector jobs tended to be restricted to university graduates, who evaluated this work positively.

However, several major differences emerged between the high-school and university samples. First, a much larger proportion of the high-school sample was employed in the consumer-service LMS. Second, in the high-school sample, clerical/sales/service workers in other industries tended to evaluate intrinsic work rewards, and the match between their education and their work, more positively than did their peers in consumer services. For university graduates, this distinction was not as apparent, probably because their higher job expectations would tend to produce generally negative evaluations of any nonprofessional or nonmanagerial employment.

Finally, comparisons between nonstudents and other sample members revealed few significant differences in job evaluations. This was true among both high-school and university respondents employed in the consumer-service LMS. Thus the strongly negative assessments of jobs in this LMS cannot be explained with reference to different work preferences of students and those who have left school. Instead, we must look to the jobs themselves for an explanation.

Labour-Market Location and Job Satisfaction

Our analysis of employment outcomes and job evaluations within different LMS's suggests that the lowest level of job satisfaction would be found

Table 15

Job Evaluations, by Labour-Market Location and by Transition Group,[1] University Graduate Sample, 1987

	Average evaluation score[2]											
	Clerical sales/services (consumer)		Clerical/ sales/services (other)		Managerial/ professional (business)		Managerial/ professional (other services)		Managerial/ professional (goods)		Teaching	
	Non-student	Other	Non-student	Other	Non-student	Other	Non-student	Other	Non-student	Other	Non-student	Other
Pay is good	2.50 *	3.11	3.02	3.13	2.82	2.75	3.36	3.23	3.46	3.60	3.53	3.43
Fringe benefits are good	3.11	2.81	3.69 *	2.53	3.06	3.03	3.53	3.51	3.93	3.70	3.68	3.37
Chances for promotion are good	2.92	2.30	2.92 *	2.18	3.40	3.64	2.86	3.19	3.61	3.15	2.71	2.60
Job security is good	3.37	3.36	3.68	3.62	3.68	3.69	3.60	3.73	3.65	3.65	3.11	3.04
Job provides feeling of accomplishment	3.08	2.93	3.34	2.95	3.74	3.86	3.80 *	4.15	4.05	3.75	4.19	3.99
Freedom to decide what I do in job	3.11	2.68	3.24 *	2.71	3.20	3.08	3.47	3.34	3.77	3.45	3.57	3.67
Work is interesting	3.45 *	2.82	3.32	2.95	3.62	3.83	3.95	4.18	4.08	3.85	4.38	4.23
Chance to help others	3.68	3.29	3.52	3.05	3.40	3.17	3.92	4.05	3.16	2.95	4.61 *	4.36
Lets me use skills and abilities	2.71	2.64	3.05 *	2.34	3.60	4.06	3.75	4.06	3.86	3.70	4.44 *	4.16
Job related to education/training	2.32	1.82	2.27 *	1.76	3.36 *	4.11	3.88	3.92	3.76	3.45	4.67	4.54

Table 15 (cont'd.)

	Average evaluation score[2]											
	Clerical sales/services (consumer)		Clerical/ sales/services (other)		Managerial/ professional (business)		Managerial/ professional (other services)		Managerial/ professional (goods)		Teaching	
	Non-student	Other	Non-student	Other	Non-student	Other	Non-student	Other	Non-student	Other	Non-student	Other
Workmates are friendly and helpful	3.89	4.04	4.03	4.16	3.88	4.14	4.08	4.15	4.07	4.10	4.14	4.13
Supervisor is concerned about workers	3.42	3.29	3.85	3.50	3.65	3.31	3.62	3.92	3.72	4.05	3.81	3.93
Pleasant physical surroundings	3.42	3.36	3.52	3.24	3.50	3.61	3.48	3.73	3.41	3.30	3.78	3.70
(N)	(38)	(28)	(62)	(38)	(50)	(36)	(98)	(61)	(74)	(20)	(131)	(69)

*Differences between transition groups are statistically significant (one-way analysis of variance, $p<.05$).

