

**REPORT
FROM THE
INSPECTORATE**

Community Colleges in Canada

International Report

October 1996

**THE
FURTHER
EDUCATION
FUNDING
COUNCIL**

ACKNOWLEDGEMENTS

The arrangements for this visit were made by the principal and staff of Humber College, Toronto. We are greatly indebted to them and to the staff of all the institutions visited, officials of the Canadian government, regional officials, and representatives of other educational organisations. The generosity with which they gave their time and hospitality, and their frankness in discussion ensured our visit was both fruitful and enjoyable.

PREFACE

This is one of a series of publications planned by the Further Education Funding Council's inspectorate to build up knowledge of the post-16 vocational education and training systems of other countries in order to highlight those aspects which might inform thinking in England in particular and the United Kingdom in general.

CONTENTS

	Paragraph
Commentary	1
Purpose and Organisation of the Visit	5
Economy and Government	9
Education and Training	
Education System of Canada	15
Current Issues in Post-secondary Education	21
Vocational Training	24
Community Colleges	28
Governance and Management	31
Funding and Fees	38
Staffing and Staff Development	44
Resources	49
Participation	50
Curricula	55
Assessment and Examinations	61
Development of Common Standards	65
Quality Assurance within Colleges	69
Accreditation and Self-assessment	71
Counselling, Guidance and Student Support	74
Students with Learning Difficulties and/or Disabilities	80
Appendices	
1 Organisations and Institutions Visited	
2 Pen Portraits of some Institutions Visited	
3 A Sample of the Programmes Offered by Algonquin College, Ottawa 1995-96	
4 Examples of Broadcasting Radio Diploma Programmes in Two Ontario Colleges	
5 Highlights of the Graduate Placement Report	
Bibliography	

COMMENTARY

1 A team, comprising two officials from the Department for Education and Employment (DfEE), four inspectors and a member of the Further Education Funding Council's (FEFC's) quality assessment committee, visited Canada in March 1996 to examine aspects of post-16 vocational education in community colleges. Two members of the FEFC's committee on learning difficulties and/or disabilities joined the team for part of the visit. Many of the issues raised by Canadian colleagues and many of the circumstances they are facing are familiar to members of the team from their own experience in England. Others are quite different. The key issues are:

- the recognition of the need for continuous retraining and upgrading of the workforce in order for the country to remain competitive in a global economy
- the fact that economic restraint is leading to a reduction in the funds available for education at a time when enrolments are increasing
- the restructuring of industries, which often results in a reduction in the size of the total workforce, and a need for more people with advanced technical skills
- the increasing levels of unemployment faced by college graduates at a time when some employers, particularly in high-tech industries, are experiencing difficulties in filling positions
- the pressure from large employers and trade unions for national training programmes
- the lack of external mechanisms such as inspection, external examinations or moderation for checking standards
- the high drop-out rates from secondary schools, and a growing concern about the poor literacy and numeracy skills of students entering college from school
- the effect of the changes to the apprenticeship system and the impact on courses for those who enter employment directly from school.

2 Features common to all the colleges visited are:

- a tradition of institutional autonomy, reflected in curriculum design and the power of institutions to award their own qualifications
- a college curriculum designed in response to local business and community interests, supported by a well-developed system of advisory committees linking colleges to employer and community groups
- a recognition of the importance of co-operation with business, industry, government and labour and an awareness of the need to respond quickly to changes in the labour market

-
- a heavy emphasis upon employability of college graduates as a criterion for evaluating the success of courses
 - almost half the students are over 25 years of age, and often enter college after university or after a period in the labour market
 - a concern at the high drop-out rates from many courses
 - a comprehensive system of student support including diagnostic assessment, remedial programmes and the use of peer tutors to provide learning support.

3 The missions in all the community colleges visited are being pursued with energy and commitment. Nevertheless, there are external influences and aspects of the colleges' provision which limit the full expression of their missions and ideals:

- the reductions in government funding, which make it difficult for colleges to keep pace with technological and industrial changes and to maintain an open admissions policy
- the conflicting expectations of government, students and employers
- limited provision within colleges for students with learning difficulties
- the low turnover of college staff, resulting in a high proportion of older teachers and a need for staff to update their knowledge and experience.

4 Many of the features of post-16 education are common to Canada and England. In both countries there is:

- a drive towards greater efficiency, involving increased enrolments and lower funding for students
- a need for more people with advanced technical skills
- a recognition of the importance of numeracy, literacy and problem-solving skills in developing a skilled workforce
- a concern over high drop-out rates
- recognition of the need to update the knowledge and experience of staff, particularly full-time teachers.

In several aspects, however, Canada differs from England:

- community colleges, most of them founded during the last 30 years, are generally purpose built and often better equipped than English colleges
- other than in areas such as nursing and engineering, there are no national examining or awarding bodies as in England
- colleges have substantial control over the content and assessment of the programmes they offer and work closely with local industry and business in developing curricula
- there is increasing concern over the variability of content and standards of courses and increasing interest in defining national

occupational standards, using formats similar to those adopted for NVQs and GNVQs

- although many colleges have well-established procedures for monitoring and evaluating programmes, there are no formal accreditation, inspection or quality assurance arrangements comparable with those found in England
- the demand that colleges demonstrate greater accountability for public funding and the desire to establish common standards are leading to some early development of external systems of quality assurance which draw upon colleges' internal procedures
- detailed information on students' destinations is collected and assessed, and students' success in obtaining relevant employment is a major factor in evaluating the effectiveness of individual programmes
- other performance indicators, such as retention rates and examination results, are given less emphasis than in English colleges.

PURPOSE AND ORGANISATION OF THE VISIT

5 This report is based on a 10-day visit to Canada in March 1996 by a team of four inspectors from the FEFC, one member of the FEFC's quality assessment committee, and two officials from the DfEE. Two members of the FEFC's committee on learning difficulties and/or disabilities joined the team for part of the visit.

6 The purpose of the visit was to examine the roles of local, regional and national government in the governance, management and funding of community colleges. The team also looked at staffing and staff development, participation, curricula, assessment and examinations, development of common standards, quality assurance within colleges, accreditation and self-assessment, counselling, student support and guidance, and services for students with learning difficulties and/or disabilities.

7 It was not the team's intention to report on the quality of post-16 vocational education and training in Canada, nor would it have been possible to do so on the basis of so short a visit.

8 The visiting team held discussions with officials from the Ontario Council of Regents, the Council of Ministers of Education, Human Resources Development Canada, the British Council in Ottawa, the College Standards and Accreditation Council of Ontario, and the Association of Canadian Community Colleges. They also visited colleges in the provinces of Ontario, Quebec and British Columbia. The institutions and organisations visited are listed in appendix 1. Pen portraits of some of the institutions are given in appendix 2.

ECONOMY AND GOVERNMENT

9 Canada has a population of almost 29 million, approximately half that of the United Kingdom. Canada is the second largest country by area in the world, with a population density lower than that of almost any other developed country. However, its population is concentrated in particular areas: 70 per cent of Canadians live in towns or cities, with Toronto, Montreal and Vancouver each having over a million inhabitants; 60 per cent live in two provinces, Ontario and Quebec (table 1); and 85 per cent live within 150 km of the border with the United States of America. Although its rate of growth has now eased, the country has twice as many inhabitants as it had in 1945. Between 1968 and 1989, its labour force grew by 69 per cent (compared with 12 per cent in the United Kingdom) to 13.6 million. A high proportion of Canada's population will reach retirement age around the turn of the century.

Table 1. Population of Canada by province (in thousands)

<i>Province</i>	<i>Population</i>	<i>Province</i>	<i>Population</i>
Ontario	10,795	Nova Scotia	925
Quebec	7,226	New Brunswick	751
British Columbia	3,570	Newfoundland	581
Alberta	2,672	Prince Edward Island	132
Manitoba	1,117	Northwest Territories	63
Saskatchewan	1,002	Yukon	33

Source: 'Statistics Canada', Canadian Economic Observer, December 1993

10 Immigration has been a major factor in Canada's population growth. Recent immigrants represent 16 per cent of the total population, and are concentrated in a few provinces, particularly Ontario and British Columbia. An increasing proportion of immigrants have neither of the two official Canadian languages, English and French, as their mother tongue. A third of Canadians have a knowledge of both English and French. The population of Canada by ethnic origin is shown in table 2.

Table 2. Population of Canada by ethnic origin

<i>Ethnic origin</i>	<i>Percentage of population</i>
More than one ethnic group	29
British origin	28
French origin	23
German origin	3
Italian origin	3
Ukrainian origin	2
Indigenous Indians and Inuits	2
Other	10

Source: 1991 Census, Canada

11 Canadian government is federal in structure. There are 10 provinces and two northern territories. Provincial independence is high. Each province has sub-federal jurisdiction over its own government and budget, which includes authority over most educational and labour matters.

