

Statistics Canada

Tuesday, October 12, 1999

For release at 8:30 a.m.

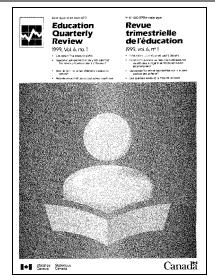
MAJOR RELEASES

Computer technology in schools, 1999

3

Most Canadian schools are connected to the Internet for educational purposes, according to a new survey on computer technology in the classrooms. The survey showed that while major strides were taken in introducing computers to schools and in connecting them to the Internet, education systems face significant challenges as they move towards taking fuller advantage of the new information age.

(continued on following page)



Statistics

Canada

Statistique

Canada

Education quarterly review

October 1999

Education quarterly review, Statistics Canada's flagship publication for education statistics, analyzes and reports on current issues and trends in education. The October 1999 issue, available today, includes a report from the president of UNESCO's International Commission on Education for the 21st Century. The report, delivered at the third National Forum on Education, covers the commission's recommendations for the future of education.

In addition, this issue contains three analytical papers using data from the National Longitudinal Survey of Children and Youth to examine the impact of family, school and neighbourhood characteristics on a child's academic success.

The October 1999 issue of *Education quarterly review* (81-003-XPB, \$21/\$68, 81-003-XIB, \$16/\$51) is now available. See *How to order publications*.

For more information, contact Jim Seidle (613-951-1500; seidjim@statcan.ca), Culture, Tourism and Centre for Education Statistics.





The Daily, October 12, 1999

OTHER RELEASES	
New Housing Price Index, August 1999 Residential Telephone Service Survey, August 1999 New Brunswick wages and salaries, 1999	6 6 7
PUBLICATIONS RELEASED	8

MAJOR RELEASES

Computer technology in schools

The majority of Canadian schools are connected to the Internet for educational purposes, according to a new survey on computer technology in the classrooms. The survey showed that despite major strides taken in introducing computers to schools and connecting them to the Internet, education systems face significant challenges as they move towards taking fuller advantage of the new information age.

At the time of this survey, in January and February 1999, more than 9 out of every 10 students at the elementary, intermediate and secondary levels in Canada attended schools that had access to the Internet for educational purposes.

However, principals and school informatics technicians reported a number of obstacles to fuller use of computer technology in the classroom, the biggest of which were a lack of computers and lack of training opportunities for teachers.

Principals of schools representing about two-thirds of students cited a need for more computers as well as more time for teachers to prepare courses that require the use of computers and to explore ways to use the Internet. In addition, these principals said teachers needed more training opportunities to upgrade their computer knowledge and skills. Informatics technicians reported too few computers, too few copies of software as well as a lack of technical support to maintain the computers or to solve minor problems.

Nevertheless, schools indicated they have made major strides in bringing their students on-line. On average, during the last school year, there were seven students per computer in secondary schools. About 4 in every 10 students at the elementary, intermediate and secondary levels had used e-mail by the end of the school year. In addition, 73% of students attended an intermediate or a high school that had its own site on the World Wide Web.

Internet use expanding in Canadian schools

At the time of this survey, in January and February 1999, only 12% of elementary students attended a school without Internet access for instructional purposes, while less than 3% of students attended intermediate and secondary schools without Internet access.

Note to readers

Data for this release were drawn from the Second International Technology in Education Study (SITES) conducted in January and February 1999 in 30 nations, including Canada. This survey was designed to profile the use of new information and communication technology in elementary and secondary schools.

In Canada, the survey was conducted by Statistics Canada under the auspices of the International Association for the Evaluation of Educational Achievement and a number of other partners, including the provincial and territorial ministries of education, the Council of Ministers of Education, Canada, Industry Canada, and Human Resources Development Canada. This report presents only Canadian results. A comparison of Canada's standing with that of other nations will be released in mid-October.

The Canadian survey was a random sample covering 4,000 schools, each of which received two questionnaires, one completed by the principal and the second by an individual responsible for technology in the school. Both questionnaires included questions on the school, the use of communications technology, training and professional development of teachers, obstacles to the use of technology at the school and specific requirements.

Data are available by province, for schools with three specific grades representing the majority of elementary/ secondary schools in Canada: schools with Grade 5 (most elementary schools), schools with Grade 9 or Secondary III (most intermediate and junior high schools) and schools with the last year of secondary (most high schools).

In some provinces, Prince Edward Island and New Brunswick for example, all schools were connected to the Internet at the time of the survey.

About one-third of elementary and intermediate students, and half of all secondary students, had used e-mail. In addition, 76% of elementary students, 80% of intermediate and 87% of secondary students had made use of external databases to find and extract information.

Overall, just over one-third of all students had disseminated information via the Internet and about 30% had designed or maintained a Web site.