1 See footnote 1 of Table 13.

2 See footnote 1 of Table 12.

within the consumer-service LMS. Indeed, Table 16 shows that high-school graduates in this LMS reported the lowest level of satisfaction; the few managerial or professional workers were the most satisfied, using both a behavioural intentions measure (would choose the same type of work again) and a broader measure of satisfaction.

Again, we note the differences between the consumer-service and the clerical/sales/service LMS's. High-school graduates appear to make an evaluative distinction between these lower-tier service-sector labour markets. The lower incidence of part-time work, higher occupational status, more frequent computer use, and slightly higher incomes observed in the clerical/sales/service LMS, compared with consumer services, undoubtedly contribute to these differences in job satisfaction.

Table 16

Job Satisfaction, by Labour-Market Location and by Transition Group,[1] High-School Graduate Sample, 1987

		Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Blue-collar	Managerial/ professional (services)
			(Per cent)		
Would choose same type of work	*	51.3 [44.1] (54.9)	60.9 [67.7] (57.0)	52.9 [55.4] (50.0)	84.3 [81.3] (85.2)
			(Score)[2]		
Average job satisfaction	*	3.19 [3.02] (3.28)†	3.46 [3.55] (3.42)	3.47 [3.45] (3.50)	3.85 [3.40] (3.98)†
			(Per cent)		
Earning less than deserved, given education, training, and experience	*	46.2 [51.7] (43.4)	28.9 [30.6] (27.9)	36.8 [32.4] (41.9)	52.9 [81.3] (44.4)†
Approximate N		354 [118] (236)	168 [62] (106)	135 [73] (62)	70 [16] (54)

*Differences between labour-market groups are statistically significant (one-way analysis of variance or Chi-square test, p<.01).

†Differences between transition groups are statistically significant (one-way analysis of variance or Chi-square test, p<.05).

1 See footnote 1 of Table 10.

2 Rising scale of 1 to 5.

Examining satisfaction with earnings more closely, we still observe greater dissatisfaction in the consumer services, but also among the managerial/professional employees in the high-school sample. As we noted earlier, these individuals worked in jobs that they found interesting and stimulating. But their employment was frequently part-time, and the average income in this LMS was low.

Distinguishing between students and nonstudents also highlights the greater dissatisfaction in the consumer-service LMS. Nonstudents were more dissatisfied with their work, although the differences were significant only for the global measure of satisfaction. Employment in consumer services may be less dissatisfying for young workers who are continuing their education, since they can view these jobs as temporary. But these students were still more dissatisfied with their jobs than workers in any of the other high-school LMS's.

In the university sample (Table 17), the patterns of job satisfaction reported across LMS's are also consistent with the employment outcomes and job evaluations discussed earlier. Consumer-service employment was considered the least satisfying, followed closely by jobs in the clerical/sales/service LMS. Managerial/professional jobs provided more satisfaction, although there were variations across these four more desirable university LMS's. Specifically, teachers reported the most satisfaction on all three measures. No significant differences emerged when we compared students and nonstudents within each LMS.

Labour-Market Location and Employment Stability

Young workers' experiences in the service economy are often depicted as a series of short-term, low-quality jobs. Yet many young service-sector workers are also part-time or full-time students. Employment instability may therefore be a function of decisions to give up a summer job in order to return to school, or to drop a part-time job because it is interfering with school work. Alternatively, many of the jobs open to young workers may be relatively short-term. A third explanation is that low pay and limited career opportunities lead to frequent job changing and unemployment as young workers look for positions more in line with their education and expectations. While our data do not allow a definitive test of these alternative explanations, we can begin to look at some of the patterns of employment instability reported by young workers.