12 The Canadian economy has been heavily dependent on its considerable natural resources, including minerals, oil, gas, coal, hydro-electricity, agriculture, forestry and fishing, as well as manufacturing and tourism. A quarter of Canadian production is exported, with three-quarters of exports going to the United States of America. There are close economic and industrial links between the two countries, especially in the car and aircraft industries.

13 The Canadian economy experienced two recessions during the 1980s and 1990s, linked to a decline in trade with the United States of America and a drop in home demand. Employment fell in the manufacturing and construction industries and there was a reduction in the contribution these made to the gross domestic product. Manufacturing now provides 15 per cent of all non-agricultural jobs and construction 6 per cent. Agricultural employment has declined steadily from one in four workers in the late 1940s to less than one in 20 now. The number of companies involved in the new technologies is growing.

14 The services sector has grown and now represents 77 per cent of all non-agricultural jobs. The growth of consumer service industries, especially those relating to food and accommodation, has created many new jobs, a high proportion of which are part time, low paid or seasonal. One in five workers is employed part time. Over half the women of working age are in the labour force; a quarter of these work part time. The unemployment rate is about 11 per cent, but it varies considerably between regions and there is a high degree of seasonality related to the cold winters. The seasonal nature of employment is a persistent problem for certain groups; for 16 to 24 year olds, those with little formal education and residents of the Atlantic provinces.

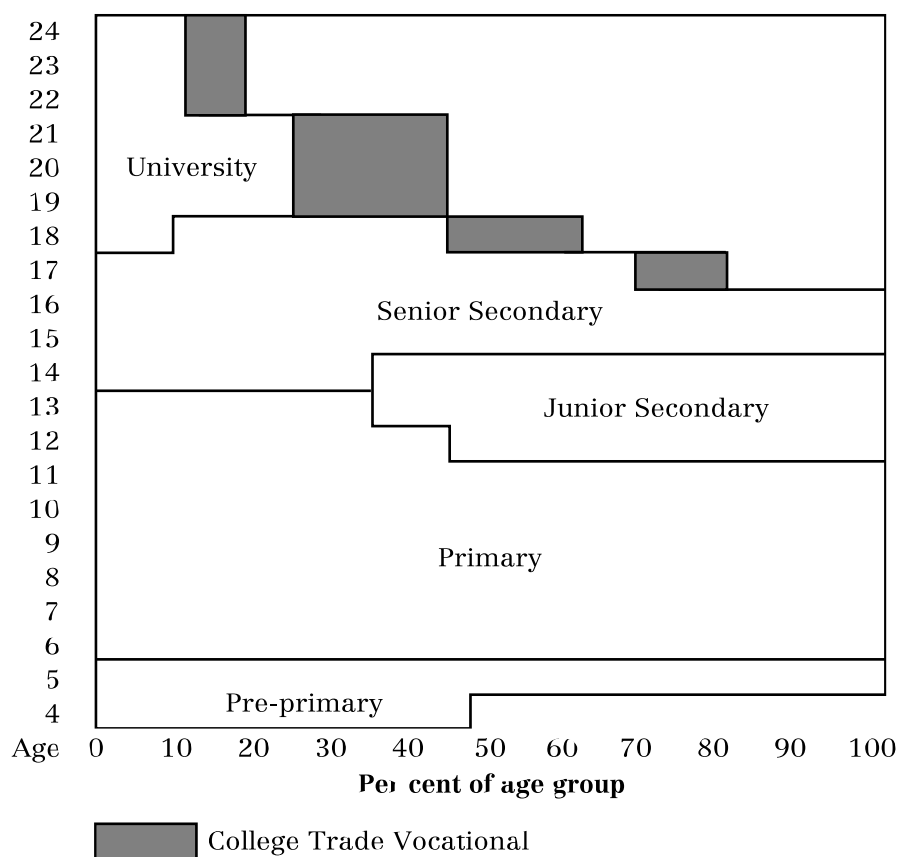
EDUCATION AND TRAINING

Education System of Canada

15 Responsibility for the legal and administrative aspects of education in Canada rests exclusively with the 10 provinces and two territories. There is no central ministry of education, although the department of the secretary of state of Canada has traditionally played a role in co-ordinating federal involvement in post-secondary education. That role has recently been assumed by a newly-established department of human resource development as part of a major government reorganisation.

16 In common with most developed nations, there are three principal levels of education: primary, secondary and post-secondary. The structure of the education system is illustrated in figure 1. In general, the starting age is five or six, attendance is compulsory for about 10 years and the minimum leaving age is 15 or 16. However, there are variations from one province or territory to another, including differing definitions of 'primary' and 'secondary'. The combined primary/secondary programme tends to be consistent across Canada and usually extends over 12 years. A total of 95 per cent of Canada's 15,600 primary and secondary schools are publicly funded and tuition is free.

Figure 1. The education system of Canada



Source: *International Encyclopedia of National Systems in Education*

17 In 1991-92, just over six million Canadians, approximately 25 per cent of the total population, were enrolled full time in education. Of the six million, about five million were in compulsory education, 400,000 in non-university and 600,000 in university post-secondary education. In addition, there were approximately two million part-time students in post-secondary institutions. Full-time enrolments, as a percentage of all 17 to 24 year olds, are shown in table 3.

Table 3. Full-time enrolment rates by phase of education, for 17 to 24 year olds

<i>Age</i>	<i>Upper secondary education</i>	<i>Non-university tertiary education</i>	<i>University education</i>	<i>Total</i>
17	71%	2%	7%	80%
18	37%	6%	18%	61%
19	11%	11%	25%	47%
20	14%	10%	24%	48%
21	-	7%	21%	28%
22	-	4%	17%	21%
23	-	3%	11%	14%
24	-	2%	7%	9%

Source: 'Education at a Glance', OECD Indicators

18 Post-secondary education is mainly government financed. The number of post-secondary institutions has grown from 28 in 1940 to 272 in 1994. Sixty-nine are degree-awarding universities and the others are non-degree-awarding community colleges.

19 Surveys published in 1989 indicated that twice as many people, aged 15 to 64, were pursuing some form of education in Canada (20 per cent) compared with the United Kingdom (10 per cent). This partly reflected the prolonged transition from school to work in Canada, but the participation rate for 25 to 34 year olds was also twice that for comparable groups in the United Kingdom. Among women, the contrast persisted into the 35 to 44 year-old cohort.

20 The official languages of Canada are French and English. Outside the province of Quebec, English is the predominant medium of instruction. However, French language institutions at all levels are found in other regions of the country. French language immersion programmes at the primary and secondary school levels are also popular throughout Canada.

Current Issues in Post-secondary Education

21 Since the late 1980s, a number of issues and concerns have dominated the debate about post-secondary education and training in Canada:

-
- the re-appraisal of the role of community colleges in the light of the sometimes conflicting demands from government, students and employers
 - a recognition of the need for continuous retraining of the workforce, and for more people with advanced technical skills
 - the increasing enrolments in post-secondary education, at a time when the federal and provincial governments' commitment to cut budget deficits is resulting in less government spending on education
 - the changes being made to the funding of federal government programmes and apprenticeships
 - the lack of national programmes and established mechanisms, such as a common agreement about the credits a student requires in order to transfer to a degree course
 - the increasing interest being shown in assessment and performance standards
 - a widespread concern at the high drop-out rates from secondary schools and the poor literacy and numeracy skills of school-leavers
 - the increasingly longer periods college students are taking to complete their programmes, the high drop-out rates from some programmes, and the generally unreliable statistics on retention and successful course completion.

22 In the early 1980s, Canada's productivity level was comparable with, or better than, those of other industrialised countries, but by 1990, it had fallen well behind that of Italy, West Germany, France, and the United States. To increase their competitiveness, many companies have restructured. This has often resulted in the companies employing fewer workers, but requiring more people with advanced technical skills. Although Canada has a high participation rate in post-secondary education, it still lacks sufficient highly-skilled workers in some areas, particularly in the science and technology-based industries.

23 Expenditure on education is high by United Kingdom standards. In 1992-93, education expenditure in Canada represented 8 per cent of the gross domestic product, compared with 5.3 per cent in the United Kingdom. Education is viewed as a process of imparting the necessary knowledge and skills to achieve a productive, rewarding and fulfilling life. Tertiary education, in particular, is seen as including preparation for work. In 1991, 11 per cent of the population had university degrees and 32 per cent had undertaken some other form of post-secondary education. There is a close relationship between higher income, lower levels of unemployment, and the possession of formal qualifications. For people under 30 with a post-secondary qualification, unemployment is in the 7 to 10 per cent range, whilst for those with only high school qualifications, it is over 30 per cent. Canada estimates that half of the new jobs created by the year 2000 will require more than 17 years of education and training.

