IN THE CANADIAN ENCYCLOPEDIA EDMONTON, ALBERTA: HURTIG, 1985.

they are called by a variety of names — college, COMMUNITY COLLEGE, regional college, college of applied arts and technology, COLLÈGE D'ENSEIGNEMENT GÉNÉRAL ET PROFESSIONNEL (CEGEP), institute f technology, etc. These colleges offer programs eading to diplomas rather than degrees. Some provide academic education for transfer to university, some provide vocational training, chiefly at the technician level, while others offer both academic and vocational programs. The colleges are not expected to undertake research, but do provide a wealth of community services.

Enrolment in PSE has risen steadily since WWII and the participation rate (total of full-time students in PSE as a percentage of the population 18-24 years old) is now close to 20%. Students in university and nonuniversity institutions are about equal in numbers; about 50% attend full-time, 50% part-time. According to the 1981 census, of the population over 19 years of age, 9% had a degree and 12% had another postsecondary qualification.

PSE is funded primarily by governments (approximately 84%), tuition fees (8%) and other sources (8%). Both the provincial and federal governments contribute, but in the context of overall federal-provincial fiscal arrangements the federal share is being constantly renegotiated (*see also* EDUCATIONAL OPPORTUNITY).

Recurrent issues in higher education include who should be served; what mix of general and specialized courses should be offered by universities and colleges; how good teaching can be assured; what the desirable balance is between teaching and research; how costs should be shared by the student and society; what the respective roles and responsibilities of institutions and governments should be; and whether aims and outcomes are commensurate.

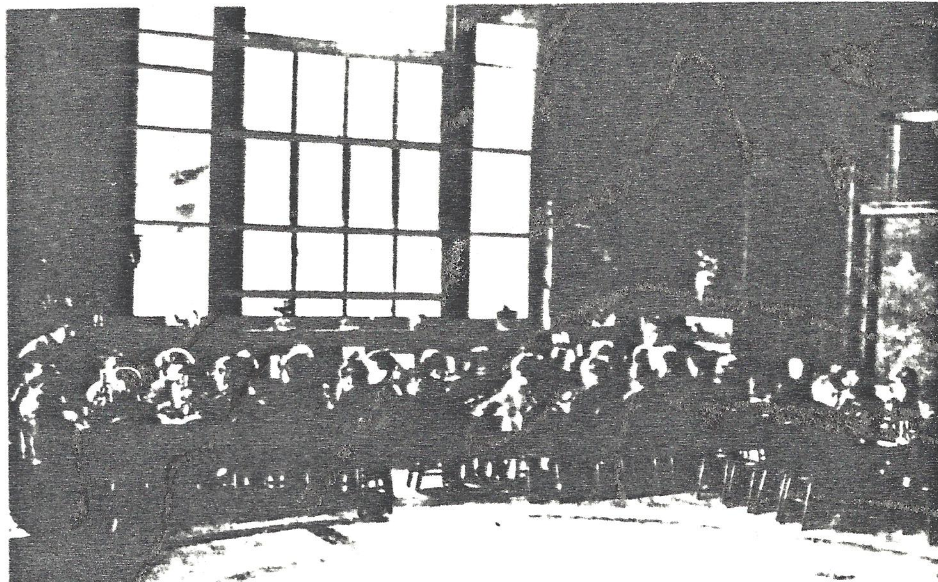
EDWARD SHEFFIELD

Reading: Robin S. Harris, *A History of Higher Education in Canada, 1663-1960* (1976); Edward Sheffield, et al, *Systems of Higher Education: Canada* (1982).

Education, History of The history of education is a central theme in Canada's social, economic and political development. In NEW FRANCE education was usually an informal process in which skills and values were passed from one generation to the next by parents, relatives and older siblings. Three hundred years later, informal learning has become an adjunct to extensive systems of formal schooling. The growth of schooling in Canada reflects a transformation in the nature of social organization, which has become increasingly based on institutional structures.

