

Table C-3

## Access to computers and software, school year 2003-04

	All schools	Instructional level of school			Location of school		All schools	Type of school		Size of school		
		Elementary	Secondary	Mixed	Urban	Rural		Public	Private	Small	Medium	Large
<b>Student to computer ratio (median)</b>												
<i>Canada</i>	5.0	5.5	4.3	3.4	5.4	3.8	5.0	4.9	4.7	3.4	5.0	6.3
<i>Newfoundland and Labrador</i>	4.4	5.7	4.5	3.4	6.1	3.7	4.4	4.4	3.3	2.9	4.5	6.5
<i>Prince Edward Island</i>	5.4	5.4	5.6	5.9	6.2	5.4	5.4	5.6	F	3.6	5.7	6.3
<i>Nova Scotia</i>	4.9	5.6	4.4	4.1	5.1	4.3	4.9	4.9	5.6 *	4.2	5.5	4.6
<i>New Brunswick</i>	4.6	5.2	3.8	3.9	5.3	3.9	4.6	4.7	3.1	3.4	5.6	6.1
<i>Quebec</i>	5.9	5.8	6.6	3.6	6.5	4.0	5.9	5.8	6.8	3.8	6.2	7.1
<i>Ontario</i>	5.4	5.8	4.1	4.2	5.6	4.6	5.4	5.5	4.5	3.7	5.2	6.5
<i>Manitoba</i>	3.6	4.1	3.4	2.7	4.3	2.6	3.6	3.4	3.9	2.6	4.2	5.0
<i>Saskatchewan</i>	3.7	4.4	3.7	3.1	4.4	3.0	3.7	3.7	2.4	3.0	3.7	5.3
<i>Alberta</i>	4.1	4.4	3.9	3.7	4.3	3.0	4.1	4.1	3.0	3.1	4.0	4.8
<i>British Columbia</i>	5.0	5.3	4.7	3.8	5.3	3.4	5.0	4.9	5.3	3.5	5.1	6.1
<i>Yukon</i>	2.9	3.6	3.5	2.5	3.5	2.6	2.9	2.9	F	2.9	2.7	3.3
<i>Northwest Territories</i>	3.5	4.3	3.9	2.8	3.6	3.5	3.5	3.3	F	1.8	3.7	4.0
<i>Nunavut</i>	4.1	7.7	4.0	3.6	4.1	4.1	4.1	4.1	F	3.9	4.3	8.7
<b>% of schools by type of software available to students</b>												
Word processing software	97.1	96.7	99.5	94.8	97.1	97.0	97.1	97.8	91.7	94.2	98.4	98.4
Desktop publishing software	68.8	62.2	87.5	69.1	70.7	63.5	68.8	70.2	58.0	55.3	72.2	77.5
Presentation software	84.5	80.3	95.3	86.8	85.4	81.9	84.5	85.8	73.9	73.1	87.9	91.3
Spreadsheet and database programs	88.0	83.7	98.1	91.8	89.0	85.1	88.0	88.5	83.3	78.7	91.6	92.6
Programming languages	28.1	13.7	65.0	34.5	29.6	23.9	28.1	27.5	33.1	19.0	28.1	36.3
Graphic programs	81.1	81.6	83.6	73.9	83.4	74.4	81.1	82.9	67.4	68.5	84.3	89.1
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	21.2	8.6	55.5	24.4	21.9	19.3	21.2	22.4	12.5	11.7	21.5	29.5
Mathematical/statistical and business programs	22.9	13.6	49.2	23.9	24.0	19.9	22.9	23.5	18.7	16.0	22.0	29.9
Educational, drill and practice programs	93.1	94.6	90.3	90.1	93.4	92.2	93.1	94.3	82.7	88.1	94.7	96.1
Simulation programs	50.4	47.9	57.9	49.7	51.5	47.1	50.4	51.7	39.5	41.3	52.9	56.1
Geographical Information Systems	28.3	24.3	44.1	21.2	30.5	22.0	28.3	29.2	22.2	19.3	28.9	35.9
Internet browsers	95.9	96.8	98.4	87.3	96.6	94.1	95.9	97.8	81.3	89.2	98.5	99.4
E-mail software	63.3	60.5	70.6	64.6	62.6	65.0	63.3	64.1	57.2	61.6	64.8	63.2
Other	52.7	48.9	64.7	46.6	54.8	45.7	52.7	55.2	40.9	39.3	59.3	60.3
<b>% of schools with Internet-connected computers available to students outside instructional hours</b>												
<b>Before and/or after school</b>												
<b>Desktops computers</b>												
<i>Frequent access</i> <sup>1</sup>	41.7	30.1	67.0	56.3	41.9	41.0	41.7	40.9	48.5	39.9	39.8	45.1
<i>Infrequent access</i>	42.8	50.1	26.9	33.6	42.3	44.2	42.8	43.7	35.0	40.0	45.4	42.4
<i>Never access</i>	15.5	19.8	6.1	10.1	15.8	14.7	15.5	15.4	16.6	20.1	14.8	12.5
<b>Laptops and notebooks</b>												
<i>Frequent access</i>	25.9	21.9	32.8	30.4	25.6	27.0	25.9	25.0	36.5	26.9	25.1	25.9
<i>Infrequent access</i>	29.4	28.3	30.8	32.3	30.0	27.2	29.4	29.6	26.9	24.3	29.6	32.1
<i>Never access</i>	44.7	49.9	36.4	37.3	44.4	45.7	44.7	45.5	36.6	48.7	45.3	41.9
<b>During school</b>												
<b>Desktops computers</b>												
<i>Frequent access</i>	60.8	50.1	86.7	70.5	61.1	60.1	60.8	60.7	61.6	57.7	60.2	64.0
<i>Infrequent access</i>	33.3	42.7	11.4	23.2	33.1	34.0	33.3	33.8	29.3	33.4	35.1	31.6
<i>Never access</i>	5.9	7.2	1.8	6.4	5.9	5.9	5.9	5.5	9.2	8.9	4.7	4.5
<b>Laptops and notebooks</b>												
<i>Frequent access</i>	35.0	30.3	43.3	39.7	35.2	34.4	35.0	34.4	44.9	35.0	33.4	36.5
<i>Infrequent access</i>	28.0	28.4	27.6	27.2	27.7	29.2	28.0	28.2	25.1	26.8	28.6	28.2
<i>Never access</i>	36.9	41.2	29.1	33.2	37.1	36.4	36.9	37.4	30.1	38.2	38.0	35.3
<b>On weekends</b>												
<b>Desktops computers</b>												
<i>Frequent access</i>	2.8	1.9	3.3	6.6	2.2	4.7	2.8	2.4	6.5	4.7	2.1	2.0
<i>Infrequent access</i>	16.5	9.7	25.0	36.5	13.9	24.0	16.5	15.5	26.1	18.2	16.6	15.0
<i>Never access</i>	80.7	88.4	71.7	56.9	84.0	71.3	80.7	82.1	67.4	77.1	81.3	83.0
<b>Laptops and notebooks</b>												
<i>Frequent access</i>	8.2	7.7	7.5	12.5	7.2	11.7	8.2	7.6	13.6 *	11.6	7.2	7.2
<i>Infrequent access</i>	17.2	12.2	25.8	23.1	16.2	20.8	17.2	16.5	26.0	17.9	15.5	18.2
<i>Never access</i>	74.7	80.2	66.7	64.5	76.6	67.5	74.7	75.8	60.5	70.5	77.4	74.6