Vocational Training

24 One of the federal government's priorities in the 1990s has been to encourage business and industry to play a more active role in training. Canadian business spends less than 0.5 per cent of its payroll on formal training programmes. The 1987 *Statistics Canada* survey found that less than a quarter of firms provided any funds for employee training.

25 Training is a provincial responsibility, but the federal government has exerted considerable influence through its financial support for programmes which include institutional and on-the-job training, financial assistance to employers to train in areas of skill shortages, and support to employees and employers for retraining. Some programmes are targeted towards particular groups such as people with disabilities, women and indigenous people.

26 A comparison between Canada and the UK shows that 14 per cent of the Canadian workforce have followed the apprenticeship route to employment compared with 18 per cent in the UK. Most apprentices in Canada are male, and many are in engineering. Canadians do not start an apprenticeship until they are in their late teens and it lasts two to three years, part of which is spent in a college. One college visited has an apprenticeship income of over C\$1 million (roughly equivalent to £500,000). However, the number of individuals enrolled full time in apprenticeship programmes has declined in recent years. Apprenticeships are often seen as having less status than college diplomas or equivalent 'white collar' qualifications. The federal government is considering introducing changes to the funding of apprenticeships. Colleges are concerned that their recruitment, and hence income, could be reduced.

27 Colleges are increasingly involved in retraining and updating the skills of workers, either on the college campus or in the work place. Some colleges have experienced a substantial expansion in the demand for retraining.

COMMUNITY COLLEGES

28 Because education is a matter of provincial or territorial jurisdiction, the role of the community colleges in each of the 10 provinces and two territories is determined by its government. Each government designed its college system according to its own perception of economic and cultural needs. The result is a greater diversity of colleges and college systems than exists within the United Kingdom.

29 Almost all community colleges have several campuses or outreach centres and many are active in distance learning. It is claimed that almost all Canadians are within easy reach of the services of a community college.

30 Most community colleges were established in the 1960s and early 1970s. There are four broad models:

-
- in Quebec, the Collège d'Enseignement Général et Professionnel provides two-year and three-year programmes leading to higher education or employment
 - in Alberta and British Columbia, the colleges resemble community or junior colleges in the United States of America and provide university entrance and two-year credit programmes
 - in Ontario, Newfoundland, Prince Edward Island and Saskatchewan, the emphasis is on applied studies and vocational training with no formal route to university entrance
 - in Manitoba, New Brunswick, Nova Scotia and the Northern Territories the colleges are essentially vocational training centres offering mainly short-term programmes.

Governance and Management

31 Community colleges and college systems were formally established through provincial and territorial legislation in the period 1963 to 1972 in order to meet the increasing demand for a well-educated and well-trained workforce. Most colleges are established under a board of governors, with board membership drawn from the communities to be served. Boards of governors vary in size from about seven to 17 members, with exceptions at both extremes. Although board members in some provinces and territories were originally selected by their communities, the current pattern, except in Quebec, is that board members are appointed by provincial and territorial governments. A recent feature of some, but not all boards, is the inclusion of the president, academic vice-president and elected staff and students in their constitution. In Quebec, an Act of 1994 requires that membership includes representatives from the business community, alumni, students, parents, the college executive managers, support and academic staff.

32 Because each province and territory established its own colleges in response to its social, political or economic needs, there is no over-arching national legislation equivalent to the *Further and Higher Education Act 1992*, which defines instruments and articles of government for colleges in England and Wales. However, the provincial or territorial legislation generally specifies the powers and responsibilities of the board of governors and expects them to establish advisory or consultative mechanisms (committees) and an academic board or council.

33 Governors appoint the president, employ the staff, determine the mission and educational character of the college, set budgets and review the overall performance of the college.

34 All community colleges are expected to make extensive use of advisory or consultative committees. Members are drawn from the industries and communities served by the college and their brief is to advise the college on its mission, its policies and practices and its portfolio of courses, and to assist in the work placement of graduates.

35 The president is the chief executive and is responsible to the governors for the management and leadership of the institution. The president does not have ex officio membership of the academic board or council; members are elected by and from the academic and support staff of the college. The academic board is usually chaired by the academic vice-president, and its remit is to advise the governors and president on academic matters.

36 There is no direct provincial or territorial government involvement in college structures. However, staff salaries and conditions of service are negotiated, agreed and underwritten by provincial government. Contracts of employment differ, as do arrangements for staff development. However, all contracts include a right to staff development and some allow staff to accrue sabbatical leave, with up to 70 per cent of salary, every five years. Most colleges throughout Canada are managed using pyramidal, departmental, line-management structures.

37 Community colleges have never had the degree of institutional autonomy typically associated with Canadian universities, nor have they sought an arm's-length relationship with their provincial or territorial government. Their missions clearly indicate that they view themselves as major players in supporting economic and social policy at a local and regional level.

Funding and Fees

38 College revenue budgets range from C\$9 million to C\$120 million (approximately £4.5 million to £60 million) a year depending on size and location. By far the largest proportion of revenue funding for colleges, typically between 55 and 85 per cent, comes in the form of an annual budget allocation from provincial or territorial government. Historically, a substantial portion of these funds was derived from federal government and redistributed under 'Established Programme Funding' arrangements to the provinces and territories, but this arrangement has recently been terminated by the federal government. Provincial and territorial governments are now finding it difficult to maintain the funding levels of the past. After maintaining level funding for each student in real terms for more than 10 years, Quebec has recently announced cuts of 10 per cent. In Ontario, the projected reduction is 15 per cent.

39 Each province or territory applies its own priorities and allocation formulas to apportion monies in support of its colleges and their programmes. The formulas are recruitment (input) driven rather than qualification (output) driven, with workshop, laboratory and high-priority programmes favourably weighted to reflect high delivery costs and provincial priorities. For example, weightings within Ontario span one to eight in increments of 0.1. Engineering courses attract up to three times the funding of a basic business management or 'arts and sciences' course. In other provinces and territories, colleges which support small or widely spread communities or low-volume, high-priority specialisations such as programmes for the indigenous population, receive special funding for

disproportionately high expenditure on overheads, plant and materials. Geographic and scale adjustment factors of 20 per cent of budget are often applied.

40 In almost all colleges, between 12 and 20 per cent of operating costs are recovered through tuition fees paid directly by students or indirectly by their employers. Students on full-time vocational courses, irrespective of their age and the length of their course, generally pay a similar fee of around C\$1,200 (£600) a year. A notable exception is Quebec which defines anyone taking four or more courses (options) in one semester as a full-time student and does not charge them tuition fees.

41 The remaining component of revenue funding comes from activities for which sponsors or students pay the full costs. Community colleges compete in the open marketplace with private sector providers for training programmes, and have become entrepreneurial. Many operate in niche markets such as paramedical technologies, specialised management development, telecommunications and robotics. Most provide contract training for industrial clients and many, if not most, attract students from abroad. Approximately 10 per cent or more of colleges' operating funds are generated from full-cost activity. Some of the colleges visited had incomes of several million dollars from car parking and campus shops.

42 Throughout the country, capital funding for buildings and new technologies such as communications, electronics, paramedical technologies, and computers comes almost exclusively from the provincial and territorial governments on an 'as needed' basis rather than by formula. Capital is often raised by the provincial government on behalf of the college by selling 20-year interest-bearing bonds on the money market. The bonds are underwritten and the interest is paid and guaranteed by the provincial government. The interest payable is shown in the college accounts as both an income and an expenditure and the capital borrowings and assets appear in the college balance sheet. Private sector donations for capital projects are very few, but some colleges have attracted substantial private sector sponsorship for buildings and specialised equipment in areas such as computer graphics animation, plastics, forest technologies, catering, and health and social services.

43 In British Columbia, where the economy is growing rapidly, the college system is expanding and there has been heavy capital investment in buildings and new technologies. The rate of growth is such that the province plans to establish two new public sector universities. Five community colleges which have developed the two-year component of degree programmes have been designated 'university colleges' with the right to grant university degrees, whilst continuing to offer traditional vocational and general education community college programmes.

Staffing and Staff Development

44 Full-time employment in community colleges expanded rapidly during the 1970s and whilst the colleges have continued to grow, the

nature of the growth and the stability and security of employment is such that staff turnover is low. A recent study of human resources in the colleges indicates that there are approximately 250,000 employees in the community college sector, of which some 30,000 are in full-time employment. With a turnover of less than 5 per cent a year against an average service sector turnover of 20 per cent, concerns are being expressed about the age profile of employees within the sector and its possible impact on the currency of their skills and knowledge.