During the French regime in Canada, the process of learning was integrated into everyday life. While the French government supported the responsibility of the Catholic Church for schooling, the FAMILY was the basic unit of social organization and the main context within which almost all learning took place. In the labour-intensive economy of the 17th and 18th centuries, families relied on the economic contributions of their children, who were actively engaged in productive activity. Children learned skills such as gardening, spinning and land clearing from other family members. Young males were trained for various trades through an APPRENTICESHIP system. Similarly, because the population was small and dispersed, it was the family that undertook religious instruction and, in some cases, instruction in reading and writing. In certain areas, parish priests established *petites écoles* in which they taught catechism and other subjects. However, the majority of the population in New France, particularly in the rural areas, could not read and write.

In the towns of New France, formal education was more important for a variety of purposes. The Jesuits, Récollects, Ursulines, the Congregation of Notre Dame and other religious orders provided elementary instruction in catechism, reading, writing and arithmetic. More advanced instruction was available for young men who might become priests or enter the professions. By the mid-17th century, a course in classical studies, grammar and theology was available at the college founded by the Jesuits in 1635. In the 1660s Bishop LAVAL founded the SÉMINAIRE DE QUÉBEC, which later became UNIVERSITÉ LAVAL. Formal instruction for females was quite limited and usually did not extend beyond religious instruction and skills such as needlework. However, girls who lived in the countryside may have been better educated than boys as a result of the efforts of the sisters of the Congregation of Notre Dame, who established schools in rural areas as well as in towns, and travelled as itinerant teachers.



Kindergarten was meant to promote spontaneous learning through song and play but came to be seen as a bridge between home and school (*courtesy Ontario Archives*).

While only a minority of colonists in New France received instruction in an institutional setting, Catholic missionaries played an important role in formal education. The Recollects hoped to undermine the traditional culture and belief systems of the native people by educating the young boys and girls in the Catholic religion and in French customs. The Jesuits, who also embarked on an ambitious program to "francisize" the native people, compiled translations of the native tongues and established various schools. Other groups, such as the Ursulines, focused their educational efforts on native girls. However, the Catholic Church's missionary efforts met with minimal success and the educational programs had little impact on the society of native people, in which learning continued to be viewed as an ongoing part of everyday activity (*see* NATIVE PEOPLE, EDUCATION).

During the 18th and early 19th centuries, the family remained the unrivalled setting for education; few children in what was then British N America received formal instruction either from tutors or in schools. The pattern began to change during this period, however, as the British government looked to education as a way of promoting cultural identification with Protestantism, the English language and British customs.

In the years after the Conquest of 1759-60, the British authorities were exceedingly concerned about the strong French Canadian presence in the colony, and they tried repeatedly to assist in the establishment of schools that were outside the control of religious authorities. These efforts were undermined by the Catholic Church and, more importantly, by the disinterest of local communities, in which education was associated more with households than classrooms. However, the concept of schooling as an agent of cultural change became more widespread among social leaders during the 19th century, especially as American influence and IRISH immigration added to concern about the cultural complexion of British N America. In these years, politicians, churchmen and educators debated questions of educational financing, control and participation, and as early as the 1840s the structure of the modern SCHOOL SYSTEMS can clearly be discerned in an emerging official consensus.

The consensus involved a fundamental redefinition of the content and structure of education, eg, formal education became a public responsibility under secular rather than religious control. Schools were promoted as components of educational systems rather than as products of single communities. In most regions, the financing of schools became compulsory and attendance by all children (and not just the more affluent) was encouraged. One of the major promoters of these developments was Egerton RYERSON, who as a Methodist minister in UPPER CANADA began a long career of educational leadership when he took up the cause of nondenominational schooling in the late 1820s. The position of assistant superintendent to which he was appointed in 1844, had been created by the School Act of 1841, which was intended to provide for a uniform school system for the United Province of Canada. However, the Act did not effectively resolve the complicated issue of control, administration and finance, and Ryerson sought possible solutions in the US and Europe. During 1844 and 1845 he visited more than 20 countries and was particularly impressed by teaching methods in Prussia, by textbook use in Ireland, and by educational administration in New York and Massachusetts. The recommendations for legislative change included in his 1846 report were based partly on his impressions of education in these countries. These recommendations were incorporated into the Common School Acts of 1846 and 1850 and refined in the 1871 Act to Improve the Common and Grammar Schools. This legislation was not only the foundation for the contemporary Ontario school system, but served as the model for school Acts in most other regions of Canada.