## Footnotes

### Symbols and abbreviations:

- ... Not applicable
- x Suppressed to meet confidentiality requirements of the *Statistics Act*
- \* Numbers marked with this symbol have a coefficient of variation between 16.6% and 25% and are less reliable than unmarked numbers
- \*\* Numbers marked with this symbol have a coefficient of variation greater than 25% and less or equal to 33.3% and are very unreliable
- F Too unreliable to be published (coefficient of variation surpasses 33.3%)
- 0 Nul, zero or too small to be expressed

### Infrastructure:

#### Notes:

1. Processor speeds are measured in Megahertz (MHz), with each MHz representing one million cycles per second (the number of times the computer processor is able to perform a task). Computers with low processor speed include those with processors in the range of 66-233 MHz (e.g. 486, Pentium® I). Computers with medium processor speed typically range in the area of 233 MHz all the way up to 1.4 GHz (Gigahertz) (e.g. Pentium® II/III, Apple™ G3). The most recent generation of processors on the market, classed as having high processor speed, are typically available in speeds of 1.3 GHz to 3.8 GHz and sometimes higher (e.g. Pentium® IV, Apple™ G5).

2. Computers with most recent operating systems were computers running with the latest version of operating systems (e.g. Windows™ NT/2000/XP, Mac™ OS X) at the time of the survey.

Source: Information and Communications Technologies in Schools Survey, 2003-2004

### Connectedness:

#### Notes:

1. Processor speeds are measured in Megahertz (MHz), with each MHz representing one million cycles per second (the number of times the computer processor is able to perform a task). Computers with low processor speed include those with processors in the range of 66-233 MHz (e.g. 486, Pentium® I). Computers with medium processor speed typically range in the area of 233 MHz all the way up to 1.4 GHz (Gigahertz) (e.g. Pentium® II/III, Apple™ G3). The most recent generation of processors on the market, classed as having high processor speed, are typically available in speeds of 1.3 GHz to 3.8 GHz and sometimes higher (e.g. Pentium® IV, Apple™ G5).

#### **% of schools with Internet-connected computers available to students outside instructional hours ...**

##### **Before and/or after school ...**

##### **Desktops computers...**

##### **Frequent<sup>1</sup> access**

2. Dial-up access is defined as "Regular dial-up telephone line with a modem".

3. The method to access the Internet is said to be "Always on" when the method used by the school is one of the following: cable modem, high-speed line (ISDN/DSL) or Frame relay, T1 line, optical fibre, fixed wireless (terrestrial) devices or Satellite connection.

Source: Information and Communications Technologies in Schools Survey, 2003-2004

### Access:

#### Notes:

1. Frequency of access is established as follow: Computers that were often to always available outside instructional hours were defined as "frequently accessible". Computers that were rarely available or available sometimes were defined as "infrequently accessible". "Never accessible" was assigned in the cases where principals reported that their computers were never available outside instructional hours.

Source: Information and Communications Technologies in Schools Survey, 2003-2004

### Teacher Skills:

#### Notes:

1. Technology applications were defined as frequently incorporated into teaching practices when they were used "most of the time" or "always".