45 Many, if not the majority, of lecturers in the community colleges were trained and developed their skills in the 'old technologies' of the 1960s and 1970s and there is general concern among educators and employers that the training they receive to update these skills is inadequate. For example, many are not in a position to prepare students effectively for employment in the expanding industries concerned with new materials, electronics, optics, biotechnology, environmental technology and information technology.

46 Colleges typically hire people with previous work experience and, as such, they seldom appoint staff under the age of 30. Higher education in the form of first and higher degrees is the principal form of staff development, but many in the colleges feel that this is failing to provide adequate training and that, if the present pattern continues, the academic staff profile will become even less compatible with the curriculum profile required. Exceptions are professional disciplines where government legislation or self-regulating professional bodies require individuals to sustain and record professional development in order to practise. The most obvious examples are nursing, and trades which are regulated by public health and safety legislation.

47 There are no legal requirements for pre-service teacher training for community college teachers and most do not have such training. However, there are several voluntary teacher training programmes and colleges have well-structured induction and mentoring programmes for new staff. In some colleges, staff cannot rise to the top of the pay scale without some formal teacher training.

48 Government data showed that in the early 1990s almost 50 per cent of college teachers had previously worked in business or industry, 16 per cent were recruited from other colleges and public sector trade schools, 14 per cent from government service, 10 per cent from the schools sector and the remainder direct from the university sector. The study concluded that colleges already employ most of the people they will continue to employ into the next century.

Resources

49 Because they were developed in the last 30 years or so, colleges have good-quality purpose-built accommodation. By British standards, space norms are high, circulation and social areas are spacious and the furnishings, decor, heating, lighting and ventilation are excellent. Most

equipment is of industry standard. It is modern, well maintained and is supported by an ample supply of consumable materials. Some colleges have attracted industrial sponsorship for major specialist facilities and equipment. For example, sponsorship amounting to several million dollars has been attracted in the areas of graphic animation, catering and plastics.

Participation

50 Attendance at school in Canada is compulsory up to the age of 15 or 16. An increasing number of pupils stay on until they are 18 and underachievers are allowed to continue at school until they are 21. Many students who go to work on leaving school return to college later, and there is an increasing tendency for university graduates to attend community colleges for short periods of technical or vocational study. As a result, the average age of full-time college students is relatively high; about 25 years.

51 One in four of Canada's young adults aged between 18 and 24 is engaged in some form of post-secondary education, and one in five is enrolled on a full-time basis in community colleges. In the metropolitan areas such as Montreal and Toronto, the proportion rises to as high as 50 per cent, but it is much lower in the sparsely-populated rural areas of northern Canada. Part-time enrolment of people active in the workforce is the fastest growing area of college recruitment. Each year, almost 10 per cent of the workforce is involved in part-time study.

52 Colleges have a philosophy of open admission, but many specialised courses are oversubscribed and selection criteria are increasingly used. A reduction in funding is causing some colleges to narrow the range of courses they offer.

53 A recent report on Ontario expressed concern that students are increasingly shying away from technically-orientated courses in the colleges in favour of more general programmes in universities. This is also reflected in Quebec, especially in the English-speaking Collège d'Enseignement Général et Professionnel. The drop-out rate from college programmes is high, in some cases approaching 50 per cent. It is low on professional and craft courses in specialist institutions such as catering, hospitality, travel and tourism colleges.

54 The employment rates for college graduates vary across occupations and different areas of the country. The recession has resulted in more graduates now seeking employment in fields other than those they studied. Table 4 shows the changing pattern of employment for graduates from one Ontario college.

Table 4. Employment of graduates from one Ontario college

<i>Year of graduation</i>	<i>Graduates employed in field related to studies</i>	<i>Graduates in other employment</i>	<i>Graduates still seeking employment</i>
1988-89	78%	12%	10%
1993-94	57%	23%	20%

Source: Algonquin College Graduate Placement Reports

Curricula

55 The curricula of the community colleges in the various provinces and territories reflect their different missions. Some provide courses which prepare students to transfer to universities, but the majority concentrate on vocational training.

56 Quebec students complete secondary school in 11 as opposed to 12 years and then progress to a Collège d'Enseignement Général et Professionnel. Here they can study for a two-year general diploma that leads to university admission, or a three-year professional diploma that prepares them for work. Half of the university preparation programme consists of a specialist curriculum; for example, that in science is made up of mathematics, physics, chemistry, biology and geology. The other half consists mainly of general education. Unlike other provinces, Quebec exercises central control on the curriculum in its Collège d'Enseignement Général et Professionnel, and has established 120 recognised technical programmes. In the past few years, the ministry has moved towards a position where it retains responsibility for objectives and standards and leaves the design of learning activities to the institutions. In these programmes, about two-thirds of the content is concerned with the development of specialist vocational knowledge and skills whilst one-third consists of general education similar to that in the pre-university programme. Because of the general education component, it is possible for some students to transfer from vocational to general programmes or to progress to university following completion of a vocational programme.

57 In Ontario, the main emphasis is on vocational courses in areas such as business studies, the applied arts, technology, the social services, nursing and health sciences. About 85 per cent of the content of these programmes is concerned with the development of vocational skills and knowledge. The remaining 15 per cent deals with general education and the development of core skills such as mathematics, problem-solving, communications and information technology. Ontario's community colleges do not offer programmes specifically aimed at university entrance. In order to be admitted to a university, secondary school students must complete six Ontario Academic Credit courses during their four-year secondary school programme or during an additional school year after completion of grade 12. Ontario colleges have few progression links with the Canadian universities, although many have better transfer

arrangements with universities in the United States of America because the latter are willing to allow college diplomates to transfer directly to bachelor-level programmes.

58 The British Columbia community college system allows students to complete two years of academic course work towards a bachelor degree. Some, but not all, go on to complete the third and fourth years at a university-college or university and receive a degree.

59 Many community colleges have a wide range of part-time courses taught during the day, the evening and at weekends. These include: professional courses, for example in chartered accountancy; training for specific skills, for example, retail meat cutting; and training for unemployed people funded through the federal budget. A rapidly expanding range of postgraduate certificates is also provided. These are one-year courses for graduates wishing to increase their marketability by acquiring occupational skills. A distinctive trend in Ontario colleges is the increase in the number of university graduates being recruited onto college diploma courses. At Algonquin College, graduates constitute about one-quarter of full-time students. In the Quebec Collège d'Enseignement Général et Professionnel, about one-third of students are above school-leaving age. More adults are returning to study and full-time students are taking increasingly longer to complete their programmes.

60 Many colleges offer, in co-operation with industry business partners, professional development services or specialised programmes in high technology areas such as plastics technology, media and animation. In addition, the colleges offer preparatory courses for school-leavers who have recently entered employment. These have been declining in number with the erosion of the apprenticeship system. There are also special programmes for students who do not meet the basic entry requirements for diploma courses. These concentrate on improving mathematics and English and last for one or two terms.

Assessment and Examinations

61 Colleges have substantial control over the content and assessment of the programmes they offer. With the exception of the professional bodies in areas such as nursing and engineering, there are no province-wide or national examining bodies which play a role comparable with that of the GCE A level boards or the vocational awarding bodies in the United Kingdom. Historically, each community college has based the content of its programmes on the perceived needs of local employers. Employability rather than the achievement of nationally-recognised qualifications has been the most important criterion in judging the value of these programmes.

62 In many colleges, there are well-established links between teaching staff, employers and local professional groups which enable the curriculum to be related to local employment needs. In Ontario, for example, each college programme has an advisory committee made up of between eight

and 12 external members. Each advisory committee provides a written report annually to the board of governors. Their role is to evaluate the vocational relevance of the curriculum and to assist with work placement and industrial sponsorship. Many colleges have been very successful in securing the involvement of local business and community leaders in the planning and development of the curriculum.

63 Initial approval to provide new courses is required from the ministry at provincial level. At this stage the title of the programme is agreed and colleges must demonstrate that they have consulted employers to determine the need for the programme. In Quebec, the content of the programme must follow ministry guidelines. In most other provinces, each college is free to determine the subject content of each course. Once approval has been granted, teachers at each institution have control over teaching and methods of assessment. There are no national examinations to check the comparability of standards, nor is there a system of external moderation. There is a growing concern at national level about the variability of the content and standards of diploma and certificate courses offered by different community colleges.

64 Colleges offer courses through different patterns of study. One-year, full-time certificate programmes and two-year or three-year full-time diploma programmes are common, but there are many variations in these. Appendix 3 shows a sample of programmes offered by one community college. Appendix 4 shows examples of broadcasting radio diploma programmes in two colleges.

Development of Common Standards

65 Employers and professional bodies, operating nationally, are seeking a clearer definition of the competences that college graduates should possess when entering the labour market. National and provincial governments are keen to strengthen the accountability of colleges, given the extensive public funding they receive. This has led to initiatives aimed at identifying the minimum occupational standards which college programmes should meet.