Ryerson and other school promoters such as Alexander Forrester in NS and John Jessop in BC sought to establish a system of universal tax-supported elementary education based on Christian morality. Ideally the administration of this

system would blend centralized control and local responsibility. In most cases, property taxes would finance the new institutions to guarantee free access to all children. Teachers would be trained and certified and pupils would be provided with standardized textbooks. Fulfilment of these ambitions depended upon a complex array of circumstances. To begin with, school promoters had to convince property owners that they should pay taxes to support the schooling not only of their own children but also, and most importantly, of poorer children. To do so, educators argued that schooling had become necessary as a result of widespread political, social and economic changes. The association of formal education with social purpose was potent in the mid-19th century; school promoters believed that common schooling not only provided an opportunity for general social improvement but that it would serve as an antidote to social instability. Canadian leaders interpreted the REBELLIONS OF 1837 as a sign that the future political stability of their society depended upon achieving a new consensus on the importance of social order and the moral value of self-regulation.

At the same time, economic changes were transforming the family, especially the position of women and children. Until around 1920, Canada was a predominantly rural society, but throughout the 19th century rapid commercial and manufacturing development spurred the growth of major cities in which productive activity moved out of the home and into centralized workplaces (*see* WORK). This transition redefined production as employment. Women and children were most affected, because the emerging wage-labour economy generally offered job opportunities only to men. Older children and unmarried women were employed in sectors such as the TEXTILE INDUSTRY, but by the mid-1800s the number of these potential workers greatly exceeded the number of jobs available for them. Social leaders viewed the dislocation of children from productive activity with concern, fearing that cities such as Toronto and Hamilton might be threatened by the appearance on the streets of numerous idle children from working-class families. These children were generally considered by educators to be ignorant, criminally inclined and in need of social training. In the mid-19th century, therefore, school promoters argued that public systems could respond to the emerging political, social and economic dimensions of a new Canadian society, and that "free" schools would create social harmony by providing a common experience for children of disparate socioeconomic groups. Of course, common schooling was not intended to alter the actual social structure but to preserve it by shaping the behaviour and attitudes of what were perceived as certain potentially disruptive groups, eg, immigrants and the poor. The role of education was to engender a "proper" appreciation (and acceptance) of one's place in society and to promote shared values and customs, thereby ensuring social stability. School promoters considered taxation a small price to pay for these benefits, and although some ratepayers in communities as disparate as Toronto and Victoria did oppose the taxation, the promise of education was sufficiently attractive to encourage support at the local level.