Since more than half of high-school graduates still in school planned to leave their jobs within the next half year (Table 18), some of the high turnover of young service workers may be due to the way they combine school and work. However, among nonstudents, the percentage planning to leave their job within the next six months was considerably higher in the consumer-

Table 17

Job Satisfaction, by Labour-Market Location and by Transition Group,[1] University Graduate Sample, 1987

		Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Managerial/ professional (business)	Managerial/ professional (other services)	Managerial/ professional (goods)	Teaching
				(Per cent)			
Would choose same type of work	*	49.3	58.0	74.7	77.0	71.3	89.0
		[57.9]	[62.9]	[74.5]	[72.7]	[73.0]	[90.8]
		(37.9)	(56.0)	(75.0)	(83.9)	(65.0)	(85.5)
				(Score)[2]			
Average job satisfaction	*	3.06	3.12	3.56	3.64	3.79	3.98
		[3.16]	[3.23]	[3.49]	[3.56]	[3.78]	[4.03]
		(2.93)	(2.95)	(3.67)	(3.78)	(3.85)	(3.90)
				(Per cent)			
Earning less than deserved, given education, training, and experience	*	65.2	52.0	55.2	43.5	39.4	37.4
		[63.2]	[47.5]	[60.8]	[45.4]	[40.5]	[34.6]
		(67.9)	(59.5)	(47.2)	(40.5)	(35.0)	(42.6)
Approximate N		66	100	86	159	94	200
		[38]	[62]	[50]	[97]	[74]	[131]
		(28)	(38)	(36)	(62)	(20)	(69)

*Differences between labour-market groups are statistically significant (one-way analysis of variance or Chi-square test, $p<.05$).

1 See footnote 1 of Table 11.

2 Rising scale of 1 to 5.

service LMS and in the managerial/professional LMS than in the other two major high-school LMS's.

Thus some of the employment instability in the lower-level service sectors probably can be attributed to less satisfying employment conditions. Supporting this conclusion are the higher proportions of high-school graduates in lower-tier LMS's who were looking for another job. Differences between nonstudents and students were not statistically significant for this indicator of employment stability.

Similar patterns pointing to a possible link between job dissatisfaction and employment instability in the lower-level service LMS's are observed in the

Table 18

Employment Stability, by Labour-Market Location and by Transition Group,[1] High-School Graduate Sample, 1987

		Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Blue-collar	Managerial/ professional (services)
			(Per cent)		
Plan to stay in job for less than seven months[2]	*	45.4 [33.9] (56.1)†	41.4 [16.1] (56.1)†	39.7 [24.3] (58.1)†	52.9 [37.5] (57.4)
Looking for another job	*	33.5 [33.3] (33.9)	27.8 [22.6] (30.8)	19.9 [20.3] (19.4)	21.4 [31.2] (18.5)
			(Months)		
Average duration of unemployment		2.5 [2.6] (2.5)	1.8 [2.1] (1.6)	2.2 [1.7] (2.6)	1.8 [2.3] (1.7)
			(Number)		
Average number of jobs		3.5 [3.4] (3.5)	3.8 [3.7] (3.8)	3.6 [3.7] (3.4)	3.4 [3.1] (3.5)
			(Per cent)		
Involuntary part-time (at some point in past 24 months)		28.5 [35.6] (24.9)†	26.0 [35.5] (20.6)†	18.4 [16.2] (21.0)	20.0 [32.5] (14.8)
Approximate N		354 [118] (236)	168 [62] (106)	135 [73] (62)	70 [16] (54)

*Differences between labour-market groups are statistically significant (one-way analysis of variance or Chi-square test, p<.01).

†Differences between transition groups are statistically significant (one-way analysis of variance or Chi-square test, p<.05).

1 See footnote 1 of Table 10.

2 Includes those who answered "for the summer," "till school is over," and "till I find something better."

university sample (Table 19). Continuing students were, as expected, more likely to say they planned to stay in their jobs for less than six months. However, larger proportions of both students and nonstudents employed in consumer services and in the clerical/sales/service LMS's were planning to leave their job in the next half year, or were currently seeking another job.