66 The federal government has set up sectoral groups at a national level in key industrial and occupational areas. For example, there is a sectoral council which has defined national standards for 13 different applied science and engineering occupations, such as civil engineering and forest resource technologies. The sectoral council for science and technology refers to a national standard as 'a description of the competencies expected of technologists at the point of entry to the labour market'. The aims of these standards are to:

- promote recognition of qualifications
- facilitate labour market mobility
- guide the development of education and training programmes.

67 There are some parallels between the different components of the national standards and the format for expressing national vocational qualifications and general national vocational qualifications in England. Each set of occupational standards is broken down into core competences or generic skills such as communication, mathematics, management principles and computer studies. These are then supplemented by discipline-specific standards for each occupation. Each standard blends aspects of knowledge and skill and is expressed in terms of the minimum outcomes that students are required to achieve.

68 Many of the national sectoral councils are at an early stage in the determination of appropriate occupational standards. The federal government relies on the provincial governments to translate the standards into the qualifications offered by colleges. There have been important developments at the provincial level which complement the national initiatives. For example, in Ontario, the provincial government established the College Standards and Accreditation Council in 1993 to work with employers, trade unions, professional bodies and colleges to develop common standards for publicly-funded college courses. These standards are expressed as outcomes for vocational learning, generic skills and general education. The definition of standards at provincial level draws upon national occupational standards, where these are available.

Quality Assurance within Colleges

69 Procedures for monitoring and evaluating programmes are well established in many community colleges. Most institutions review programmes once every five years and a member of the teaching staff is responsible for co-ordinating this. College review processes usually incorporate feedback from students and employers, and teachers are expected to undertake a critical examination of teaching, learning and assessment. The outcomes of the reviews are reported to governors and programme advisory committees and procedures have been developed for ensuring that action is taken to implement the recommendations of review reports. The process relies heavily on peer-group evaluation. Review teams are drawn from teaching and support staff within the college and rarely from other colleges or professional groups.

70 Considerable emphasis is placed on the extent to which college graduates secure employment when evaluating the effectiveness of individual programmes. For example, Algonquin College publishes a graduate placement report each year which is made available to prospective students and employers and is reviewed by governors. Highlights of the 1995 report are shown in appendix 5. For every post-secondary programme, it provides data on the numbers of students successfully completing the programme, the proportion of these that have secured relevant employment and the median salary level achieved. All Ontario colleges mail or telephone a college graduate placement questionnaire to their graduates six months after graduation. Other performance indicators of student achievement such as retention and

examination success are generally given less emphasis than in English colleges. The overall record of programmes in placing their students in relevant employment is a critical factor for managers and governors when deciding whether to close or retain individual programmes.

Accreditation and Self-assessment

71 The need for colleges to demonstrate greater accountability for public funding and the desire for more common standards are leading to the development of external quality assurance systems. In Quebec, an evaluation commission was set up in 1993 as an autonomous and independent governmental body with a duty to report on how colleges fulfil their academic responsibilities. It is discharging this duty by conducting external assessments of the quality of programmes in selected subject areas across the province. Each college provides a self-assessment of its programme, drawing on evidence from its own quality assurance arrangements. A review team, consisting of full-time staff from the commission and external experts drawn from colleges, universities and the professions, visits the college to discuss the implementation and resourcing of the programme. The observation of teaching is not part of the process. The commission writes a report based on its findings which includes recommendations to the college and to the minister of education. At the time of the visit, the commission had conducted reviews of computing and childcare programmes across colleges in the province. British Columbia and Alberta college systems have institutional and programme review processes similar to those in Quebec.

72 In Ontario, the College Standards and Accreditation Council is advocating a similar approach for the accreditation of college programmes. It will focus on whether the college can demonstrate that it has systems in place to provide reasonable assurance that graduates from the programme have met the required standards. This will require colleges to assess their own programmes and will incorporate an element of evaluation by external experts.

73 These evolving forms of external review and accreditation are developing in the context of a system in which colleges have had considerable institutional autonomy without scrutiny from awarding bodies or inspectorates. Provincial governments are attempting to develop an independent method of assuring the quality of programmes which draws upon the colleges' internal procedures for quality assurance. Although the regulatory framework within which English colleges operate is quite different, there are some parallels in the emphasis that is being placed on the rigour of self-assessment as the basis for institutional inspection.

Counselling, Guidance and Student Support

74 Comprehensive information about the programmes, facilities and services available in colleges is provided in college catalogues. All students

who graduate from high school can apply to study at post-secondary institutions. However, many programmes are oversubscribed. For example, in one of the colleges visited, 1,400 students had applied for the 400 places available on one of the programmes. As a consequence of this, strict entry criteria are set, many students are not accepted at the college of their first choice, and some are not able to study the programme for which they initially applied.

75 Applications to colleges are managed in a number of different ways. In Ontario, all colleges are part of a consortium arrangement which operates in a similar way to the United Kingdom's 'clearing house' system for university applications. Publicity material from the colleges is distributed to the students through the consortium. Students then list their chosen programmes and colleges and send their applications to the consortium, whence they are distributed to the individual colleges. Many colleges will only consider applications from students who list them as their first choice. In one province, places are offered to students who meet all the entry criteria set by the college and the specific criteria required by the subject, on the basis of random selection by computer.

76 Student services have a high profile in many colleges. They are generally managed separately from the academic programmes of the college, although there is often a close link with academic services. The student services manager is usually a member of the senior management team. Student services are organised in such a way as to provide students with easy access to information and support. In many colleges this is reflected in a 'one-stop shop' approach to the organisation and management of the services. The services offered include counselling, careers information and guidance, health services, financial aid services, learning centres, induction programmes, peer tutoring, sports and recreational opportunities and employment centres. On joining the college, students pay a fee of approximately £25. This gives them access to the support services provided by the college, including membership of the Students' Association.

77 There is concern about the number of students who are considered to be under-prepared for their programmes at college. Some of these students have language difficulties because English is not their first language. Other students have more general difficulties with literacy and numeracy. Colleges take care to ensure that students are placed on programmes on which they are likely to succeed. Once students are accepted at a college they are often required to undertake placement tests. The results determine the level of course the student will study. In some cases, the tests are also used to identify students who need to undertake remedial programmes before, or as part of, their main programme of study. These programmes have proved to be effective in helping students to reach the level of literacy and/or numeracy they require to study successfully.

78 Colleges also provide additional support for students through learning centres. This is linked directly to the skills required for the students' main programmes. For example, mathematics courses have been designed to provide students with the specific mathematical problem-solving skills they need in order to undertake their programmes successfully. Support in the learning centres is provided by staff and peer tutors. Peer tutors are often students in their second or third year at college who have completed their previous studies successfully. In many colleges they are paid a small salary for the hours they spend tutoring.

79 Approximately half of all students use the student loan assistance programme, which is currently being reviewed by government. Employment centres in student services help students to find part-time employment, on or off the college campus, and to find permanent employment on completion of their college programmes. Most students find it necessary to work while they are studying, although there is some evidence to show that part-time work in excess of 10 hours a week affects their results and the time they take to complete their programmes.

Students with Learning Difficulties and/or Disabilities

80 Although there are policies to encourage colleges to place students with learning difficulties and/or disabilities on mainstream academic and vocational programmes, there is no requirement to do so. Some colleges have made a commitment to accept students with disabilities, whereas others have decided that they will not accept such students.

81 Students in Canada do not have an entitlement to post-secondary education. On courses where there are many more applicants than places, students with learning difficulties are unlikely to be able to meet the entry criteria. As a consequence, they are effectively excluded from post-secondary education at the colleges and many of them stay at school until they reach 21.

82 Additional funding is provided by provincial governments for those colleges which accept students with physical and/or sensory impairment. Although this funding is not protected by legislation, it has not been reduced. It is used to buy equipment and to provide specialist staff such as communicators, care assistants and teachers. Funds for the support services required by students with disabilities are also provided by vocational rehabilitation services. Students who wish to study at a college have to apply to the service in their last year at high school as the application takes at least six months to complete. If the service approves the student's career goal, funding is provided for support services at the college.

83 Special needs services have been established at all the community colleges in Ontario with the help of funding from the provincial government. Special needs services are generally based within the student services section of the college. Special needs co-ordinators liaise with students, their teachers and their sponsoring agencies. They inform

teachers of the support students require, co-ordinate the timetabling of the student's programme, act as advocates, negotiate funding and provide progress reports. This is similar throughout Canada.

84 In some colleges, learning disabilities consultants are part of the special needs services. They are responsible for working with teachers to enable them to develop teaching and learning strategies which are effective for the students. Most of the students supported in this way have specific learning difficulties such as dyslexia.

85 The high number of immigrants to Canada has necessitated the establishment of courses in English as a second language. Students can also obtain additional language support from staff and peer tutors in college learning centres.

