Council of Ministers of Education, Canada
Conseil des ministres de l'Éducation (Canada)

Education in Canada

Canada is the second largest country in the world — almost 10 million square kilometres (3.8 million square miles) — with a population density of 3.3 people per square kilometre, one of the lowest in the world, and a per capita GDP in 2003 of C$38,495. A very large portion of the population of 32.1 million live in four major urban centres, as well as within 300 kilometres of the southern border with the United States. One of the major challenges to the provision of quality educational opportunities for all Canadians is meeting the needs of both urban students and those in small, remote communities, as well as those in Aboriginal communities.

Responsibility for Education

Responsibility: In Canada, there is no federal department of education and no integrated national system of education. Within the federal system of shared powers, Canada's Constitution Act of 1867 provides that "[I]n and for each province, the legislature may exclusively make Laws in relation to Education." In the 13 jurisdictions — 10 provinces and three territories — departments or ministries of education are responsible for the organization, delivery, and assessment of education at the elementary and secondary levels within their boundaries. The institutions in the postsecondary system have varying degrees of autonomy from direct provincial government control. In some jurisdictions, separate departments or ministries may be responsible for elementary-secondary education and for postsecondary education and skills training.

Regional Differences: While there are a great many similarities in the provincial and territorial education systems across Canada, there are important differences that reflect the geography, history, culture, and corresponding specialized needs of the populations served. The comprehensive, diversified, and widely accessible nature of the education systems in Canada reflect the societal belief in the importance of education.

Elementary and Secondary Education

Government Role: Public education is provided free to all Canadian citizens and permanent residents until the end of secondary school — normally at age 18. Each province and territory has one or more departments/ministries of education, headed by a minister, an elected member of the legislature appointed to this position by the government leader of the jurisdiction. Deputy ministers, civil service positions, are responsible for the operation of the departments. The ministries and departments provide educational, administrative, and financial management and school support functions,

defining both the educational services to be provided and the policy and legislative framework. Their responsibilities include curriculum development, assessment, teachers' working conditions, funding formula, equity, and technological innovation.

Local Governance: Local governance of education is usually entrusted to school boards, school districts, school divisions, or district education councils. Their members are elected by public ballot. The power delegated to the local authorities is at the discretion of the provincial and territorial governments and generally consists of the operation and administration (including financial) of the group of schools within their board or division, curriculum implementation, responsibility for personnel, enrolment of students, and initiation of proposals for new construction or other major capital expenditures. There are approximately 15,500 schools in Canada — 10,100 elementary, 3,400 secondary, and 2,000 mixed elementary and secondary — with an overall average of 351 students per school. In 2002–03, provinces and territories reported that there were five million students attending public elementary and secondary schools. As Canada is a bilingual (French-English) country, each province and territory (except Quebec) has established French-language school boards to manage and control the network of French-language schools within their jurisdiction. These are French-First-Language schools to serve the French-speaking minority populations. In Quebec, the same structure applies to English-First-Language education.

Funding: Public funding for education comes either directly from the provincial or territorial government or through a mix of provincial transfers and local taxes collected either by the local government or by the boards with taxing powers. Provincial and territorial regulations, revised yearly, provide the grant structure that sets the level of funding for each school board in their jurisdiction, based on factors such as the number of students, special needs, and location. In 2002-03, almost $40 billion was spent on public elementary and secondary education in Canada, breaking down to an expenditure of about $7,950 on a per student basis. Expenditures on public elementary and secondary schools were 13.4 per cent of the total combined expenditures by provincial, territorial and local governments in 2002-03, representing 3.3 per cent of GDP.

Teachers: In 2000-01, Canada's elementary and secondary school systems employed close to 310,000 educators, generally with four or five years of postsecondary study. Educators include predominantly teachers, but also principals, vice-principals, consultants, and counsellors. They are licensed by the provincial and territorial departments or ministries of education. Secondary school teachers are required to have a subject speciality in the courses that they are teaching. Some school boards and districts are encountering shortages of specialized secondary teachers in such areas as technology and mathematics.