Table 19

Employment Stability, by Labour-Market Location and by Transition Group,[1] University Graduate Sample, 1987

		Clerical/ sales/ services (consumer)	Clerical/ sales/ services (other)	Managerial/ professional (business)	Managerial/ professional (other services)	Managerial/ professional (goods)	Teaching
				(Per cent)			
Plan to stay in job for less than seven months[2]	*	38.8	43.0	17.2	29.8	14.9	28.0
		[26.3]	[29.0]	[8.8]	[22.2]	[9.5]	[23.7]
		(55.2)†	(65.8)†	(27.8)†	(40.3)†	(35.0)†	(36.2)
Looking for another job	*	43.3	30.0	19.5	25.5	14.9	27.5
		[36.8]	[30.6]	[23.5]	[26.3]	[12.2]	[26.0]
		(51.7)	(28.9)	(13.9)	(24.2)	(25.0)	(30.4)
				(Months)			
Average duration of unemployment	*	2.0	1.8	0.9	1.8	1.4	1.1
		[2.5]	[2.2]	[0.8]	[2.0]	[1.4]	[1.2]
		(1.4)	(1.2)	(1.1)	(1.4)	(1.5)	(0.8)
				(Number)			
Average number of jobs	*	3.9	3.9	3.2	3.9	2.8	3.6
		[3.9]	[3.9]	[2.9]	[3.6]	[2.6]	[3.5]
		(4.0)	(4.0)	(3.7)†	(4.4)†	(3.3)†	(3.6)
				(Per cent)			
Involuntary part-time (at some point in the past 24 months)		34.3	21.0	6.9	13.7	–	22.0
		[42.1]	[24.2]	[11.8]	[13.1]	–	[23.7]
		(24.1)	(15.8)	(0.0)	(14.5)	–	(18.8)
Approximate N		66	100	86	159	94	200
		[38]	[64]	[50]	[97]	[74]	[131]
		(28)	(38)	(36)	(62)	(20)	(69)

NOTE The single dash (–) represents nil or zero.

*Differences between labour-market groups are statistically significant (one-way analysis of variance or Chi-square test, $p<.01$).

†Differences between transition groups are statistically significant (one-way analysis of variance or Chi-square test, $p<.05$).

1 See footnote 1 of Table 11.

2 See footnote 2 of Table 18.

Young workers who have been employed mainly in the bottom segments of the service-sector labour market may have checkered work histories. While the additional analyses presented in Tables 18 and 19 do not directly test this hypothesis, they hint at such patterns.[9] In both samples, those currently employed in the consumer-service LMS reported more months of unemployment in the previous two years, although this relationship was not significant for high-school graduates. Considering only nonstudents (to control for unemployment spells associated with summer jobs), we find somewhat greater unemployment in the lower-level LMS's.

In both the high-school and university samples, periods of involuntary part-time employment were more common among employees in the consumer-service LMS. Again, the pattern was more pronounced when considering only nonstudents. However, analyses of the average number of jobs held in the previous 24 months failed to reveal the expected differences across LMS's.

In short, while a closer examination of the sequential employment experiences of these young workers is needed, Tables 18 and 19 suggest that employment instability may be greater in lower-level service-sector jobs. The larger percentages of workers in these LMS's who were looking for a different job suggest that some of this may be due to dissatisfaction with the quality of their work. The relatively high proportion of consumer-service workers reporting involuntary part-time work points to the same conclusion. Distinguishing between nonstudents and those who continued their education merely serves to emphasize the differences across the major high-school and university LMS's.

Summary and Conclusions

Developments in Canada's huge service sector must be viewed against the backdrop of other social trends, in particular of the increase in youth labour-force participation rates, rising postsecondary educational enrollments and educational attainment, an aging population, and a shrinking youth cohort. Discussions of the service sector present incomplete and contradictory perspectives on questions of human-capital utilization and job quality, often because this larger social context is not adequately considered. While a number of useful studies have addressed aspects of this subject, detailed analysis of young workers in the service economy is lacking. It is this gap in our knowledge that we have attempted to fill.