APPENDIX 1

ORGANISATIONS AND INSTITUTIONS VISITED

Organisations

Association of Canadian Community Colleges

Bishop Allan Academy

British Council, Ottawa

College Standards and Accreditation Council of Ontario

Council of Ministers of Education

Human Resources Development, Canada

Ontario Council of Regents

Roehrer Institute

Institutions

Algonquin College, Ottawa, Ontario

Camosun College, Victoria, British Columbia

Dawson College, Montreal, Quebec

George Brown College, Toronto, Ontario

Humber College, Toronto, Ontario

Institut de Tourisme et d'Hôtellerie du Québec

John Abbott College, Montreal, Quebec

APPENDIX 2

PEN PORTRAITS OF SOME INSTITUTIONS VISITED

Association of Canadian Community Colleges

The Association of Canadian Community Colleges (ACCC) was created in 1972 and is the national organisation which represents colleges and institutes to government and industry, both in Canada and internationally. The ACCC is governed by a board of directors which consists of regional representatives of the college constituent groups (students, administrators, teaching and support staff, and community members). With an Ottawa-based secretariat, the ACCC interacts with federal ministries and agencies on the colleges' behalf and acts as a link between colleges and industry. Other aspects of its work are to organise conferences and workshops for college staff, students and board members and to facilitate networking and participation in national and international activities. The 175 member colleges contribute approximately C\$850,000 (£425,000) to the ACCC's operating budget of C\$4 million (£2 million), the balance being self-financed.

Ontario Council of Regents

This is a statutory government agency which reports directly to the minister of education and training. It was established in the mid-1960s at the same time as the first community colleges. There are 17 members of the council, including a full-time chairman. It has three main functions: to appoint college governors; to conduct collective bargaining on behalf of the ministry and to advise the minister on policy issues. There is no equivalent to the council in other provinces in Canada.

College Standards and Accreditation Council

The College Standards and Accreditation Council was established in 1993 by the minister of training and development for Ontario. Through its links with employers, trade unions, professional bodies and colleges, it is developing common standards across the province for publicly-funded college courses. These are expressed as outcomes for vocational learning, generic skills and general education. It is also responsible for establishing a common framework for the review of programme standards in colleges and a process of accreditation. It reports to the minister through the Council of Regents.

Algonquin College, Ottawa, Ontario

Algonquin College in Ottawa was established in 1967. The college has 595 full-time academic staff, 10,000 full-time students and about 60,000 part-time students. Of the 870 courses on offer, 114 are full-time programmes.

More than 2,500 students each year take advantage of the many courses which the college offers through distance learning, including courses delivered through electronic mail, video and electronic conferencing. The provision ranges from short courses to vocational programmes of three years' duration. The majority are two-year diploma programmes. The college's operating budget for 1995-96 was C\$117.4 million (approximately £58.7 million), which, in addition to the full-time and part-time post-secondary courses, included C\$27 million (£13.5 million) of educational services under contract to the federal government, provincial agencies and the private sector. In common with other Ontario colleges, Algonquin College is having to budget for substantial reductions in income as a result of cuts in government spending.

Camosun College, Victoria, British Columbia

Camosun College, Victoria, Vancouver Island, British Columbia, was formally founded in 1971, although vocational evening classes date back to 1913. The college provides for 5,000 full-time and 10,000 part-time students and 10,000 students on recreational programmes. The college's mission is to provide a range of programmes related to career and vocational training, adult learning and academic studies, for the 400,000 people of southern Vancouver Island and the southern Gulf Islands. This region is the traditional territory of nine Salish tribes, and indigenous students are particularly welcomed at the college. The college has close collaborative links with industry and commerce and promotes courses which involve students extending their programmes by spending additional time on a sandwich course in paid employment. The college's annual budget is about C\$50 million (£25 million), including about C\$35 million from the provincial government and C\$6 million to C\$7 million from tuition fees. Virtually all full-time courses are over-subscribed.

Dawson College, Montreal, Quebec

Dawson College opened in the autumn of 1969. Located in downtown Montreal, it was the first English-language college in Quebec's new system of post-secondary Collège d'Enseignement Général et Professionnel. With 7,000 full-time students and 4,000 part-time students, Dawson is Quebec's largest college. In 1988 the college moved most of its students into a historic and attractive property known as the Mother House of the Congregation of Notre-Dame. The college's library is housed in the former chapel. The college offers full-time students two-year pre-university programmes in arts and sciences and three-year career programmes in engineering and medical technologies, business and the applied arts. There is also extensive part-time provision, particularly in the evening. In recent years there has been considerable investment in information technology. Only 50 per cent of students claim English as their first language, while the mother tongue of the remainder is one of 38 different languages.

George Brown College of Applied Arts and Technology, Toronto

George Brown College was established by the government of Ontario in 1967 to provide vocational programmes for students in the city of Toronto. There are 70,000 students, approximately 20,000 of which are full time. The college has three main campuses located in the downtown area of the city. The main curriculum areas include: access and preparatory; business; community services; creative work; health sciences; hospitality; science and technology, and continuing education. The college has a national reputation for its specialist hospitality programmes and has attracted sponsorship from many international hotels and restaurants based in Toronto.

Humber College of Applied Arts and Technology, Toronto

Founded in 1967, Humber College has grown to become one of the largest community colleges in Canada. It has two main campuses in the cities of Etobicoke and York located within the suburbs of Toronto. The college's mandate is to prepare people for employment by providing career-orientated programmes of study. Over 11,000 full-time students and over 70,000 part-time students are enrolled on a range of diploma, certificate, apprenticeship and skills updating courses. The college has a variety of international links and in addition to its own awards provides a number of courses for graduates through an agreement with the University of Michigan. These include a substantial teacher education programme.

John Abbott College, Montreal, Quebec

Located on the western tip of Montreal Island, John Abbott's distinctive red-brick buildings and grounds were originally deeded to McGill University in 1906 by a wealthy industrialist. The campus is now shared with the agricultural department of the university. The high standard of accommodation includes a modern sports complex with a swimming pool and on-campus boarding accommodation for 191 students in two-bedroomed apartments. The college serves a predominantly professional, English-speaking population. It has about 5,200 full-time students on two-year pre-university and three-year professional programmes leading to careers in business or industry. The college is heavily over-subscribed. The college believes in 'student-centred' education, emphasising individual development and creativity. Sports and arts activities are a major component of both curricular and extra-curricular activity. The college also has about 1,500 students on part-time continuing education programmes and some 200 students on short training programmes run directly for local business and industry.

Institut de Tourisme et d'Hôtellerie du Québec

Founded in 1968 and constituted as a corporation in 1988, the Institut de Tourisme et d'Hôtellerie du Québec (ITHQ) has a mandate for the provision of professional education, including the upgrading and retraining of workers, for the hotel, restaurant and tourism industry. In addition, the

educational mission of the ITHQ encompasses research, technical assistance and publications in these fields. The ITHQ is administered by a board of 11 members appointed by government. The director-general reports directly to the minister of education. The institute provides education for about 900 full-time students at three levels: secondary, college and university. Secondary school students study basic craft courses in cooking, bakery and restaurant service for one or one-and-a-half years whilst college students take a three-year diploma in restaurant and food service management, hotel management or tourism. University level students are able to take a bachelor degree in administration with a specialism in tourism and hotel management through the partnership of the ITHQ and the University of Quebec in Montreal. In addition, the ITHQ has an extensive programme of adult education, both full time and part time, involving about 1,500 adult students. This includes training for unemployed people, short day-release courses for updating and upgrading the skills of catering and hotel employees and specially-designed courses for particular companies, such as the training of employees for the new Montreal casino. All instruction is in French. The ITHQ has a range of modern facilities and up-to-date equipment including a 42-room hotel. All programmes are fully supported by work placements both in Canada and abroad. Nearly 90 per cent of full-time students find employment in the industry within eight months of completing their studies.