Pre-elementary Education: Most provinces and territories provide kindergartens, operated by the local education authorities and offering one year of pre-first-grade, non-compulsory education for five-year-olds. In one province, kindergarten is compulsory; in others, it is available from age four or even earlier. At a pan-Canadian level, 95 per cent of five-year-olds attend pre-elementary or elementary school, and over 40 per cent of

four-year-olds are enrolled in pre-kindergarten, with large variations among the jurisdictions. The intensity of the programs also varies, with full-day and half-day programs, depending on the school board.

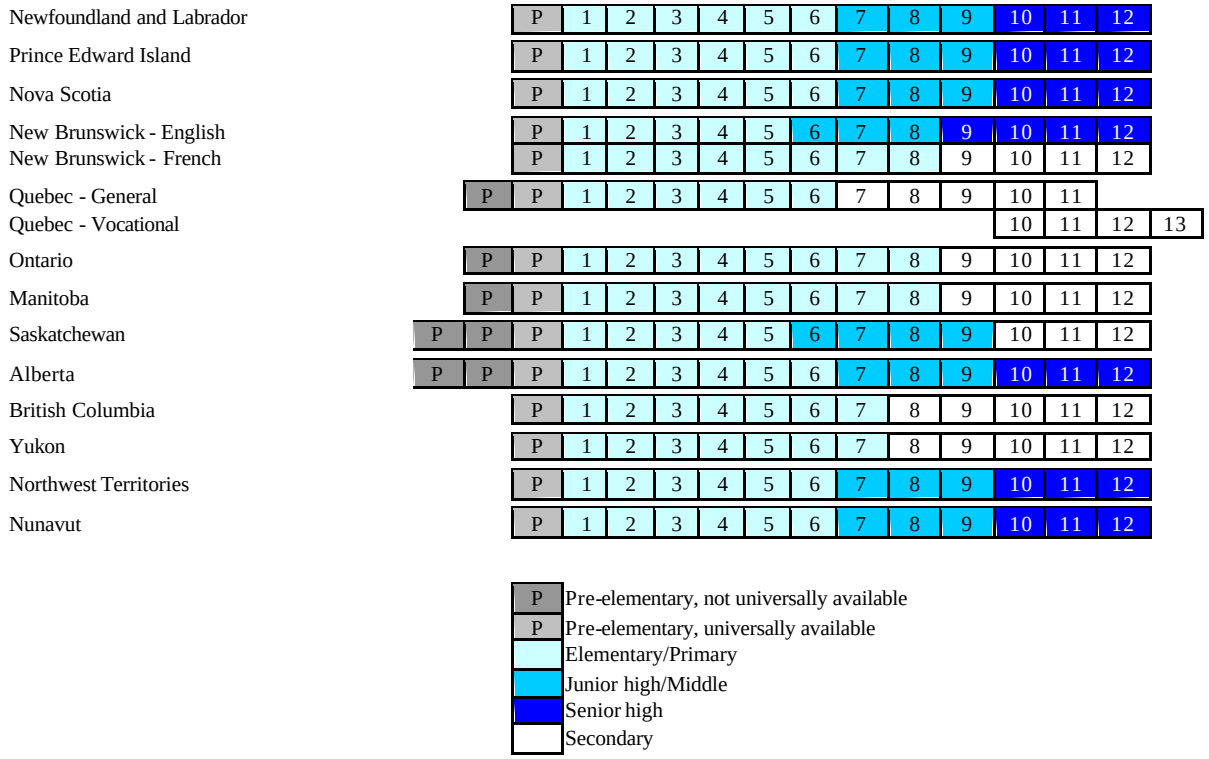
Elementary Education: The ages for compulsory schooling vary from one jurisdiction to another, but most require attendance in school from age 6 to age 16. In some cases, compulsory schooling starts at 5, and in others it extends to age 18 or graduation. In most jurisdictions, elementary schools cover six to eight years of schooling, which can be followed by a middle school or junior high before moving on to secondary school (see Figure 1). The elementary school curriculum emphasizes the basic subjects of language, mathematics, social studies, and introductory arts and science, while some jurisdictions include second-language learning. In many provinces and territories, increased attention is being paid to literacy, especially in the case of boys as test results have shown that they are falling behind girls in language performance. Almost 98 per cent of elementary students move to the secondary level.