When interpreting our findings, several points must be kept in mind. First, while we used the conventional distinction between goods-producing and service industries, occasionally we had to cross this boundary to understand the labour-market location of graduates. Second, our original sampling design does not permit generalizations about the relative size of different labour-

market segments in which our sample members found employment. However, our samples are sufficiently representative to allow comments about industrial/occupational intersections within the larger labour market for recent high-school and university graduates. Third, while the study was designed to examine differences across three urban labour markets, only a few significant variations have emerged in this regard. Instead, level of education, age, and gender were more powerful predictors of a young person's employment situation. More analysis is needed to determine the extent to which service-sector employment patterns transcend local labour-market conditions.

We addressed three general questions in this paper, the first focusing on the transition from school to the labour market. We discovered a disintegration of the traditional boundary between student and worker roles. But changes in the school-to-work transition have not altered the structure of inequality in Canadian society. Our data (results not reported here) show that young people from higher socio-economic backgrounds are still more likely to stay on in school. Class differences in postsecondary educational attainment persist despite rising education levels. Yet youth continue to value higher education, expecting it to improve their labour-market chances [Krahn and Lowe, 1990]. This is despite the fact that many were unemployed for a time after graduating or were unable to find the type of employment they desired. Whether these experiences of unemployment or underemployment will eventually lead to a new educational ethic among youth warrants careful monitoring.

Results relevant to our second research question showed that the vast majority of today's youth, especially young women, are employed in the service sector. Women tended to be clustered in the least rewarding service-sector jobs, demonstrating that existing patterns of gender-based inequality are being reproduced. Thus, despite some optimistic signs that more women are beginning to enter "nontraditional" jobs, our study underscores the deeply rooted institutional basis of these inequalities. Important here is the interplay between education and occupations. Remedies such as employment-equity/pay-equity need to be strengthened. But such labour-market policy thrusts cannot succeed alone. Equally crucial are policies aimed at encouraging young women to choose a wider range of secondary and postsecondary programs of study.

The popular image of service-sector employment is based on student jobs in fast-food chains, retail outlets, and other low-wage marginal positions. We identified several distinct lower-tier labour-market segments in which high-school and university graduates were employed. Almost half of the high-school graduates, and one in ten of the university graduates, worked in clerical, sales, and service occupations in consumer services two years after graduating. These are the types of jobs that the polarization thesis predicts will rapidly expand the bottom layers of the service sector. Yet the majority of university graduates

were employed in managerial/professional positions, enabling us to distinguish four different labour markets that incorporate these higher-status "good" jobs. Clearly, service-sector employment opportunities for young people vary considerably by specific age group and by level of education.

A student labour market exists to the extent that young workers still in school are overrepresented in the consumer service LMS and in some clerical, sales, and service occupations. There is some movement out of these bottom strata of the service sector by university graduates who have left the educational system. But a young person with a high-school diploma has a very limited range of work opportunities. There seems to be an emerging consensus that individuals entering today's job market equipped with only a high-school education will increasingly be disadvantaged. In the words of a recent Ontario Ministry of Skills Development [1987] report, "a high school education (partial or complete) is not sufficient for youth to compete effectively in today's labour market."

Will these young workers manage eventually to move out of student jobs into something better? Our continuing research will determine if extended participation in these secondary labour-market segments is part of a longer school-to-work transition or if these entry-level positions are traps that inhibit upward occupational mobility over the long term. Given the fact that a sizable minority of university graduates had not escaped from student job ghettos, the prospects are not encouraging. While entering a postsecondary educational program certainly is to be encouraged, it should not be seen as the only solution. There is, for example, a much greater role for employers to play in providing on-the-job training so that young workers, even those with a basic high-school education, can be more effectively utilized. Such training is one way of addressing the growing underemployment problem. The day has passed when employers could expect new recruits to have "completed" their education. Our study suggests that many young workers are committed to obtaining more education. Employers could capitalize on this "educational ethic" by providing more in-house training or by facilitating the mixing of employment with enrollment in postsecondary education.