Source: Information and Communications Technologies in Schools Survey, 2003-2004

### Challenges:

Source: Information and Communications Technologies in Schools Survey, 2003-2004

Table C-3

Access, school year 2003-04  
Newfoundland and Labrador

	All	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Student to computer ratio (median)	4.4	5.7	4.5	3.4	6.1	3.7	4.4	x	2.9	4.5	6.5
% of schools by type of software available to students											
Word processing software	100	100	100	100	100	100	100	x	100	100	100
Desktop publishing software	77.4	63.9	83.8	88.5	80.8	74.7	77.4	x	73	81.5	77.5
Presentation software	87.3	78.7	98.4	88.4	93	82.7	87	x	84.1	91.2	85.6
Spreadsheet and database programs	84.8	69.5	94.9	94.9	84.7	84.9	84.4	x	81.8	90.5	79.7
Programming languages	43.8	10.1*	71.1	61.3	37.8	48.5	43.6	x	39.3	49.7	40.5
Graphic programs	78.7	66.4	86.1	87.2	74.1	82.5	79.5	x	81.3	81.7	69.4
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	42.8	x	82.7	53.7	37.5	47	43.2	x	30.5	59.1	34.1
Mathematical/statistical and business programs	22.4	12.2*	29.8	29.3	19.8	24.5	23.1	x	18.8	29.1	17.1*
Educational, drill and practice programs	89	93.6	83.8	87.7	91	87.4	90.1	x	83.5	92.3	91.6
Simulation programs	52.8	49	59.1	52.1	56.9	49.4	53.5	x	49.3	49.9	62.5
Geographical Information Systems	17.7	8.2**	34.2	15.6*	20.8	15.3	18.2	x	13.8*	21.5	17.2*
Internet browsers	98.8	98.8	100	97.8	100	97.9	98.8	x	98.7	100	97.1
E-mail software	85	82	80	93	81.5	87.8	85.4	x	77.8	90	88
Other	x	x	x	x	x	x	x	x	x	x	x
% of schools with Internet-connected computers available to students outside instructional hours ...											
Before and/or after school ...											
Desktops computers...											
Frequent access	59.5	36.6	69.7	76.8	52.4	65.1	59.7	x	64.2	58.4	53.7
Infrequent access	33.3	45.7	28.7	23.2*	36.6	30.7	32.9	x	28.1	36.1	36.9
Never access	7.2*	17.7*	x	x	11.0*	x	7.4*	x	7.7**	x	x
Laptops and notebook...											
Frequent access	33.2	x	42.6	x	35.7	30.1*	33.2	x	43.3	39.0*	x
Infrequent access	38.4	x	28.4*	59.1	31.7*	46.6	38.4	x	32.8*	x	72.4
Never access	28.5	44.3*	28.9*	x	32.7*	23.3*	28.5	x	x	37.9*	x
During school...											
Desktops computers...											
Frequent access	71	54.8	79.1	83.4	69.4	72.3	71.5	x	67.7	68.9	80
Infrequent access	24.3	33.2	20.9*	16.6*	21.1	26.9	24.2	x	28.2	28.4	x
Never access	4.7*	11.9*	x	x	9.5*	x	4.2*	x	x	x	x
Laptops and notebooks...											
Frequent access	42.4	x	46	40.9*	38.5	46.9	42.4	x	45.1	43.2	x
Infrequent access	31.9	x	30.2*	44.0*	29.7*	34.4*	31.9	x	36.3*	x	x
Never access	25.8	42.2*	23.8*	x	31.8*	x	25.8	x	x	35.4*	x
On weekends...											
Desktops computers...											
Frequent access	7.1*	x	x	20.0*	x	12.0*	7.2*	x	8.8*	x	x
Infrequent access	43.1	28.1	56.3	50	40.6	45.3	42.6	x	44.7	48.8	30.9*
Never access	49.8	70.6	43.7	30	58	42.7	50.2	x	46.5	45.4	62.5
Laptops and notebook...											
Frequent access	x	x	x	x	x	x	x	x	x	x	x
Infrequent access	36.9	x	43.8	x	35.6*	38.4*	36.9	x	47.4	36.0*	x
Never access	53.5	61.3	48.5	53.8	56.7	49.8	53.5	x	36.8*	58.6	65.3

Table C-3

Access, school year 2003-04  
Prince Edward Island

	All schools	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Student to computer ratio (median)	5.4	5.4	5.6	x	6.2	5.4	5.6	x	3.6	5.7	6.3
% of schools by type of software available to students											
Word processing software	96.5	94.1	100	x	100	93.1	96.4	x	100	88.8	100
Desktop publishing software	90.2	83.4	100	x	90.9	89.6	90	x	88.6	80.8	100
Presentation software	71.2	55.2	100	x	63.5	78.1	70.5	x	76.2	67.6	69.2
Spreadsheet and database programs	87.9	79.2	100	x	86.9	88.9	87.6	x	89.6	92.9	81.3
Programming languages	37.7	23.4*	65.5	x	x	48.7	38.6	x	34.5*	x	46
Graphic programs	79.8	79.3	82.2	x	71.4	88.1	81.6	x	81.5	70.6	86.8
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	x	x	x	x	x	x	x	x	x	x	x
Mathematical/statistical and business programs	21.4	x	50.0*	x	x	26.1*	21.9	x	x	x	x
Educational, drill and practice programs	85.4	83.4	92.2	x	86.9	83.9	85.1	x	89.6	85.9	80.6
Simulation programs	35.4	32.5	x	x	34.9*	35.9	36.2	x	42.2*	x	51.1
Geographical Information Systems	14.6*	x	x	x	x	x	14.9*	x	x	x	x
Internet browsers	93.9	89.6	100	x	91.3	96.4	95.9	x	88	93.3	100
E-mail software	94.3	90.5	100	x	95.6	93.1	96.4	x	83.4	100	100
Other	x	x	x	x	x	x	x	x	x	x	x
% of schools with Internet-connected computers available to students outside instructional hours ...											
Before and/or after school ...											
Desktops computers... Frequent access	39.2	36.1	50.0*	x	49.4	29.7*	39.2	x	38.5*	45.3*	x
Infrequent access	48	46.9	50.0*	x	35.7*	59.5	48	x	48.7	43.5*	51.6
Never access	12.8*	x	x	x	x	x	12.8*	x	x	x	x
Laptops and notebook... Frequent access	x	x	x	x	x	x	x	x	x	x	x
Infrequent access	54.5	x	x	x	x	x	54.5	x	x	x	x
Never access	x	x	x	x	x	x	x	x	x	x	x
During school... Desktops computers... Frequent access	72	65.8	83.3	x	70.1	73.8	72	x	62.6	85.9	67.5
Infrequent access	28	34.2	x	x	29.9*	26.2*	28	x	37.4*	x	x
Never access	x	x	x	x	x	x	x	x	x	x	x
Laptops and notebooks... Frequent access	x	x	x	x	x	x	x	x	x	x	x
Infrequent access	x	x	x	x	x	x	x	x	x	x	x
Never access	x	x	x	x	x	x	x	x	x	x	x
On weekends... Desktops computers... Frequent access	x	x	x	x	x	x	x	x	x	x	x
Infrequent access	37.6	28.3*	x	x	x	43.6	37.6	x	x	x	x
Never access	59.8	67.2	58.6	x	63.4	56.4	59.8	x	61.8	65	53.2
Laptops and notebook... Frequent access	x	x	x	x	x	x	x	x	x	x	x
Infrequent access	x	x	x	x	x	x	x	x	x	x	x
Never access	60.6	x	x	x	x	x	60.6	x	x	x	x