Use of the Internet varied widely from province to province. For example, about 65% of students in Prince Edward Island had used e-mail during the last school year compared with 31% of those in New Brunswick. Students in Prince Edward Island were also in the forefront in developing Web sites. About 46% had been involved in maintaining a Web site during the last school year compared with 16% in Saskatchewan.

In general, computers were more available to students in higher grades. At the time of the survey,

there was one computer for every seven students at the secondary level, compared with one for every eight intermediate students and one for every nine elementary students.

Pupil-computer ratio

	Elementary	Intermediate	Secondary
Canada	9	8	7
Newfoundland	10	11	8
Prince Edward Island	14	9	6
Nova Scotia	15	11	9
New Brunswick	10	9	8
Quebec	11	11	9
Ontario	9	6	6
Manitoba	8	6	5
Saskatchewan	10	8	8
Alberta	7	6	7
British Columbia	8	8	8

Mathematics most likely to be taught using instructional software

Mathematics was the subject most likely to be taught in all three levels of schools using instructional software, according to the survey.

About 87% of elementary pupils attended a school that used software to teach math, compared with about 64% of students who used software for geography and 56% who used it for primary language instruction.

At the intermediate level, 76% of students attended a school that used software to teach math, compared with 57% for geography and 53% for informatics. At the secondary level, 79% of students attended a school that used software to teach math, 64% for geography and 75% for informatics.

Most elementary pupils had access to software for word processing, encyclopedias (on CD-ROM), spreadsheet packages, databases and Internet browsers. Additionally, intermediate and secondary students had widespread access to software for graphics, presentation and programming.

Training opportunities and types of training taken vary considerably among teachers

Only about 30% of students at all three levels attended a school where it was mandatory for all teachers to take at least a basic computer-training course. Similarly, only 22% of students attended a school where it was mandatory for all teachers to take courses on a regular basis to keep up to date with new technological knowledge and skills.

On the other hand, about 79% of the students were in a school where a large number of teachers had taken at least some basic computer courses. The course most frequently provided for school teachers was an introductory applications course (standard tools).

A publication with more details on Information and Communication Technologies in the field of education will be released early in 2000. This publication will include a comprehensive series of statistical tables resulting from SITES.

For tables or general inquiries, contact Daniel Perrier (613-951-1503; fax: 613-951-9040; perrdan@statcan.ca). For more information, or to enquire about the concepts, methods or data quality of this release, contact Raynald Lortie (613-951-1525; lortray@statcan.ca) or Nanci Comtois (613-951-1740; comtnan@statcan.ca), Centre for Education Statistics.

Use of new information and communication technology in schools

	Use of e-mail	Using information from external databases	Designing and maintaining Web sites	Disseminating information via the Internet	Discussing and exploring ideas by video conferencing
			%		
Canada	40	81	30	35	7
Newfoundland	52	81	44	45	9
Prince Edward Island	65	83	46	41	2
Nova Scotia	53	79	33	38	8
New Brunswick	31	86	21	29	5
Quebec	44	80	30	40	7
Ontario	34	83	32	31	6
Manitoba	50	81	32	38	15
Saskatchewan	46	82	16	33	3
Alberta	41	81	25	42	7
British Columbia	39	75	30	26	6

_

OTHER RELEASES

New Housing Price Index

August 1999

The New Housing Price Index increased 0.9% in August compared with the same period a year earlier. On a monthly basis, this index of contractors' selling prices for new houses rose 0.3%.

As was the case in July, the highest annual changes were noted in Calgary (+3.9%), Halifax (+3.9%) and Regina (+3.6%) as builders passed on higher construction prices, such as those for lumber, to new home buyers. Significant increases were also recorded in Ottawa-Hull, St. Catharines-Niagara and Charlottetown. In British Columbia, where the new housing market continues to be very competitive, Victoria and Vancouver registered significant decreases on an annual basis. A moderate decrease was also noted in Sudbury-Thunder Bay (-1.0%).

On a monthly basis, the most significant increase was in St. Catharines-Niagara (+1.7%) — the result of higher prices for building materials and labour. In both Winnipeg and Hamilton, where higher prices for lumber and drywall were noted, the index rose 1.1% compared with July. Consumer confidence was particularly good in Hamilton. Decreases were registered in three cities, with the largest decline in Victoria (-0.8%). Four cities showed no change from July to August.

Note: The total New Housing Price Index for August has fallen below the level of its two components, the House-only Index and the Land-only Index. This situation has occurred in several previous months because the component index series is derived and linked independently. Linking, in particular, creates total indexes that are not, in a strict sense, averages of their sub-indexes.