APPENDIX 3

A sample of the programmes offered by Algonquin College, Ottawa 1995-96

<i>Programme</i>	<i>Duration</i>	<i>Certification</i>	<i>CE</i>	<i>Delivery</i>	<i>Type</i>
Advertising – Creative	2 yrs	Diploma		FT	
Air Conditioning and Refrigeration		Certificate		FT	APP
Alignment and Brakes Mechanic		Certificate		FT	APP
Ambulance and Emergency Care	1 yr	Certificate		FT	
Animation – Television	2 yrs	Diploma		FT	
Architectural Technician	2 yrs	Diploma		FT	
Architectural Technology	3 yrs	DT		FT	
Archives Technician	2 yrs	Diploma		FT	
Auto Body Repairer		Certificate		FT	APP
Automated Office Techniques	1 yr	Certificate		FT	CO-OP
Baker		Certificate		FT	APP
Baking Techniques	40 wks	Certificate		FT	ATP
Bartending	15 wks	Certificate		FT	ATP
Basic Training for Skill Development – Level 1	36 wks	Certificate	*	FT/PT	ATP
Basic Training for Skill Development – Level 2	24 wks	Certificate	*	FT/PT	ATP
Basic Training for Skill Development – Level 3	32 wks	Certificate	*	FT/PT	ATP
Basic Training for Skill Development – Level 4	32 wks	Certificate	*	FT/PT	ATP
Brick and Stone Mason		Certificate		FT	APP
Broadcasting – Radio	2 yrs	Diploma		FT	
Broadcasting – Television	2 yrs	Diploma		FT	
Building Healthy Communities – Multidiscipline		Certificate	*	PT	
Building Maintenance Mechanic		Certificate		FT/PT	APP
Business	2 yrs	Diploma		FT	
Business – Accounting	2 yrs 52 wks	Diploma Diploma		FT NSDP	
Business – Information Systems	2 yrs	Diploma		FT	CO-OP
Business – Insurance	2 yrs	Diploma		FT	
Business – Marketing	2 yrs	Diploma		FT	
Business – Retailing	2 yrs	Diploma		FT	
Business Administration	3 yrs	DB	*	FT	
Business Administration – Accounting	3 yrs	DB	*	FT	
Business Administration – Finance	3 yrs	DB	*	FT	
Business Administration – Human Resources Management	3 yrs	DB	*	FT	

Key	APP – Apprentice	FT – Full-time
	ATP – Adult Training (or tuition Short)	CE(*) – Continuing Education
	CO-OP – Co-operative Education option	PT – Part-time
	DT – Diploma of Technology	
	NSDP – 52-64 weeks continuous study (non-semestered diploma programs)	

APPENDIX 4

Examples of broadcasting radio diploma programmes in two Ontario colleges

<p>Algonquin College – Broadcasting Radio Diploma 1995-96</p> <p>Program Description</p> <p>This two-year diploma program provides students with formal training to become leaders in the communication industry. All aspects of the radio industry are covered with the common focus of making graduates job-ready. Equal importance is given to creative production elements and technical quality in operations. The program follows a hands-on approach to learning, stressing the importance of teamwork. Students follow a common curriculum that emphasizes announcing, broadcast journalism and production techniques.</p> <p>Employment Opportunities</p> <p>Graduates may find employment in radio stations as announcers, studio operators, writers, reporters, researchers and producers. Opportunities also exist for graduates to work as audio technicians in production houses.</p> <p>Admission Requirements</p> <p><i>College eligibility</i></p> <ul style="list-style-type: none"> Ontario Secondary School Diploma (OSSD) at or above the General Level, or equivalent. Applicants with an OSSD showing senior English and/or Mathematics courses at the Basic Level will be tested to determine their eligibility for admission; or Mature Student status (19 years of age or over and without a high school diploma; eligibility may be determined by academic achievement testing). <p><i>Program eligibility</i></p> <ul style="list-style-type: none"> Attend a program admission session. Successfully complete the Broadcasting – Radio program admission tests in written language proficiency and a quiz on Canadian and current events. A fee of \$25.00 will be charged for the testing. <p>Fees and Expenses</p> <p>Tuition fees listed are in effect for the 1995-1996 academic year. Tuition fees: \$554.50 per level. Incidental fees: \$55.00 in levels one and three. Student Activity/Sports fee: \$60.50 per level. Student Centre Building fee: \$12.50 per level. A \$30.00 graduation fee is payable in the final level.</p> <p>Books and supplies cost approximately \$700.00 per year and can be purchased in the campus bookstore or in the Broadcasting Department.</p>	<p>Additional Information</p> <p>This full-time day program is offered on the Woodroffe campus.</p> <p>The program is recognized by the Broadcast Educators' Association of Canada. The federal government is encouraging radio stations to hire more broadcasters from the following categories:</p> <ul style="list-style-type: none"> racial or cultural minorities aboriginal Canadians persons with disabilities women. <p>As a trainer for the broadcasting industry, Algonquin's Broadcasting – Radio program encourages applications from these under-represented groups.</p> <p>Program of Study</p> <table> <thead> <tr> <th>Level: 01</th> <th>Hours</th> </tr> </thead> <tbody> <tr><td>ENGLISH I</td><td>48</td></tr> <tr><td>MEDIA LAW</td><td>48</td></tr> <tr><td>RADIO PRODUCTION I</td><td>80</td></tr> <tr><td>PERFORMANCE I</td><td>32</td></tr> <tr><td>RADIO NEWSWRITING I</td><td>32</td></tr> <tr><td>MUSIC APPRECIATION</td><td>32</td></tr> <tr><td>RADIO PROGRAMMING I (CKDJ)</td><td>32</td></tr> <tr><td>COMMERCIAL WRITING I</td><td>32</td></tr> <tr><td>INTRODUCTION TO BROADCASTING</td><td>32</td></tr> </tbody> </table> <table> <thead> <tr> <th>Level: 02</th> <th>Hours</th> </tr> </thead> <tbody> <tr><td>RADIO PRODUCTION II</td><td>80</td></tr> <tr><td>PERFORMANCE II</td><td>32</td></tr> <tr><td>RADIO NEWSWRITING II</td><td>32</td></tr> <tr><td>RADIO PROGRAMMING II (CKDJ)</td><td>32</td></tr> <tr><td>RADIO FORMATS</td><td>32</td></tr> <tr><td>COMPUTER THEORY</td><td>32</td></tr> <tr><td>TELEVISION JOURNALISM</td><td>64</td></tr> <tr><td>English General Education Elective: choose 1</td><td></td></tr> <tr><td>THE ANIMATED CULTURE</td><td>48</td></tr> <tr><td>BEST SELLERS AND POPULAR CULTURE</td><td>48</td></tr> <tr><td>EXPLORING THE ARTS IN THE 20TH CENTURY</td><td>48</td></tr> </tbody> </table> <table> <thead> <tr> <th>Level: 03</th> <th>Hours</th> </tr> </thead> <tbody> <tr><td>ENGLISH III – RADIO</td><td>48</td></tr> <tr><td>STATION OPERATION I (CKDJ)</td><td>112</td></tr> <tr><td>RADIO NEWSWRITING III</td><td>32</td></tr> <tr><td>CURRENT AFFAIRS PROGRAMMING</td><td>32</td></tr> <tr><td>ADVANCED PRODUCTION TECHNIQUES</td><td>48</td></tr> <tr><td>MARKETING, PUBLIC RELATIONS AND PROMOTION</td><td>32</td></tr> <tr><td>General Education Elective: choose 1</td><td></td></tr> <tr><td>MEDIA RELATIONS</td><td>48</td></tr> <tr><td>MEDIA SALES</td><td>48</td></tr> </tbody> </table> <table> <thead> <tr> <th>Level: 04</th> <th>Hours</th> </tr> </thead> <tbody> <tr><td>PSYCHOLOGY OF THE WORKPLACE</td><td>48</td></tr> <tr><td>MULTI-TRACK STUDIO OPERATION</td><td>24</td></tr> <tr><td>BROADCAST MANAGEMENT THEORY</td><td>16</td></tr> <tr><td>FIELD WORK I – RADIO</td><td>60</td></tr> <tr><td>FIELD WORK II – CKDJ</td><td>100</td></tr> <tr><td>COMMERCIAL WRITING II</td><td>16</td></tr> <tr><td>STATION OPERATION II (CKDJ)</td><td>80</td></tr> </tbody> </table>	Level: 01	Hours	ENGLISH I	48	MEDIA LAW	48	RADIO PRODUCTION I	80	PERFORMANCE I	32	RADIO NEWSWRITING I	32	MUSIC APPRECIATION	32	RADIO PROGRAMMING I (CKDJ)	32	COMMERCIAL WRITING I	32	INTRODUCTION TO BROADCASTING	32	Level: 02	Hours	RADIO PRODUCTION II	80	PERFORMANCE II	32	RADIO NEWSWRITING II	32	RADIO PROGRAMMING II (CKDJ)	32	RADIO FORMATS	32	COMPUTER THEORY	32	TELEVISION JOURNALISM	64	English General Education Elective: choose 1		THE ANIMATED CULTURE	48	BEST SELLERS AND POPULAR CULTURE	48	EXPLORING THE ARTS IN THE 20TH CENTURY	48	Level: 03	Hours	ENGLISH III – RADIO	48	STATION OPERATION I (CKDJ)	112	RADIO NEWSWRITING III	32	CURRENT AFFAIRS PROGRAMMING	32	ADVANCED PRODUCTION TECHNIQUES	48	MARKETING, PUBLIC RELATIONS AND PROMOTION	32	General Education Elective: choose 1		MEDIA RELATIONS	48	MEDIA SALES	48	Level: 04	Hours	PSYCHOLOGY OF THE WORKPLACE	48	MULTI-TRACK STUDIO OPERATION	24	BROADCAST MANAGEMENT THEORY	16	FIELD WORK I – RADIO	60	FIELD WORK II – CKDJ	100	COMMERCIAL WRITING II	16	STATION OPERATION II (CKDJ)	80
Level: 01	Hours																																																																																
ENGLISH I	48																																																																																
MEDIA LAW	48																																																																																
RADIO PRODUCTION I	80																																																																																
PERFORMANCE I	32																																																																																
RADIO NEWSWRITING I	32																																																																																
MUSIC APPRECIATION	32																																																																																
RADIO PROGRAMMING I (CKDJ)	32																																																																																
COMMERCIAL WRITING I	32																																																																																
INTRODUCTION TO BROADCASTING	32																																																																																
Level: 02	Hours																																																																																
RADIO PRODUCTION II	80																																																																																
PERFORMANCE II	32																																																																																
RADIO NEWSWRITING II	32																																																																																
RADIO PROGRAMMING II (CKDJ)	32																																																																																
RADIO FORMATS	32																																																																																
COMPUTER THEORY	32																																																																																
TELEVISION JOURNALISM	64																																																																																
English General Education Elective: choose 1																																																																																	
THE ANIMATED CULTURE	48																																																																																
BEST SELLERS AND POPULAR CULTURE	48																																																																																
EXPLORING THE ARTS IN THE 20TH CENTURY	48																																																																																
Level: 03	Hours																																																																																
ENGLISH III – RADIO	48																																																																																
STATION OPERATION I (CKDJ)	112																																																																																
RADIO NEWSWRITING III	32																																																																																
CURRENT AFFAIRS PROGRAMMING	32																																																																																
ADVANCED PRODUCTION TECHNIQUES	48																																																																																
MARKETING, PUBLIC RELATIONS AND PROMOTION	32																																																																																
General Education Elective: choose 1																																																																																	
MEDIA RELATIONS	48																																																																																
MEDIA SALES	48																																																																																
Level: 04	Hours																																																																																
PSYCHOLOGY OF THE WORKPLACE	48																																																																																
MULTI-TRACK STUDIO OPERATION	24																																																																																
BROADCAST MANAGEMENT THEORY	16																																																																																
FIELD WORK I – RADIO	60																																																																																
FIELD WORK II – CKDJ	100																																																																																
COMMERCIAL WRITING II	16																																																																																
STATION OPERATION II (CKDJ)	80																																																																																