Table C-3

Access, school year 2003-04  
Nova Scotia

	All schools	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Student to computer ratio (median)	4.9	5.6	4.4	4.1	5.1	4.3	4.9	5.6*	4.2	5.5	4.6
% of schools by type of software available to students											
Word processing software	99.4	99	100	100	98.8	100	99.7	91.7	98.9	99.3	100
Desktop publishing software	83.8	80.7	87.8	90.2	87.5	79.8	85.2	x	67	91.4	89.9
Presentation software	96.2	94.9	99.1	96.4	98	94.3	97.1	72.5	88.5	100	98.6
Spreadsheet and database programs	91.5	87.4	98	97.4	93.8	88.8	91.5	91.7	84.2	93.2	96.2
Programming languages	31.6	19.6	54.4	40.6	35	27.7	31.6	x	21.1	35.1	37
Graphic programs	88.2	87.5	86.1	96.6	88.5	87.7	89.3	60.4	82.1	88.6	93.5
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	35.6	14	76.9	46.7	34.8	36.4	37.1	x	20.4	41.6	41.9
Mathematical/statistical and business programs	30	11.4	60.5	53.5	34.6	24.9	30.5	x	15.9	36.4	35.3
Educational, drill and practice programs	93.8	95.8	91.3	89.5	93.8	93.9	94.7	73.9	93.5	96.8	90
Simulation programs	59.3	49.8	74.5	72.1	57.5	61.2	60	x	45.5	67.2	61.9
Geographical Information Systems	45.8	29.9	74.4	58.2	46.1	45.4	47.4	x	32.2	51.9	50.9
Internet browsers	98.9	99.5	100	93.1	98.7	99.2	100	71.9	96.3	100	100
E-mail software	80.9	80.1	82.6	80.3	83.7	77.8	82.5	x	67.3	86.3	86.4
Other	84.5	x	100	x	90.7	78.3	89.1	x	x	87.9	100
% of schools with Internet-connected computers available to students outside instructional hours ...											
Before and/or after school ...											
Desktops computers... Frequent access	39.2	27.2	60.8	48.7	37.7	40.7	38.5	57.7	32.6	41.1	42.8
Infrequent access	50.5	59.3	38	35	52	48.8	51.6	x	53.7	48.3	50.4
Never access	10.4	13.6	x	x	10.3	10.5	9.9	x	13.7	10.6	x
Laptops and notebook... Frequent access	23.3	19.4	35.4	x	19.9	26.9	22	x	x	31.5	x
Infrequent access	40	41.9	32.5	x	49.7	29.9	39.7	x	59.9	30.1	40.5
Never access	36.7	38.7	32.1	x	30.4	43.2	38.3	x	26.6*	38.4	41.1
During school... Desktops computers... Frequent access	61.5	48.5	83.4	77.9	62.1	60.8	61.3	67.2	50	67.5	64.1
Infrequent access	36.5	49.8	14.5	18.5*	35.3	37.9	37	x	46.4	31.8	33.6
Never access	2.0*	x	x	x	x	x	x	x	x	x	x
Laptops and notebooks... Frequent access	36.3	31	55.9	x	42.1	30.4	35.6	x	x	47.1	31.1
Infrequent access	35.4	40	x	x	36.6	34.1	34.8	x	52.6	26.1	36.3
Never access	28.3	28.9	28.4*	x	21.3	35.5	29.6	x	25.4*	26.8	32.6
On weekends... Desktops computers... Frequent access	2.9*	x	x	x	x	x	2.4*	x	x	x	x
Infrequent access	20.2	9.9	37.1	31.1	18.4	22.1	20.4	x	18.1	13.4	31.9
Never access	76.9	86.9	60.7	65.3	78.1	75.6	77.3	x	77.1	84.9	65.2
Laptops and notebook... Frequent access	7.8*	x	x	x	x	x	6.9*	x	x	15.3*	x
Infrequent access	22.9	12.2*	26.8*	76.6	17.2*	29.1	21	x	25.5*	x	37.8
Never access	69.3	82.5	57.8	x	74.4	63.8	72.1	x	69.9	74.2	62.2

Table C-3

Access, school year 2003-04  
New Brunswick

	All schools	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Student to computer ratio (median)	4.6	5.2	3.8	3.9	5.3	3.9	4.7	3.1	3.4	5.6	6.1
% of schools by type of software available to students											
Word processing software	97.3	95.9	100	100	97.3	97.2	97.2	100	97	97.8	97
Desktop publishing software	72.8	63.1	94.4	81	70.1	76.8	73.7	x	68.5	75.2	74.9
Presentation software	84.6	78.7	98.9	87.7	81.4	89.7	85.8	x	82.4	83.6	88.6
Spreadsheet and database programs	83.8	77.1	100	87.5	79.8	89.9	84.1	75.7	83	79.9	89.6
Programming languages	23.3	9.5	52.6	44.4	22.1	25.1	23.2	x	20.7	20.3	30
Graphic programs	65.3	58.8	75.8	87.1	67.1	62.7	65.3	x	57	63.4	77.7
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	26.9	6.9	70	53.9	27.1	26.7	27.4	x	16	29	38.3
Mathematical/statistical and business programs	11.4	4.3*	26.8	x	12.9	9.2	11.9	x	7.1*	12.8	15.4
Educational, drill and practice programs	90.7	90.6	88.6	100	91.6	89.3	90.4	100	93.3	87	91.8
Simulation programs	43.3	30.8	69.7	65.3	43.2	43.6	43.6	x	34.3	41.7	56.6
Geographical Information Systems	14.1	10.5	22.8	x	13.5	15.1	14	x	9.4	17.6	15.9
Internet browsers	98.1	98.4	98.5	93.9	98.8	96.9	98.8	76.1	95.6	98.9	100
E-mail software	65.1	59.6	78.3	68.3	63.1	68.2	65.4	x	59.7	65.8	71.2
Other	72.3	x	x	x	100	x	79.6	x	x	x	x
% of schools with Internet-connected computers available to students outside instructional hours ...											
Before and/or after school ...											
Desktops computers... Frequent access	42.6	32.5	64.6	56.4	34.2	55.8	42.4	x	54	35.2	37.1
Infrequent access	48.6	55.8	35.4	x	55.2	38.3	49.4	x	38.6	56.1	52.4
Never access	8.8	11.7	x	x	10.6	5.9*	8.1	x	7.4	8.7	10.5*
Laptops and notebook... Frequent access	21.9	23.7	23.2*	x	18.7	27.2	22.2	x	x	26.3	x
Infrequent access	21.7	20.8	29.2	x	20.8	23.1	22	x	x	24.8	21.3*
Never access	56.4	55.5	47.6	x	60.5	49.7	55.8	x	66.3	48.9	60.8
During school... Desktops computers... Frequent access	60.6	51.3	80.2	76	59.3	62.5	60.6	x	60.8	59.7	61.3
Infrequent access	37.7	46	19.8	x	38.2	36.7	38	x	35.5	40.3	37.2
Never access	x	x	x	x	x	x	x	x	x	x	x
Laptops and notebooks... Frequent access	26.3	27.4	30.6	x	23	31.7	26.7	x	x	30.7	26.6
Infrequent access	19.6	19.5	24.8	x	19.4	19.9	19.9	x	x	22.7	x
Never access	54.1	53.1	44.6	x	57.6	48.3	53.4	x	63.9	46.6	58.1
On weekends... Desktops computers... Frequent access	12.4	9.8	17.3	x	7.5	19.8	12.8	x	14.3	10	12.8
Infrequent access	25.5	21.9	34.7	x	23.5	28.7	25.8	x	24.3	25.8	26.6
Never access	62.1	68.3	48	56.5	69	51.5	61.4	84.3	61.4	64.1	60.6
Laptops and notebook... Frequent access	15.3	16.1	x	x	12.0*	21.4	15.5	x	x	23	x
Infrequent access	11.2	12.9	x	x	9.6*	x	11.4	x	x	x	x
Never access	73.5	71	72.3	x	78.5	64.5	73.1	x	72.4	68.3	82.4