Secondary Education: Secondary school covers the final four to six years of compulsory education. In the first years, students take mostly compulsory courses, with some options. The proportion of options increases in the later years so that students may take specialized courses to prepare for the job market or to meet the differing entrance requirements of postsecondary institutions. Secondary school diplomas are awarded to students who complete the requisite number of compulsory and optional courses. In most cases, vocational and academic programs are offered within the same secondary schools, with some shorter non-diploma programs for students interested in specific trades. Enrolment at age 16, the final year of compulsory schooling in many jurisdictions, was above 90 per cent in the 1999–2000 school year. The secondary school completion rate in 2003 was 75.6 per cent, with 81 per cent of girls and 70 per cent of boys graduating. (Because of a change in the structure of senior secondary school in Ontario, a double group of students graduated in 2003 and these graduates are not reflected in the above numbers. Graduates from Ontario generally represent about 37 per cent of all graduates in Canada.) The overall graduation rate has remained relatively stable during the past five years.

Private/Separate Schools: Private, separate, or independent schools provide an alternative to publicly funded schools in many provinces or territories; however, they are required to meet the general standards prescribed by the ministry or department of education. They usually charge tuition fees and have a great variety of options based on interest, religion, language, or academic status. While the public system is coeducational, several of the private schools offer education for boys or girls only. In most cases, these schools receive partial funding from the province or territory.

Figure 1: Organization and Structure of Elementary and Secondary Schools

Levels within elementary-secondary schools, by jurisdiction



Source: Statistics Canada and Council of Ministers of Education, Canada. Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003 (Toronto, Ontario: Canadian Education Statistics Council, 2003), 172.

Postsecondary Education

Range of Institutions: Postsecondary education is available in both government-supported and private institutions, which offer degrees, diplomas, certificates, and attestations depending on the nature of the institution and the length of the program. Universities and university colleges focus on degree programs but also offer diplomas and certificates, often in professional designations. The non-degree-granting institutions, such as colleges, community colleges, and technical and vocational institutions, offer diplomas, certificates, and, in some cases, two years of academic credit that can be transferred to the university level. Les collèges d'enseignement général et professionnel (cégeps) in Quebec offer a choice of two-year academic programs that are prerequisite for university study or three-year vocational and professional programs that prepare students for the labour market. All "recognized" postsecondary institutions in Canada

have been given the authority to grant academic credentials by their provincial or territorial government through charters or legislation that ensure mechanisms for institutional and program quality. Distance education, providing extensive on-line, media, and print-based programs, is available from traditional institutions, dedicated distance universities, and college networks.

Governance: Universities are largely autonomous; they set their own admissions standards and degree requirements and have considerable flexibility in the management of their financial affairs and program offerings. Government intervention is generally limited to finances, fee structures, and the introduction of new programs. In the case of colleges, government involvement can extend to admissions policies, program approval, curricula, institutional planning, and working conditions. Most colleges have boards of governors appointed by the provincial or territorial government, with representation from the public, students, and instructors. Program planning incorporates input from business, industry, and labour representatives on college advisory committees.

Funding: Revenue for Canada's universities and colleges in 2004-05 was $27.7 billion. Federal, provincial and municipal government funding, including funding for research, accounted for 55.6 per cent of the revenue, although this ranged from 43.6 per cent in Nova Scotia to 70.5 per cent in Quebec. Student fees accounted for over 20 per cent of the total, with bequests, donations, nongovernmental grants, and sales of products and services bringing in another 24.2 per cent. University and college expenditures in 2004-05 were more than $27.9 billion. Canada has 157 public universities and degree-granting institutions and over 175 recognized public colleges and institutions. Tuition costs at universities averaged $4,172 in 2004-05, with international student fees for an undergraduate program averaging about $12,000 annually. At colleges (outside Quebec), the average tuition was $2,133. (Quebec residents do not pay college tuition.) Education is also funded through the money that governments transfer to individual students through loans, grants, and education tax credits. In 2003, federal and provincial government spending on all forms of student assistance was about $4.4 billion.