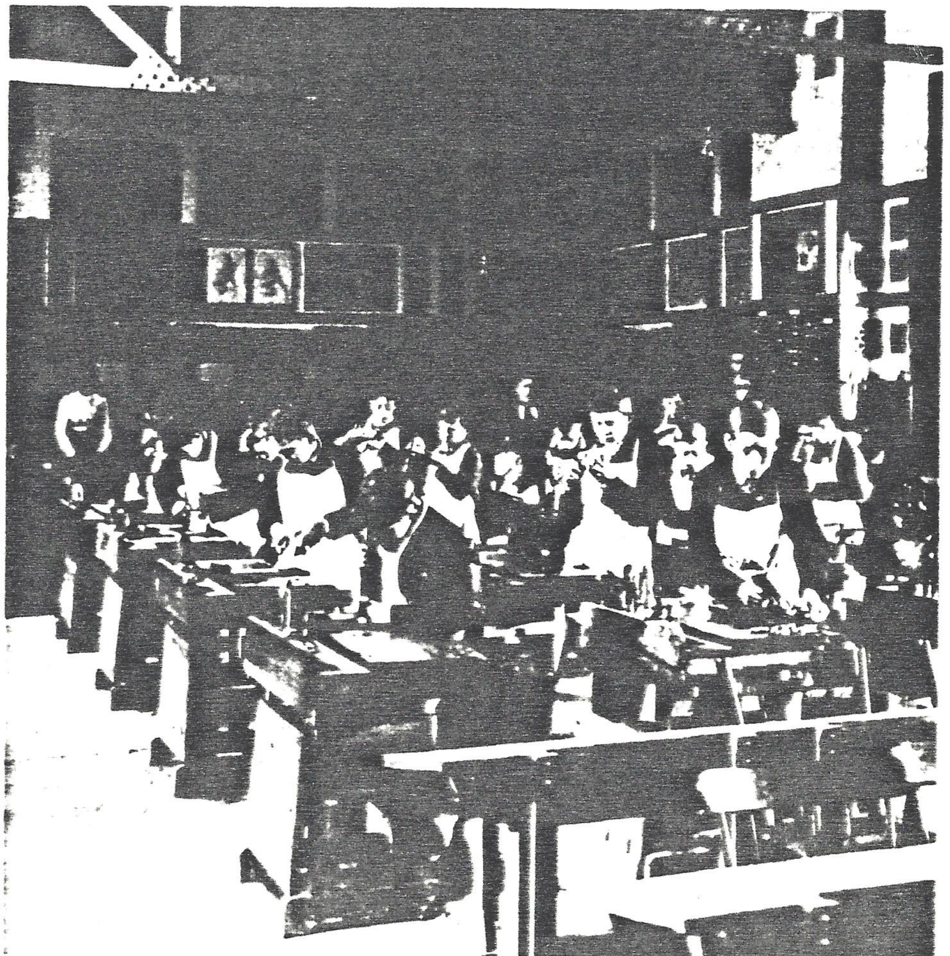
The rapid construction of school systems during the mid-19th century resulted not only from official promotion of public schooling but also from the willingness of parents to send their children to school. Even before compulsory attendance legislation was enacted in the late 19th century, most children between the ages of 7 and 12 attended school at least several months each year. Children from affluent families attended regularly and stayed in school until they were older, while children from poorer families only attended irregularly because other demands were more pressing. Official motivation for promoting school construction and local motivation for sending children to school have been distinct from each other, therefore the history of education since the 19th century has been one of conflict and controversy.

Educational development since Ryerson's day has been characterized by an increase in the years of formal attendance at school. SECONDARY SCHOOLS became commonplace in cities. By 1921 many Canadian children registered at school until age 16, while a smaller percentage continued to higher levels. However, social position continued to influence attendance patterns. Children from working-class families received far less schooling than those from more affluent backgrounds. In addition, children in rural areas had less EDUCATIONAL OPPORTUNITY than their counterparts in cities, where population density encouraged the construction of high schools and UNIVERSITIES. The development of public school systems in the 19th century was marked by the standardization of textbooks, teacher training, classroom organization and curriculum. Children were viewed as clay to be molded in desired forms, but over time a view of children as inherently distinct with varying levels of potential (ie, seedlings that had to be cultivated according to their individual natures) came to prevail. The changing view of children contributed to the growth of new educational programs (especially at the secondary level) designed to accommodate the differing abilities and potential of different students. Most importantly, technical and vocational courses were developed for students who were deemed unsuitable for further academic study. Not surprisingly, the criteria for assigning children to various courses reflected cultural and social prejudices more than intellectual assessments. Measures such as IQ tests, developed by the 1920s, revealed unintentionally more about the school administrators than the students, but they were nevertheless used to place different students in different courses of study after the elementary years. This approach has been constantly revised during the 20th century, especially after WWII, when the expansion of post-secondary institutions provided a new way of sorting different students into different programs. In these years, educational debate focused on the content of the appropriate curriculum for various age groups (*see* CURRICULUM DEVELOPMENT). Questions of administration, financing, teacher training and other structural features of school systems have tended to follow the general pattern established during the 19th century.

A great deal of educational conflict and controversy has involved religion and language. The establishment of schools brought local practice under official scrutiny and forced communities to conform to prescribed standards of formal instruction which did not accord with the reality of a diverse society. For example, religious groups did not always agree on the desirability of nondenominational Christian curricula, and their protests led to the growth of parallel Catholic and Protestant school systems in Québec, the provision for SEPARATE SCHOOLS in provinces such as Ontario, and a completely denominationally based school system in Newfoundland. These developments were legally guaranteed by the Constitution Act, 1867, which not only assigned education to the provinces but also enshrined the continued legitimacy of denominational schools that were in place in the provinces at the time that they joined Confederation.