Table C-3

Access, school year 2003-04  
Quebec

	All schools	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Student to computer ratio (median)	5.9	5.8	6.5	3.6	6.5	4	5.8	6.8	3.8	6.2	7.1
% of schools by type of software available to students											
Word processing software	97.4	96.5	100	100	97.3	97.7	97.4	96.6	96.5	98	97.6
Desktop publishing software	51.7	42.2	80.1	69.7	57	38.3	50.1	65.3	38.7	55.2	60.3
Presentation software	80.7	75.4	97.1	88.7	82	77.3	79.6	90.5	72.6	83.5	85.6
Spreadsheet and database programs	79.1	71.9	100	96.1	81.9	71.7	77.5	93.2	69.8	82.7	84.2
Programming languages	17.2	7.1	47.6	37.3	19.5	11.4	15.3	36.4	8.7	17.6	24.5
Graphic programs	59.5	58.4	61.6	67.3	64.6	46.6	59.3	63.6	45	60.4	71.8
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	6.9	3.6	15.5	19.2*	7.9	4.4*	6.3	11.7*	3.2**	7.4	9.8
Mathematical/statistical and business programs	10	5.7	23.4	17.0**	10.3	9	9.4	15.7*	6.3*	8.8	14
Educational, drill and practice programs	92.3	92.9	90	92.6	91.9	93.2	93.1	82.9	89.5	90.9	95.8
Simulation programs	25	21.6	34.4	35.3	27.1	19.7	25	23.6*	22.1	24.4	27.9
Geographical Information Systems	8.2	6	16.5	x	9.9	4.0*	8.3	8.4**	5.8*	7.8	10.7
Internet browsers	98	98	99.6	90.7	97.7	98.6	98.2	94.8	97.4	97.8	98.6
E-mail software	75.7	77.4	72.5	64.7	74	79.9	76.6	69.5	79.7	72.7	74.6
Other	69.9	59.2	95.7	x	74	x	67.3	91.3	54.1*	65.4	79.3
% of schools with Internet-connected computers available to students outside instructional hours ...											
Before and/or after school ...											
Desktops computers... Frequent access	41.4	38.8	47.8	55.2	45.6	30.6	40.9	43.7	29.4	44	49.4
Infrequent access	39.4	41.4	33.6	32.3*	36	48.1	39.3	42.2	42.7	38.9	37
Never access	19.2	19.8	18.6	x	18.4	21.3	19.8	14.1*	27.8	17.2	13.6
Laptops and notebook... Frequent access	29.6	29.1	24.4	54.1	28.1	34.6	29.4	28.4*	29.8	23.8	33.4
Infrequent access	29.9	28.1	35.2	28.4**	29.7	30.7	29.8	29.5**	30.9	34.4	26.3
Never access	40.5	42.8	40.4	x	42.2	34.7	40.8	42.1*	39.3	41.8	40.3
During school... Desktops computers... Frequent access	57	47.2	87.6	74.3	60.5	48.1	56.8	54.5	48.9	56	64.9
Infrequent access	34.4	42.2	10.3	19.6**	31	43	34.4	38.5	40.7	35.6	27.9
Never access	8.6	10.6	x	x	8.5	8.8*	8.8	x	10.4	8.4	7.2
Laptops and notebooks... Frequent access	35.5	33.5	35.3	55.8	34.5	39.3	35.6	36.3*	39.1	29.8	37.2
Infrequent access	29.7	28.8	33.4	x	28.9	32.7	29	31.5*	28.8	33	28
Never access	34.8	37.7	31.4	x	36.6	28.0*	35.3	32.2*	32.1	37.2	34.8
On weekends... Desktops computers... Frequent access	3	3.5*	x	x	2.2*	4.9*	2.9*	x	5.4*	2.4**	x
Infrequent access	10.4	7.1	18.7	28.6*	9.9	11.5	9.4	19.3*	11.3	7.6*	11.9
Never access	86.6	89.4	80.4	67.2	87.8	83.6	87.7	76.2	83.3	90.1	86.7
Laptops and notebook... Frequent access	12.8	13.5	8.7**	x	11.4	18.0*	12.3	x	16.9*	x	15.1*
Infrequent access	14.7	11.1*	21.3*	x	13.3	19.9*	14.6	x	15.8*	11.8**	16.0*
Never access	72.4	75.4	69.9	49.0*	75.3	62.1	73.2	68.1	67.3	82.2	68.8