Attendance and Graduation: In 2004-05, there were 785,000 full-time university students (an increase of nearly 130,000 in the last three years), as well as 270,000 part time students. In 2004, Canadian universities awarded an estimated 135,000 bachelor's degrees, 26,000 master's degrees, and 4,000 doctoral degrees. Over 736,000 full- and part-time students were enrolled in colleges in 2003. Participation in postsecondary education has grown significantly in the past few years, whether measured by numbers of enrolments or by the proportion of the population in any given age group who are attending college or university. Women continue to be the majority on both university and college campuses.

University Activities: Degree-granting institutions in Canada focus on teaching and research. In 2004-05, Canadian universities performed $9.3 billion worth of research and development, 35 per cent of the national total. Teaching is the other key function, whether at the small liberal arts colleges, which grant only undergraduate degrees, or at the large, comprehensive institutions. Registration varies from about 2,000 students at

some institutions to a full-time enrolment of almost 60,000 at the University of Toronto, Canada's largest university. There are more than 10,000 undergraduate and graduate degree programs offered in Canadian universities, as well as professional degree programs and certificates. Most institutions provide instruction in either English or French; others offer instruction in both official languages. In 2003-04, Canadian universities employed 37,000 full-time faculty members.

University Degrees: University degrees are offered at three consecutive levels. Students enter at the bachelor's level after having successfully completed secondary school or the two-year cégep program in Quebec. Most universities also have special entrance requirements and paths for mature students. Bachelor's degrees normally require three or four years of full-time study, depending on the province and whether the program is general or specialized. An honours bachelor's degree involves an additional year of study. A master's degree typically requires two years of study after the bachelor's or honours degree. For a doctoral degree, three to five years of additional study and research and a dissertation are the normal requirements. In regulated professions, such as medicine, law, education, and social work, an internship is generally required in order to obtain a licence to practice. University colleges provide three- and four-year bachelor's degrees.

College Activities: At the college level, the focus is on teaching, but applied research is taking on greater importance. Public colleges, specialized institutes, community colleges, institutes of technology, and cégeps offer a range of vocationally-oriented programs in a wide variety of professional and technical fields, which may include business, health, applied arts, technology, and social services. These programs range from six months to three years in duration, with some institutes offering postgraduate diplomas as well. Some of the institutions are specialized and provide training in a single field such as fisheries, arts, paramedical technology, and agriculture. Colleges also provide the majority of the literacy and academic upgrading programs, pre-employment and pre-apprenticeship programs, and the in-class portions of registered apprenticeship programs. As well, a wide variety of workshops, short programs, and upgrades for skilled workers and professionals are made available.

College Recognition and Cooperation: Diplomas are generally awarded for successful completion of two- and three-year college programs, while certificate programs usually take up to one year. In Quebec, attestations d'études collégiales (AEC) are awarded as the equivalent to certificates. University degrees and applied degrees are offered in some colleges and institutes and others provide university transfer programs. Colleges work very closely with business, industry, labour, and the public service sectors to provide professional development services and specialized programs and, on a wider basis, with their communities to design programs reflecting local needs. Most colleges in Canada also recognize Prior Learning Assessment and Recognition (PLAR) in at least some of their programs, some universities also recognize it, and a growing number of provinces offer PLAR to adults at the secondary school level. PLAR is a process that helps adults demonstrate and gain recognition for learning they acquire outside of formal education settings.

Adult Education

Participation: One out of every three adult workers, 35 per cent, participated in some type of formal, job-related training in 2002, accessing opportunities to continue learning and to upgrade their skills. The participants received an average of 150 hours of training. Twenty-five per cent of adult workers reported taking employer-supported training programs, support which might include payment for training, flexible hours, or transportation to training. Participants are more likely to be in management and professional than in blue collar or clerical occupations, with utilities, educational services, and public administration as the industries with the highest rates of participation. Those with higher levels of literacy and education are also more likely to participate in adult education. Self-directed learning, in which workers learn on their own through observation, study, and learning from other workers, was almost as common as formal training. When asked by researchers, 33 per cent of working adults stated that they had engaged in some sort of self-directed, informal learning related to their jobs during the preceding four-week period.