Canada's educational history has been marked by constant conflict over minority-lan-

Manual Training Room, OAAC, Ottawa 1901 (*courtesy Public Archives of Canada / PA-28236*)



guage education. Most controversies have involved Francophones outside Québec, but recently the language question has affected Québec Anglophones and has also concerned heritage language instruction to children of immigrant groups (*see* SECOND-LANGUAGE INSTRUCTION). These conflicts reflect the fact that within the general expansion of standardized public schooling, there have been competing educational visions among both policymakers and parents.

Similarly, within the concept of a standard education, there was a sharp distinction between males and females. The ideal public schoolhouse included separate entrances, classrooms and recess areas for boys and for girls. In addition, the redefinition of the family as less of an economic unit of production than an association based on emotional attachment was accompanied by the idea that girls should be educated for household responsibility while boys should be trained as breadwinners. By the late 19th century, girls attended HOME ECONOMICS programs to learn cooking and cleaning skills while boys, especially from working-class families, learned manual skills related to factory production. The idealization of women as wives and mothers, as well as the relative paucity of other employment opportunities for females, contributed to the feminization of the elementary-school teaching force. While the proper sphere for women was considered the home, young single women came to be viewed as ideal teachers for younger children who could benefit from their supposedly inherent nurturing qualities. Women teachers were poorly paid and were supervised by male officials who saw themselves as the real educators. Even in the later 20th century, many of the earlier patterns remain unchanged. The history of education has therefore been quite different for males and females.

Formal education also had different implications for Canadians of non-European ancestry. The ambitions of educators to encourage the assimilation of native peoples continued unchanged after the time of New France. In the 19th and 20th centuries, boarding schools were a major strategy for separating native children from their own people, but this approach only served to confuse the children culturally and damage them psychologically. Recently, there have been attempts by official educators to collaborate with native peoples in developing educational programs that respect cultural identity, but thus far the political, social and economic context of NATIVE-WHITE RELATIONS has worked against effective educational collaboration.

Similarly the history of Canadian education includes the establishment in the 19th century of separate schools for BLACKS in Ontario and Nova Scotia and special regulations for Asians in BC (*see* CHINESE; JAPANESE; SOUTHEAST ASIANS). Such discrimination is no longer official policy in Canada, but more subtle and informal racism is still apparent in some educational programs and textbooks.

Conclusion The history of education in Canada, as in other Western countries, has involved the growth of formal instruction funded by taxes and supervised by the state. This growth resulted from concern about cultural, moral and political behaviour, from the emergence of a wage-labour economy, from changing concepts of childhood and the family, and from the general reorganization of society into institutions. By the late 20th century, schooling has become part of an institutional network which includes hospitals, businesses, prisons and welfare agencies. Various groups have experienced this development in different ways, sometimes by official design and sometimes by their own choice. As a result, there are many histories of Canadian education and important distinctions within the general trends.

CHAD GAFFIELD

Education, Special, is remedial education designed to help children and young adults who are exceptional in some way as a result of low intelligence, visual or auditory impairment or specific learning difficulties or problems. Remedial techniques may include the use of special schools or classes, individual instruction, and specifically designed programs in reading, language or other areas. Up to 40% of youngsters may at some time require special educational help, but as a field, special education is particularly concerned with the 10-15% of the population who suffer major or chronic handicaps (*see* DISABILITIES).

The behaviour of exceptional children varies, but one of the more common characteristics associated with a handicap is instability of behaviour, eg, the motivation to learn may increase or decrease markedly from day to day or even during the course of a day. Teachers, psychologists, social workers and medical practitioners frequently collaborate as an interdisciplinary team, assessing the problems of exceptional children and designing programs suited to the children's individual needs.

Categories of Exceptional Persons The largest group of exceptional persons consists of those who have below average intelligence and below average social and educational attainment. The majority suffer mild handicaps, but they may be afflicted with physical handicaps as well, although multiple handicaps are most common among persons with a severe intelligence handicap. Children who are mildly or moderately handicapped frequently attend special classes, but others study at regular schools. Some severely handicapped children may also attend special schools.