Table C-3

Access, school year 2003-04  
Ontario

	All schools	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Student to computer ratio (median)	5.4	5.8	4.1	4.2	5.6	4.6	5.5	4.5	3.7	5.2	6.5
% of schools by type of software available to students											
Word processing software	97.6	97.2	99.2	96.8	97.4	98.6	98.3	93.5	95.1	98.9	98.1
Desktop publishing software	77.6	73.8	92.6	69.6	78.5	73.7	80.6	59	63.8	79	84.7
Presentation software	84.8	81.7	95.1	87.4	85.5	81.4	86.7	72.7	71.4	85.7	92
Spreadsheet and database programs	91.3	89.3	97.7	94.9	91.6	90.3	92.7	83.1	80.7	95	94.9
Programming languages	33.4	18.7	80	46.4	35	25.3	33.6	32	24.4	31.2	40.2
Graphic programs	93.7	94.2	95.6	76	93.8	93.1	97.4	70.7	81.5	96.6	98.7
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	26	12.8	72.3	22.8*	27.4	19.4	27.8	14.9	13.5	22.9	35.7
Mathematical/statistical and business programs	33.1	21.5	73.2	29.4	34.5	26.2	34.8	22.4	22.6	29.9	41.7
Educational, drill and practice programs	95.2	96.6	91.6	87.4	95.2	95.4	97.5	80.9	88.3	96.9	98
Simulation programs	59.7	57.5	69.5	49.4	59.8	59.2	63	39.4	45.5	61.8	66.4
Geographical Information Systems	47	38.7	77	38.9	48.6	39.3	49.7	29.6	33.2	46.2	55.7
Internet browsers	96.4	96.6	98.1	83.3	96.7	94.7	99.3	77.9	87.5	98.7	99.7
E-mail software	54.2	51.5	63.8	54	55.8	46.6	54	55.6	54.7	53.7	54.3
Other	38.3	38.3	39.2	x	35.8	55.9	37.8	40.1	34.5*	44.9	36
% of schools with Internet-connected computers available to students outside instructional hours ...											
Before and/or after school ...											
Desktops computers... Frequent access	36.1	24.1	73.4	57	37.5	29.3	34.6	47.5	38.6	29.5	40
Infrequent access	46	53.1	23.9	33.5	45.2	49.7	47.5	34.8	40.8	50.4	45.3
Never access	17.9	22.8	2.7**	9.4**	17.2	21	17.9	17.8	20.6	20.1	14.7
Laptops and notebook... Frequent access	24.7	18.5	36.8	50.3*	26.1	16.3*	22.3	42.9	30.3	20.8	25.1
Infrequent access	25.8	24.6	28.5	28.7**	26	24.7	26.2	23.0*	18.5	28.3	27.3
Never access	49.4	56.9	34.7	x	47.9	59	51.4	34	51.2	50.9	47.7
During school... Desktops computers... Frequent access	60.1	51.9	87.3	71.2	60.1	59.9	59.4	64.9	62.2	57.2	61.2
Infrequent access	35	42.2	11.4	23.2*	35.1	34.6	36.1	26.8	30.2	38.4	35
Never access	4.9	5.9	x	x	4.8	5.5*	4.5	8.3*	7.6	4.4	3.9
Laptops and notebooks... Frequent access	35	29.4	46.6	52.1*	36.1	28.3	33.3	48.9	38.5	27.6	38.5
Infrequent access	25.7	25.6	25.8	x	24.9	30.3	25.9	24.5*	28.6	29.3	21.9
Never access	39.3	44.9	27.5	x	38.9	41.5	40.9	26.6*	32.9	43.1	39.6
On weekends... Desktops computers... Frequent access	2	1.2*	3.8*	x	2.1	x	1.3*	7.0*	4.9*	1.4**	x
Infrequent access	9.3	6.2	15.1	38.1	8.7	12.1	7.3	24.8	12.3	9	7.9
Never access	88.7	92.6	81.2	54.5	89.2	86.5	91.4	68.3	82.8	89.6	91.2
Laptops and notebook... Frequent access	6	4.8*	7.7*	x	6.2	x	4.8*	15.6**	12.7*	5.0**	3.8**
Infrequent access	13.8	10.3	20.7	x	13.4	15.8*	12.4	25.3*	15.0*	12.9*	13.9
Never access	80.2	84.9	71.6	52.6*	80.3	79.4	82.8	59.1	72.3	82	82.3