Providers: Colleges are the primary vehicle for adult education and training for the labour force; universities supply a smaller portion. Community-based groups, largely funded by the provincial, territorial, or federal governments, address special needs such as literacy and serve groups such as the rural poor, the Aboriginal communities, immigrants, displaced workers, and those with low levels of literacy or education. Apprenticeship is an industry-based learning system that combines on-the-job experience with technical training and leads to certification in a skilled trade. Provincial and territorial governments are responsible for apprenticeship training, and much of the classroom learning is done in the college system. Apprenticeship in Canada is largely an adult program. Registration in apprenticeship training programs reached almost 235,000 in 2002, an increase of 40.8 per cent from 1996. Gains occurred in every major trade group, especially the building construction trades.

Activities of the Canadian Government

The Federal Contribution: The federal government of Canada plays an indirect role in education. A portion of the federal transfer payments made each year to the provinces and territories is nominally for education. It provides financial support for postsecondary education and the teaching of the two official languages. In addition, the federal government is responsible for the education of Aboriginal peoples on reserves, armed forces and coast guard personnel, and inmates of federal correctional facilities.

Aboriginal Education: The federal government is responsible for the education of Registered Indian children living on reserves, through First-Nations operated, provincial or federal schools. Funding is also provided for postsecondary assistance and programs for Registered Indian students. The three northern territories, Yukon, Nunavut, and Northwest Territories, provide education services for their Registered Indian and/or Inuit populations. First Nation children living off reserves are educated in the public

elementary and secondary schools in their cities, towns, and communities, with the provinces and the territories providing the majority of educational services for Aboriginal students.

Postsecondary Education: In addition to providing revenue for universities and colleges through transfer payments, the federal government offers direct student support. Every year, the Canada Student Loans Program and related provincial and territorial programs provide loans and interest forgiveness to over 350,000 postsecondary students. The Canada Millennium Scholarship Foundation awards $285 million in bursaries and scholarships each year to some 100,000 students throughout Canada, and the Canada Education Savings Grant program supplements savings for postsecondary education. These programs are designed to make postsecondary education more widely accessible and to reduce student debt.

Language Education: Reflecting its history and culture, Canada adopted the Official Languages Act, which established both French and English as the official languages of Canada and provided for the support of English and French minority populations. According to the 2001 Census, 67 per cent of the population speak English only, 13 per cent speak French only, and 18 per cent speak French and English. The French-speaking population is concentrated in Quebec, while each of the other provinces and territories has a French-speaking minority population; Quebec has an English-speaking minority population. The federal government's official-language policy and funding programs include making contributions to two education-related components — minority-language education and second-language education. Through the Official Languages in Education Program, the federal government transfers funding for these activities to the provinces and territories based on bilateral and general agreements that respect areas of responsibility and the unique needs of each jurisdiction. The bilateral agreements related to these contributions are negotiated under a protocol worked out through the Council of Ministers of Education, Canada (CMEC). Two national, federally funded programs, coordinated by CMEC, provide youth with opportunities for exchange and summer study to enhance their second-language skills.

Council of Ministers of Education, Canada

Role of CMEC: The Council of Ministers of Education, Canada (CMEC) was formed in 1967 by the provincial and territorial ministers responsible for education to provide a forum in which they could discuss matters of mutual interest, undertake educational initiatives cooperatively, and represent the interests of the provinces and territories with national educational organizations, the federal government, foreign governments, and international organizations. CMEC is the national voice for education in Canada and, through CMEC, the provinces and territories work collectively on common objectives in a broad range of activities at the elementary, secondary, and postsecondary levels.

Priorities

Ministerial Priorities: At recent meetings of the Council of Ministers of Education, Canada, the provincial and territorial ministers of education defined their three key priorities for the coming years: Aboriginal education, literacy, and postsecondary capacity. Action plans for joint activity that may include the involvement of the federal government and other stakeholders, as appropriate, were also outlined.

In addition to setting these priorities, the provinces and territories agreed on other policy and research directions that will help them reach their goal of building the best education systems in the world in which every learner succeeds. Students with special needs, healthy schools, technology and e-learning, teacher training, learning outcomes, and transitions will continue to receive priority attention in each jurisdiction as well as on a pan-Canadian basis.