APPENDIX 4 *continued*

HUMBER COLLEGE – BROADCASTING RADIO DIPLOMA 1995-96

(School of Media Studies)

Four semesters, beginning in September, plus a May/June internship. A one-year Certificate Program is also offered.

Radio broadcasting is a competitive industry with a demand for highly qualified professionals in all of its segments. Humber's Radio Broadcasting diploma program continues to lead the field in radio education. It is designed to develop the 'total broadcaster'. Students are taught every aspect of the profession: writing, announcing, production, management, sales, programming, technical work, music direction, promotion, market research, interviewing techniques, news and sports writing. Because program personnel maintain contact with the public and private sectors of the industry, course content is relevant and reflects current needs. 'Hands-on' training is provided through the closed-circuit radio station that is operated by the program. Students are all given opportunities to train at radio stations throughout the province, the country, and even in the Metro Toronto area during the May/June Internship which follows the fourth semester of the program.

ADMISSION REQUIREMENTS

- Ontario Secondary School Diploma (OSSD) at or above the general level, or equivalent, or mature student status with related experience in the Radio Broadcasting industry
- attendance at an interview/orientation session where applicants will be required to complete:
 - 1 a questionnaire
 - 2 a vocabulary/comprehension assessment
 - 3 voice and reading test, all of which will be taken into consideration for selection purposes.

Please note: The college reserves the right to establish a minimum literacy skill level as a prerequisite to any consideration for admission to this program.

In the case of an oversubscription to a program, the Ministry of Education and Training policy applies. The college reserves the right to use an applicant's grade point average or to use individual course grades to determine which applicants will be offered interviews, auditions, etc. Grades and/or the results of mature student assessments may also be used as the sole selection criteria in some programs.

CAREER OPPORTUNITIES

Graduates have found employment throughout Canada, and around the world. Many of our broadcasters have become household names in the communities they serve.

CURRICULUM

Semester 1 (21 hours/week)	Credits
Introduction to Radio	4
Basic Writing 1 – Radio	4
Broadcast Equipment	4
Basic Announcing 1	4
Sales Development	2
News Development	2
Communications 200	3
Semester 2 (22 hours/week)	Credits
Writing for Radio 2	2
Radio Lab	2
Announcing 2	4
Announce Development	3
Broadcast News	2
Communications 311	3
Humanities	3
General Education	3
Semester 3 (23 hours/week)	Credits
Radio Lab	4
Career Preparation for Radio	2
Station Operation (Major)	9
On-air Performance 1	3
Effective Speaking	2
General Education	3
Semester 4 (24 hours/week)	Credits
Station Operation (Major)	9
Radio Seminar	2
Radio Lab	6
On-air Performance 2	2
Radio Programming	2
General Education	3
May/June	Credits
Radio Internship	6
<i>(Students must be current and passing in all courses to go on Internship.)</i>	

APPENDIX 5

Highlights of the graduate placement report

ALGONQUIN COLLEGE 1995	UNRELATED EMPLOYMENT517
GRADUATES	Employment in full-time or part-time jobs, which the graduate felt was not related to his/her program of study.
TOTAL GRADUATES3,618	Full-time Employment: At least 30 hours of work per week, or less than 30 hours per week if that is considered full-time employment in a particular field.
Represents all students (both full-time students and full-time students who transferred to part-time studies) who graduated from a program of study between May 1, 1994 and April 30, 1995.	Part-time Employment: Less than 30 hours of work per week. Some graduates may work at one or more positions; however, two part-time jobs are not considered full-time work.
RESPONDED TO SURVEY2,892	SALARIES
Represents the number of graduates who responded to the questionnaire by mail or by telephone. All survey results are based on this number.	NUMBER OF SALARIES REPORTED1,118
AVAILABLE FOR EMPLOYMENT.....2,422	Information is not available when four or less salaries are reported.
Graduates who were either employed or unemployed during the reference weeks, ie: March 5-11, 1995; July 2-8, 1995; November 5-11, 1995. The reference week represents 28 weeks after graduation.	MEDIAN SALARY\$22,880
TOTAL WORKING.....1,984	Represents the mid point starting salary of respondents who were employed full-time in jobs related or partially related to their training. It excludes other compensation such as gratuities, commissions, or other non-monetary payments.
Graduates who during the reference week, did any work, whether full-time or part-time, salaried or self-employed, permanent or temporary in positions related or unrelated to the program of study.	LOW-HIGH SALARY\$4,000-68,000
STILL SEEKING EMPLOYMENT438	Represents the lowest and the highest salaries in thousands of dollars reported from students working full time in their field of study.
Graduates who, during the reference week, were without work but were looking for work.	REFERENCE WEEKS
NOT SEEKING EMPLOYMENT74	The weeks in which the Graduate Employment Survey were conducted (March 5-11, 1995; July 2-8, 1995; November 5-11, 1995).
Graduates who, during the reference week, were neither employed nor unemployed, including those attending school full time, travelling, or staying home for health reasons or because of family responsibilities. This includes graduates on visas who do not have work permits.	
UNKNOWN726	
Graduates who could not be contacted by mail or telephone to complete the questionnaire.	
FURTHER EDUCATION396	
Graduates who, during the reference week, continued their education at a community college, a university or other institution and who are not employed, part or full-time.	
EMPLOYMENT	
RELATED EMPLOYMENT1,467	
Employment in full-time or part-time jobs, which the graduate felt was related or partially related to his/her program of study.	

BIBLIOGRAPHY

Centre for Industrial Relations, *Baseline Study of Canada*, University of Toronto, September 1995.

L Cantor 'Canada's Community Colleges: Institutions in Transition,' *Studies in Higher Education*, Volume 17, No. 2, 1992.

Andre Beckerman, *Training for What?*, Our Schools Education Foundation, November 1992.

From HE to Employment, OECD, 1992.

R Gordon and B Sinnett, *Raising Quality in a Competitive Environment: The Canadian Experience*, Mendip Papers, 1993.

Performance Standards in Education, OECD, 1995.

D Ashton, F Green and G Lowe, 'The Linkages between Education and Employment in Canada and the UK: A Comparative Analysis', *Comparative Education*, Volume 29.

Published by the
Further Education Funding Council
October 1996