New housing price indexes (1992=100)

	Aug. 1999	Aug. 1998 to Aug. 1999	July to August 1999
		% chan	ge
Canada total	101.1	0.9	0.3
House only	102.1	1.5	0.4
Land only	102.0	=	-
St.John's	97.1	1.1	0.8
Halifax	112.4	3.9	0.6
Charlottetown	104.1	2.8	-
Saint John-Moncton-			
Fredericton	93.9	0.8	0.2
Quebec City	100.5	1.6	-
Montréal	105.0	2.6	0.6
Ottawa-Hull	101.4	3.3	1.0
Toronto	103.6	1.4	0.1
Hamilton	103.6	1.4	1.1
St. Catharines-Niagara	103.2	3.1	1.7
Kitchener-Waterloo	102.6	2.0	0.3
London	98.6	0.9	0.3
Windsor	105.6	0.4	-
Sudbury-Thunder Bay	99.3	-1.0	-0.1
Winnipeg	114.6	2.0	1.1
Regina	129.2	3.6	0.6
Saskatoon	114.2	1.5	-
Calgary	129.5	3.9	0.3
Edmonton	110.4	2.3	0.7
Vancouver	84.0	-3.9	-0.2

Nil or zero.

Victoria

Available on CANSIM: matrix 9921.

The third quarter 1999 issue of *Construction price* statistics (62-007-XPB,\$24/\$79) will be available in December. See *How to order publications*.

75.2

-4.1

-0.8

For more information, or to enquire about the concepts, methods or data quality of this release, contact Louise Chaîné (613-951-3350; fax: 613-951-1539; *infounit@statcan.ca*), Client Services Unit, Prices Division.

Residential Telephone Service Survey August 1999

A micro-data file from the Residential Telephone Service Survey for August is now available. Information in this file (56M0001XDB) refers to telephone service penetration rates in the 10 provinces.

For more information about the current survey results and related products and services, or to enquire about the concepts, methods or data quality for this release, contact Client Services (613-951-7355 or 1 888 297-7355; fax: 613-951-3012; ssd@statcan.ca), Special Surveys Division.

New Brunswick wages and salaries 1999

Data from the New Brunswick Wage and Salary Survey for 1999, which was sponsored by Human Resources Development Canada, the New Brunswick Department of Labour and the New Brunswick Labour Force Development Board, are now available. The information covers wages paid to workers in specific occupations and future skills demands.

For more information, or to enquire about the concepts, methods and quality for this release, contact Tony LaBillois (613-951-1478; tony.labillois@statcan.ca), Small Business and Special Surveys Division.

PUBLICATIONS RELEASED

Education quarterly review, Vol. 6, no. 1 Catalogue number 81-003-XIB

(Canada: \$16/\$51).

Education quarterly review, Vol. 6, no. 1 Catalogue number 81-003-XPB

(Canada: \$21/\$68; outside Canada: US\$21/US\$68).

All prices exclude sales tax.

Catalogue numbers with an -XIB or an -XIE extension are Internet versions; those with -XMB or -XME are microfiche; and -XPB or -XPE denote a paper version.

How to order publications

Simplify your data search with the Statistics Canada Catalogue (11-204-XPE, \$16; outside Canada: US\$16).

Its keyword index will guide you to statistics on Canada's social and economic activity.

Order publications by phone:

Please refer to the • Title • Catalogue number • Volume number • Issue number • Your VISA or MasterCard number.

In Canada and the United States call:

From other countries call:

To fax your order:

Address changes or account inquiries:

1-800-267-6677
1-613-951-7277
1-877-287-4369
1-800-700-1033

To order a publication by mail write: Statistics Canada, Circulation Management, Operations and Integration Division, Ottawa, K1A 0T6. Include a cheque or money order payable to **Receiver General of Canada/Publications**. Canadian customers add 7% GST and applicable PST.

To order by Internet: write to *order@statcan.ca* or download an electronic version by accessing Statistics Canada's Web site (www.statcan.ca), under the headings Products and services, Downloadable publications.

Authorized agents and bookstores also carry Statistics Canada's catalogued publications.



Statistics Canada's official release bulletin

Catalogue 11-001E.

Published each working day by the Communications Division, Statistics Canada, 10-H, R.H. Coats Bldg., Tunney's Pasture, Ottawa, Ontario K1A 0T6.

To access *The Daily* on the Internet, visit our site at http://www.statcan.ca. To receive *The Daily* each morning by E-mail, send an E-mail message to listproc@statcan.ca. Leave the subject line blank. In the body of the message, type "subscribe daily firstname lastname".

Editor: Dan Smythe (613-951-1103, smytdan@statcan.ca)

Head of Official Release: Chantal Prévost (613-951-1088), prevcha@statcan.ca

Published by authority of the Minister responsible for Statistics Canada. © Minister of Industry, 1999. Citation in newsprint, magazine, radio, and television reporting is permitted subject to the requirement that Statistics Canada is acknowledged as the source. Any other reproduction is permitted subject to the requirement that Statistics Canada is acknowledged as the source on all copies as follows: Statistics Canada, *The Daily*, catalogue 11-001E, along with date and page references.