Aboriginal Education: In the 2001 Census, almost one million people identified themselves as Aboriginal persons, that is Native American Indian, Métis, or Inuit, representing 3.3 per cent of the population. Of great consequence to the education system, one third of the Aboriginal population are children aged 14 and under. However, Aboriginal rates of secondary school completion and of transition to and graduation from postsecondary education remain well below the national average.

All provinces and territories have been implementing changes that focus on the inclusion of Aboriginal communities and parents in educational planning and the revision of curriculum and teaching practices. Their goal is to ensure that all aspects of education are more relevant to Aboriginal learners and reflect Aboriginal history, culture, and traditions for the benefit of all students. Transition and student support services, culturally relevant resources, recruitment and training of Aboriginal teachers, specialized institutions at the elementary, secondary, and postsecondary levels, and flexible methods of teaching, learning, and assessment are examples of the initiatives to improve the educational achievement of Aboriginal students.

Progress is being made. For example, in recent years there have been increases in the number of young Aboriginal people in non-reserve areas completing secondary school, and higher numbers of Aboriginal people aged 25 to 34 have graduated from postsecondary education. More Aboriginal children living in non-reserve areas are attending preschool programs, while the proportion attending preschool programs designed specifically for them has increased four-fold in five years.

As outlined in their new action plan, the ministries and departments of education in the provinces and territories will work in collaboration with local Aboriginal representatives, education stakeholders, and the federal government to identify and share best practices in Aboriginal education, including teacher training and recruitment, and to establish and/or share education indicators specific to Aboriginal student outcomes. This information will then be used to identify further actions to improve results achieved by Aboriginal learners.

Literacy: As literacy is crucial to individuals, both in their careers and in their quality of life, it is an issue of major concern in Canadian education. Canadian results on the OECD's Programme for International Student Assessment (PISA), administered to 15-year-olds in 2003, were among the highest in the world in the literacy domains of reading, science, problem solving, and mathematics. PISA also revealed that Canada has one of the highest levels of equity in achievement. However, PISA also showed that there are differing literacy levels across the country that can be attributed, in part, to socio-economic status, gender, and ethnicity.

A recent international survey, The Adult Literacy and Life Skills Survey, revealed that 58 per cent of adults aged 16 to 65 possess literacy skills that indicate they could meet most everyday reading requirements. This leaves a significant number of adults with low-level literacy skills, which can impact their participation in society and in the economy.

Funding, programs, and resources continue to be increased in all the provinces and territories to benefit school-aged and adult learners achieve higher levels of literacy, including such activities as:

- Increased access to books and resources in the classrooms;
- More professional development opportunities to prepare teachers to respond to literacy needs;
- Expansion of successful programs to more classrooms and schools;
- Extension of full-day kindergarten and enhanced programs to help parents prepare their children to be more ready to learn when they start school;
- Increased funding for cost-shared programs for adult literacy;
- More grants for community based programs in literacy for youth and adults;
- Awareness and motivation programs involving community role models aimed at increasing young boys' reading;
- Increased funding for coordinated action involving government, school districts and boards, and communities;
- More support for family literacy programs;
- More emphasis on the development of reading materials that reflect the culture and stories of the learners.

The ministerial action plan calls for two forums to be held in the near future, the first on school-age literacy and the second on adult literacy. Their purpose will be to help identify concrete initiatives to increase literacy significantly among children, youth, and adults.

Postsecondary Capacity and Access: Over the next ten years, Canadian universities are expecting an additional 200,000 students in a system that currently accommodates over 785,000. With demand for seats still rising, more pressure is being felt to upgrade and construct facilities, to attract and retain faculty and staff, and to alleviate the other problems related to chronic underfunding. For example, one challenge in the decade ahead is the replacement of up to 20,000 university faculty, mostly due to retirement, and the hiring of 10,000 new faculty to address the growing enrolment.

Other aspects of postsecondary capacity that are of particular concern are the accelerating need for and costs of research materials, laboratory equipment, and information and communications technology; the implications of long-deferred building maintenance; institutional capacity to absorb the multiple indirect costs of research; the impact of demographic changes on regional institutions; the need for more graduate students in specific fields and to meet institutional needs for future faculty; and the maintenance of quality of their educational offerings and their research in the face of the increasing numbers of students linked with societal, business, and industrial demand for well-educated graduates.