There is a large group of persons who have seemingly normal cognitive ability and physique but have difficulty learning to read, spell, etc. Specific techniques and specialized learning centres have been designed to help alleviate these problems. Learning centres may be run by a school board or private agency. Sometimes they are attached to universities such as the learning centre at McGill University, which was started by Dr S. Rabinovitch. Generally, they provide assessment of learning problems and intensive individualized or small-group (3-5 persons) instruction. Children usually attend 2 or 3 times per week. The centre staff sometimes support and advise the child's regular teacher.

Visual and hearing impairments are less common handicaps. The majority of those so impaired enjoy partial sight or hearing and often attend special classes using technological aids such as opticon and loop induction. An opticon, used by persons with very restricted vision, magnifies the size of print; with the loop system, designed to aid those with auditory difficulties, a wire around the classroom passes amplified signals to hearing aids.

Physical handicaps include problems of the motor system and diseases such as diabetes. Many people with physical or sensory handicaps exhibit average or above average intelligence and many attend regular schools.

Educational Services In many cases the severity of a child's handicap decreases over time through the use of remedial techniques and because of changes in personal or social circumstances. For example, with adulthood different demands are made upon exceptional individuals and there may as well be a change in the perception of what constitutes "normality." Skills learned in school (eg, reading, mathematics) are not necessarily of major importance in certain occupations of the work force. Frequently, intelligence increases substantially during late adolescence and early adult years.

Provincial governments have recently revised curricula for exceptional children. Special education now involves not just remediation of basic school subjects, but emphasizes social education, eg, the development of basic language and self-help skills, and may include vocational preparation and training. Day-to-day skills used in a home (eg, meal preparation, cleaning) and skills used in leisure activities, which include not only skills learned through participation in sports but those involved in choosing and planning leisure activities at home, are also taught as part of special education and are considered very important to adult adjustment. Development of this approach has already begun to change the concept of the sheltered workshop. Although special schools and special classes are provided for exceptional children, these children are integrated, wherever possible, into regular classes and remedial education is provided. Exceptional learners may be integrated with their age group for some subjects but not for others.

Assessment of Exceptional Children Assessment procedures involving diagnostic and attainment tests are used to ascertain if a child is suffering serious difficulties with hearing or visual impairment, with levels of motor attainment, education (reading or math) or cognitive ability. Intelligence tests have been used frequently for administrative purposes and have resulted in the unjustified segregation of children. Tests of social adaptation, to assess levels of social, vocational and home-living skills, have been developed recently. Staff, parents and sometimes the child discuss goals and procedures and progress. Ideally an individual program plan (sometimes called Individual Education Plan) is developed to achieve very specific goals, eg, what the child needs to learn, in what sequence he or she will do so, which techniques of special education will be used to assist the child, who the teacher will be, and where the child will be taught.

The process of "normalization," which is designed to assist a handicapped person to develop as normal a way of life as possible, took root in Canada in the early 1970s. The Canadian Association for the Mentally Retarded played an important part in this development. A requirement for compulsory education in other countries during the mid-1970s led to the development of the individual program plan which is now a required procedure within many Canadian educational institutions. During the early 19th century, some medical facilities were provided for handicapped children, but educational institutions gradually assumed greater responsibility for their welfare. Until the 1970s, handicapped children were isolated in special schools, often run by private agencies; others were sent to institutions or remained at home. With the development of the Individual Education Plan, the labelling has waned, and there has been some recognition that standardized performance tests are of limited help in assessing and developing educational procedures for such children. Denis Stott of Guelph University has played an important role in the development of curriculum material in special education and in the change of concepts in this area. At the provincial level, pioneers in this field include Dr Christine Meikle from Alberta, who began a school and training centre for mentally handicapped children and initiated the internationally recognized Vocational and Rehabilitation Research Institute in Calgary. John Dolan promoted developments in Saskatchewan, notably the Alvin Buckwold Centre.

Professional Education Many universities provide courses in special education; BEd degrees often include majors in special education, and such studies can be pursued at the graduate level. In a number of Canadian universities, student teachers are now required to take a course in special education because all teachers will