The third question focused on variations in the quality of service-sector employment for high-school and university graduates. Our major finding is that job quality, regardless of how it is measured, varies significantly across specific labour-market segments. The overall pattern pointed to considerably poorer employment conditions and more negative job evaluations in the lower-level service sectors. High-school graduates in consumer-service jobs rated their pay, promotion opportunities, benefits, and job security more negatively than did employees in any of the other three labour-market segments. As for intrinsic work rewards, consumer-service jobs were ranked lowest in two areas: feelings of accomplishment, and interesting work. Underemployment was

also identified as a major problem for consumer-service employees with high-school credentials. A similar picture emerged for university graduates employed in the lower-tier LMS's.

This pattern of relatively disadvantaged employment conditions in consumer services is further reinforced by our findings in both the high-school and university samples regarding job satisfaction. Jobs in consumer services consistently rank at the bottom. In addition, these jobs invariably fell far short of the occupational aspirations of the respondents in our study. At the same time, there is clear evidence of relatively good job quality and rewards for many university graduates in managerial/professional labour-market segments. So a university education does pay off, but only if one finds entry-level employment in these higher-status occupations.

Our findings regarding employment instability are the most tentative. Differences were not as systematic as for the other job-quality measures, although there were signs of greater instability in the lower-tier service segments. Further analysis of our four-year panel data will document how much of this employment instability is the result of dissatisfaction with poor quality work and whether employment instability is increasing as employers seek more flexibility through the casualization of employment contracts.

Finally, to look briefly into the future, will the youth labour market of the 1990s be substantially different from the one we have documented in the latter half of the 1980s? It is entirely possible that the graduates of the 1980s are unique as a cohort. Among other things, the labour market they entered was weak and in a state of flux; moreover, they entered workplaces already bursting at the seams with somewhat older baby-boomers. Demographic projections of a shrinking youth cohort may mean that the class of 1995 will enter a sellers' labour market. This scenario, if accurate, might ameliorate the current contradiction arising out of rapid growth of low-skill jobs and rising educational attainment. Continual monitoring of the school-to-work transitions among successive cohorts of graduates is needed to shed light on this important issue.

Notes

1 Since the Year 1 questionnaire asked about the preceding year (the final year of high-school or undergraduate studies), the complete time span covered is actually 36 months. An additional mini-survey in November 1985 was conducted in Edmonton and Sudbury to document labour-market activities during the first six months after graduating and to update mailing lists. Panel members were surveyed again in June 1989 to obtain a four-year perspective on the transitional process, but the results of that survey are not analysed in this paper.

2 Although Myles et al. [1988] omitted agriculture from their analysis, we include it in the goods sector in order to facilitate comparisons with national labour-force data.

3 The 70-per-cent figure is obtained by including the 3.3 per cent of the labour force with "industry undefined," on the assumption that those not in the primary, construction, and manufacturing industries must be employed in the residual service category.

4 This group also contained 24 individuals, including graduates of faculties other than education, employed as university teaching assistants.

5 We ignore the managerial/professional (goods-producing) LMS in the high-school analyses and the blue-collar LMS in the university analyses because there are too few sample members in them. The relatively few respondents not employed in any of the LMS's examined in Table 9 are omitted from all subsequent analyses, since our main emphasis is on the types of jobs within each LMS.

6 This collapsing of transition groups helps to reduce the problem of small cell sizes. But it is also conceptually appropriate. Our focus is on the quality of jobs held in 1987 (Year 3 of the panel study), and individuals in both TG3 and TG4 were nonstudents for all of Year 3.

7 The 20-per-cent difference between net and gross income is based on findings from our 1989 follow-up survey of panel members. In 1987, Statistics Canada's low-income cutoff, or poverty line, for a single individual in a large city was $11,200 [National Council of Welfare, 1988].

8 The only noteworthy differences appeared in the (largely male) blue-collar LMS. Here, nonstudents evaluated fringe benefits, promotion opportunities, and the link between education/training and their job more positively. These differences probably reflect differences between semi-skilled blue-collar jobs held by nonstudents and the relatively unskilled jobs reported by those who had continued in school.

9 This comparison of individuals currently employed in different labour markets assumes that they have also spent most of their work career in that type of labour market, which may not be the case. A sequential analysis of the employment histories of these young workers would be required for a more direct test of this hypothesis.

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