One particular area of concern for postsecondary access is student debt load and its impact on who attends postsecondary institutions. About one-half of college graduates and university graduates with bachelor's degrees from the class of 2000 left school owing money for their education, mostly in the form of government student loans. Student assistance programs from the federal, provincial, and territorial governments are undergoing considerable expansion to provide wider access to postsecondary education, by encouraging graduation through debt and interest reduction or forgiveness, increasing grants, bursaries and scholarships, and developing funding solutions that respond to the changing needs of a diverse range of students. Some jurisdictions have also brought in tuition freezes.

As a first step to in the collective action, the state of postsecondary systems will be surveyed to prepare a list of issues facing the provinces and territories. From this a position paper and strategy will be outlined, that includes the involvement of the federal government. As the new Council of the Federation brings together the premiers of the provinces and territories to promote collaborative relations among governments, this Council is expected to address issues related to postsecondary education.

Students with Special Needs: The principle that guides education of special needs students in Canada is inclusion in the regular classrooms to the greatest extent possible. Education for students with special needs, whether in regular or separate classrooms or facilities, operates on the belief that every child can learn and deserves the opportunity to achieve to the furthest extent of his/her abilities. The inclusion of special needs students n mainstream classrooms places increased demand on the teachers and the school boards. To respond, each jurisdiction has developed detailed policies and procedures, customized resources and supports, set up collaborative efforts with education, health, and social service authorities, enhanced staffing levels, and provided specialized teacher training. The challenge is that the provision of supports is not always adequate to the complexity and scope of the needs.

Healthy Schools: The physical and emotional health of students, in conjunction with safe and caring schools with healthy social and physical environments, are significant contributors to academic success. Schools promote healthy living in terms of nutrition, physical activity, injury prevention, the integration of health-related content into the curriculum, and smoking cessation and healthier lifestyles programs. Safety

interventions include safety audits, entrance cameras, bullying prevention programs, and initiatives such as Effective Behaviour Support to provide training and support so that school communities can effectively work with all students, including those with challenging behaviours. In areas of vulnerability, schools are being tested and reinforced against possible natural disasters. The ministries of education are taking advantage of the reality that the school setting provides a unique opportunity to significantly influence the multiple domains of student health in and outside the classroom. Collaboration is key as teachers, school administrators, parents, and students work with local health and safety authorities, governments, community groups, and researchers.

Technology and E-learning: Information and communications technologies (ICT) are seen as essential in education, and investments have reflected this. Computers are used for educational purposes in over 99 per cent of Canadian elementary and secondary schools, with an average of 72 computers per school. The median number of students per computer in a school is five. As of the 2003–04 school year, virtually all elementary and secondary schools were connected to the Internet, and these computers were available for student use. Students also had access to word-processing software, educatio nal and drill and practice programs, spreadsheet and database programs, and presentation software on a very wide basis. The enhanced incorporation of ICT into curriculum, teacher training on curriculum and learning management applications, and funding for technology maintenance and upgrades are issues that demand continued attention. Technology in postsecondary education is also being extended to provide institutional information, registration and financial aid services, direct delivery of programs and courses, career counselling and job opportunities, library and research resources, as well as advanced networks for educators and researchers.

Teacher Training: Much is being asked of teachers as socially-inclusive and competency-based education has evolved to respond to new social and economic pressures. Teaching, curriculum, and assessment practices have become more demanding and more flexible at the same time. While responding to differing needs and capacities in the classrooms, teachers must also incorporate curriculum that integrates important societal messages as well as ensure that competencies are developed beyond the mastery of the subject matter. Teachers are, to a great degree, willing to accept and excel at their expanded roles, but also express an enhanced need for support, training, and resources.

Pre-service training of teachers is largely undertaken by the universities. Re-design of the programs is collaborative, involving institutions, the government, the education professionals and, usually, public input. Professional development for practicing teachers is shared among the departments/ministries of education, the school boards, the universities, the teachers' associations, and non-governmental organizations with particular expertise. As well as training, ministries and departments of education are also concerned with the recruitment and retention of teachers especially in rural settings and specific subject areas.