Table C-3

Access, school year 2003-04  
Manitoba

	All schools	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
<b>Student to computer ratio (median)</b>	3.5	4.1	3.4	2.7	4.3	2.6	3.4	3.9	2.6	4.2	5
<b>% of schools by type of software available to students</b>											
Word processing software	96.3	97.1	98.5	93.9	97.8	94.2	99.1	71.8	93	99.2	99
Desktop publishing software	69.2	66.2	92.4	59.1	74.4	61.7	72.2	43.6*	60.7	77.6	74.5
Presentation software	87.7	87.3	98.5	81.7	92.8	80.7	92.5	47.5*	74.7	99.2	97.8
Spreadsheet and database programs	93	92.1	97.6	91.5	94.6	90.7	96.3	63.5	87.8	97.6	96.8
Programming languages	25.4	10.8	68.5	20.8	29.6	19.5	25.2	26.7**	16.5	34.9	29.7
Graphic programs	72.4	72.3	85.5	64.7	78.5	64.1	76	50.5	60.2	83.2	82.4
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	19.1	4.8*	51.8	20.1	18.6	19.7	20.3	x	13.6	22.8	24.8
Mathematical/statistical and business programs	33.7	17.9	63.9	39.2	32.8	35	34.9	21.1**	28.1	41.2	34.6
Educational, drill and practice programs	93.2	93.8	91.5	93.2	94.6	91.2	95.5	71.9	90.1	94.3	97.8
Simulation programs	52.7	52.4	58.2	49.6	54.2	50.6	54.7	35.1*	46.4	62.8	51.8
Geographical Information Systems	33.7	30	48.1	30.4	36.2	30.1	34.1	31.6*	28.9	40.1	34.7
Internet browsers	86	92.7	97.6	68.6	91.3	78.6	90.2	51.5	70.6	98.6	99
E-mail software	60.2	64.1	69.2	48.7	65.6	52.6	64.4	29.1**	48.8	71.1	67.2
Other	55.6	63.9*	77.6	41.5*	70	42.0*	78.6	x	42.5*	77.5	69.6*
<b>% of schools with Internet-connected computers available to students outside instructional hours ...</b>											
<b>Before and/or after school ...</b>											
<b>Desktops computers... Frequent access</b>	36.9	20.3	58.1	50.4	34.5	40.5	36.6	36.5**	33.4	41.6	36
<b>Infrequent access</b>	47.6	58.8	38.5	34.5	51.4	41.8	48	39.9**	44.5	47.5	52.9
<b>Never access</b>	15.5	20.8	x	15.1*	14.1	17.7	15.4	x	22.2	10.9*	11.1*
<b>Laptops and notebook... Frequent access</b>	20.6	14.3*	23.9**	30.7*	16.9*	26.9*	21.3	x	17.7**	22.4*	21.5*
<b>Infrequent access</b>	30.8	35.4	x	28.6*	32.2	28.4*	29.9	x	31.1*	29.0*	32.7*
<b>Never access</b>	48.6	50.2	54	40.8*	50.9	44.8	48.8	x	51.2	48.6	45.8
<b>During school...</b>											
<b>Desktops computers... Frequent access</b>	61.7	49.9	84.1	66.4	60.4	63.8	62.1	55.6*	58.6	65.8	61.3
<b>Infrequent access</b>	32.6	44.1	15.1*	24.8	35	28.9	33	x	30.3	33.2	35.4
<b>Never access</b>	5.7	6.0*	x	8.7*	4.6*	7.3*	4.9*	x	11.1*	x	x
<b>Laptops and notebooks... Frequent access</b>	33.8	27.9	46	34.6*	31.7	37.2	34.1	x	36.1	32.9	32.3*
<b>Infrequent access</b>	28.5	34.5	x	34.2*	26	32.5	29	x	24.5*	34.7	24.9*
<b>Never access</b>	37.7	37.6	45.7	31.1*	42.4	30.3*	37	x	39.4	32.4	42.8
<b>On weekends...</b>											
<b>Desktops computers... Frequent access</b>	4.0*	x	x	12.6*	x	7.3*	3.8*	x	6.8*	x	x
<b>Infrequent access</b>	22.4	13.6	34.8	28.6	15.4	33.2	21.6	x	25.6	21.3	18.9
<b>Never access</b>	73.6	85.9	64.4	58.8	82.6	59.5	74.6	67.3	67.6	78.7	75.9
<b>Laptops and notebook... Frequent access</b>	6.3**	x	x	x	x	x	6.9**	x	x	x	x
<b>Infrequent access</b>	19.4	16.1*	x	x	16.5*	23.7*	17	x	25.7*	15.7**	x
<b>Never access</b>	74.3	80.1	74.1	63.1	78	68.5	76	x	72.5	79	70.3

Table C-3

Access, school year 2003-04  
Saskatchewan

	All schools	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Student to computer ratio (median)	3.7	4.4	3.7	3	4.4	3	3.7	2.4	3	3.7	5.3
% of schools by type of software available to students											
Word processing software	94	94.8	100	90.2	95.7	91.8	94.8	78.9*	85.4	99.4	100
Desktop publishing software	77.9	72.9	90.8	78.3	78	77.7	79.3	x	63.4	89.6	82.7
Presentation software	88.2	86.2	98.9	85.9	89.8	86.2	90.2	x	74.2	96.7	98.1
Spreadsheet and database programs	87.5	81.9	100	88.8	87.4	87.6	88	78.9*	77.5	90.9	100
Programming languages	31.4	13.8	76.6	32.2	28.6	35	32.2	x	26.8	29.9	44
Graphic programs	74.9	70.5	85.7	75.4	75.1	74.7	76.8	x	67.1	76.6	86.6
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	29.8	10.3	72	34.5	26.6	33.9	30.6	x	25.5	29.1	40
Mathematical/statistical and business programs	15.1	10	30.5	14.5	15.7	14.4	15.3	x	10.7*	16.3	21.6
Educational, drill and practice programs	92.4	93.7	94.9	89.6	95.9	88	93.2	77.2	83.2	98.2	98.9
Simulation programs	55.5	58	49.8	55.1	58.8	51.3	56.8	x	43.2	60.1	71
Geographical Information Systems	12.7	15.1	9.6*	11.2	13	12.3	12.8	x	9	15.6	14.3*
Internet browsers	94.5	95	100	91.6	96.7	91.7	95.6	70.1*	86.1	100	100
E-mail software	70.4	67	76.7	71.8	70.1	70.7	70.9	63.1*	62.2	74.6	77.6
Other	46.1	x	x	42.8**	56.1	x	49	x	x	x	65.6*
% of schools with Internet-connected computers available to students outside instructional hours ...											
Before and/or after school ...											
Desktops computers... Frequent access	59.6	49.5	77	64.3	57.4	62.7	58.8	76.4	53.2	60.1	69.5
Infrequent access	36.2	43.6	21.9	33.4	38.7	32.8	37.2	x	39.6	36.1	30.5
Never access	4.2*	6.9*	x	x	4.0*	4.5**	4.1*	x	7.2*	3.8**	x
Laptops and notebook... Frequent access	28.1	27.5*	45.5	17.3**	30.3	24.6*	28	x	21.8*	29.4	33.3*
Infrequent access	36.5	35.7	36.7*	37.5*	37.4	35.1	37.5	x	30.6*	34.2	47.4*
Never access	35.4	36.8	x	45.2	32.3	40.2	34.4	x	47.6	36.4	x
During school... Desktops computers... Frequent access	69.1	59.2	88.8	72.4	67.2	71.7	69.1	x	66.9	66.2	79.1
Infrequent access	27.3	35.6	10.2*	24.7	29.1	24.8	27.4	x	28.7	30	19.0*
Never access	3.6*	5.1*	x	x	3.7**	x	3.5*	x	F	3.8**	x
Laptops and notebooks... Frequent access	36.2	36	47.2	28.8*	40.7	29.1*	36.3	x	29.8*	39.1	38.9*
Infrequent access	32.2	27.9*	45.1	29.0*	31	34	33.1	x	27.6*	26.8*	46.5*
Never access	31.6	36.1	x	42.3*	28.3	36.9	30.6	x	42.6*	34.2	x
On weekends... Desktops computers... Frequent access	4.0*	x	12.5*	x	4.5*	x	3.0*	x	5.7*	x	x
Infrequent access	40.4	26.3	48.6	54	32.2	51.1	40.3	x	36.2	42.8	42.3
Never access	55.6	71.1	38.9	44.5	63.3	45.5	56.7	x	58.2	54.1	54.4
Laptops and notebook... Frequent access	8.2*	x	x	x	12.0*	x	7.5*	x	x	x	x
Infrequent access	32	27.0*	50	26.7*	34	28.9*	33	x	24.9*	25.2*	53.4
Never access	59.7	61.5	35.5*	73.3	54	68.7	59.5	x	62	67.8	42.1*