Learning Outcomes: The education systems in Canada participate in a number of international studies measuring student achievement, and these are complemented by specific pan-Canadian, provincial, and territorial assessment programs and benchmarks. In addition, longitudinal studies are in place to help policy makers determine appropriate interventions for students, with specific expectations and achievement measures being used as progress indicators.

With about 30 per cent of secondary students at risk of not graduating, governments are focused on keeping students in school and providing them with tools for successful completion. More secondary school teachers, special supports for struggling students including specialists and language and maths mentors, enhanced trades training and cooperative opportunities, increased funding for schools in areas of socio-economic need, special programs and resources for returning drop-outs, and curriculum changes that reflect individual directions and accomplishments are some of the tools aimed at students success.

Parallel with this focus on student outcomes are the public accountability tools and reports that provide the students, parents, and the public with information on the performance of schools and school boards on such factors as rates of graduation and transition from grade to grade and to postsecondary education. This public accountability for achievement and learning outcomes reflects the reality that education is a public trust and that everyone is a stakeholder in the system.

Transitions: Currently, governments are paying particular attention to the transition from secondary school to the work force or to postsecondary education. With the work force in need of skilled workers and students looking for careers, numerous programs have been designed to facilitate this transition. Many of these involve placing the students in the workplace for extended periods of time, giving them the opportunity to learn employment skills, trade skills, leadership, and self-confidence, while earning both secondary school and technical training credits. This may also be combined with career and education counselling so that the students are encouraged and guided in their choices. Apprenticeship and technical and vocational training programs and facilities are being revised and upgraded to reflect industry trends and specific course are being offered in communities with defined needs for skilled workers. Enhanced funding for transition programs involving students-at-risk, Aboriginal students, youth in remote communities, and other traditionally disadvantaged groups has led to innovation, increased participation, retention, and success.

Web sites also provide comprehensive information on skills training, job requirements, and opportunities for students, institutions, and employers. Web sites and credit transfer programs are in place to support the transition to postsecondary education as well as the transfer of credits from one institution to another within jurisdictions. Additional attention is needed on transferability and transitions between jurisdictions at the postsecondary level.

Sources

Web sites consulted

Association of Universities and Colleges of Canada (AUCC)
http://www.aucc.ca/

Canadian Information Centre for International Credentials (CICIC)
http://www.cicic.ca/

Council of Ministers of Education, Canada, which includes links to the Web sites of the provincial and territorial ministries and departments responsible for education.
http://www.cmec.ca/

Statistics Canada
http://www.statcan.ca/

Publications

Council of Ministers of Education, Canada. (2004). *Access, Inclusion and Achievement: Closing the Gap. Country Report: Canada.* Prepared for the Fifteenth Conference of Commonwealth Ministers, Edinburgh, October 27–30, 2003. Available on the Web at http://www.cmec.ca/international/commonwealth/15CCEM.countryreport.en.pdf

Council of Ministers of Education, Canada. (2004). *Quality Education for All Young People: Challenges, Trends, and Priorities. Report of Canada*. Prepared for the Forty-Seventh Session of the International Conference on Education, Geneva, September 8–11, 2004. Available on the Web at http://www.cmec.ca/international/

Statistics Canada and Council of Ministers of Education, Canada. (2003) *Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003.* Toronto, Ontario: Canadian Education Statistics Council.
Available on the Web at http://www.cmec.ca/stats/indexe.stm

Statistics Canada, Human Resources and Skills Development Canada and Council of Minister of Education, Canada (2004). *Measuring Up: Canadian Results of the OECD PISA Study. The Performance of Canada's Youth in Mathematics, Reading, Science and Problem Solving: 2003. First Findings for Canadians aged 15.* Available on the Web at http://www.cmec.ca/pisa/2003/indexe.stm

Statistics Canada. (2004). *Summary public school indicators for the provinces and territories, 1996–1997 to 2002–2003*. Ottawa, Ontario: Statistics Canada. Available on the Web at http://www.statcan.ca/english/research/81-595-MIE/81-595-MIE2004022.pdf

July 2005