Table C-3

Access, school year 2003-04  
Alberta

	All schools	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Student to computer ratio (median)	4.1	4.4	3.9	3.6	4.3	3	4.1	3	3.1	4	4.8
% of schools by type of software available to students											
Word processing software	96.2	96.3	100	93.1	97	93.5	96.9	91.3	90.6	98.3	99.7
Desktop publishing software	68.6	61.8	86.3	63.8	69.8	64.5	69.9	55.1	53.7	72	79.9
Presentation software	91.7	93.4	94.6	87	93.7	84.6	93.1	78.7	79.1	96.2	99.4
Spreadsheet and database programs	93.3	92.6	99.4	89.2	94.4	89.4	94.4	83.3	84.5	96.3	98.8
Programming languages	28.1	13.3	49.9	30.4	28.3	27.3	27.1	39.2	22	26.2	36.5
Graphic programs	80.3	84.2	83.3	72.6	80.9	78.3	82	64.9	70.1	84.5	85.9
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	20.2	6.7	46.4	17.4	20.8	18.1	22.2	x	10.8	20.8	29
Mathematical/statistical and business programs	18.7	5.8	41.3	18.4	18.4	19.7	19.4	13.6**	18.4	15.6	22.6
Educational, drill and practice programs	89.1	90.1	87.1	89.2	89.5	87.5	89.5	86.3	82.1	92.4	92.5
Simulation programs	52.6	54.2	59.8	44.8	52.7	52.3	53	51.1	49	53.6	55.2
Geographical Information Systems	18	16.7	23	15.9	19.1	14.2	19.3	x	13	19.5	21.4
Internet browsers	93.6	96.2	96.9	87.4	95.3	87.8	94.6	85.9	83.1	98.2	99.3
E-mail software	61	52.9	70.9	64.1	58.3	70.3	61.4	58.6	57.9	64.8	59.9
Other	55.7	73	81.1	30.0**	68.6	34.1*	56.1	x	33.4*	74.6	86.9
% of schools with Internet-connected computers available to students outside instructional hours ...											
Before and/or after school ...											
Desktops computers... Frequent access	43.2	25.1	69.5	46.9	43.7	41.6	42.2	51.9	39	42.8	47.6
Infrequent access	40.2	51.3	23.6	38.5	39.4	43.3	40.9	36.7	37.2	42.5	40.4
Never access	16.5	23.6	6.9*	14.5	16.9	15.1	16.9	11.4**	23.8	14.7	12
Laptops and notebook... Frequent access	22.9	15.7	35	19.4*	23.4	19.9*	23	x	22.5*	25.3	20.9
Infrequent access	28.7	30.3	26.7	28.7	30.7	17.1*	28.8	x	16.0*	28.4	36.4
Never access	48.4	54	38.3	51.9	45.9	62.9	48.2	x	61.5	46.3	42.7
During school... Desktops computers... Frequent access	63.7	47	89.5	65.5	63.3	65.1	63.9	60.1	58.6	63.5	68.7
Infrequent access	28.9	45.1	7.4*	23.9	30	25	28.9	31.4*	28.6	30.2	27.6
Never access	7.4	7.8	x	10.5*	6.7	9.9*	7.2	x	12.8	6.3	3.7*
Laptops and notebooks... Frequent access	35.5	26.7	44.9	37.3	36.6	29.4*	35.1	x	30.4	37.1	36.9
Infrequent access	25.3	29.2	23.7	21.6*	26.4	19.2*	26.2	x	13.9*	26.9	30.2
Never access	39.2	44.1	31.4	41.1	37.1	51.3	38.7	x	55.7	36	32.9
On weekends... Desktops computers... Frequent access	2.1*	x	x	3.6**	1.6*	x	1.7*	x	x	2.5**	x
Infrequent access	23.7	14.4	29.4	31.6	20.9	33.3	22	41.1	25	25.1	20.8
Never access	74.2	85.1	67.8	64.8	77.5	63	76.4	52	73.5	72.4	77.1
Laptops and notebook... Frequent access	4.6*	x	x	x	4.0*	x	4.8*	x	x	7.6**	x
Infrequent access	18.9	11.8	31.5	14.4**	20.4	x	18	x	14.9**	19.5	20.7
Never access	76.5	84.1	66.1	77.8	75.6	81.2	77.1	x	80.9	72.9	77.4

Table C-3

Access, school year 2003-04  
British Columbia

	All schools	Instructional Level of Schools			Location		Type		Size		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Student to computer ratio (median)	5	5.3	4.7	3.8	5.3	3.4	4.9	5.3	3.5	5.1	6.1
% of schools by type of software available to students											
Word processing software	96.4	95.6	98.9	95.3	95.8	98.6	97.7	88.6	93.7	97.3	98.4
Desktop publishing software	59	49.2	82	61.4	60.2	54.3	59.7	56.5	46.2	59.3	73.6
Presentation software	77	70.8	89.6	86.9	77.1	76.5	78.4	72	62.7	81.9	87.1
Spreadsheet and database programs	85.4	80.5	95.6	92	86.1	82.7	86.4	81.1	73.8	90.7	91.9
Programming languages	27.3	10.1	64.7	41.1	28.5	22.7	26.2	33.9	13.1	27.6	43.6
Graphic programs	86.1	88.9	81.3	79	86.8	83.1	88.9	72.5	75.4	90.5	92.9
Computer aided design (CAD) or computer aided manufacturing (CAM) programs	20.2	5.4	57.2	20.1*	21.6	14.5	21.8	14.3*	7	19	36.8
Mathematical/statistical and business programs	16.2	8.1	35.4	20.4*	16.2	16	16.3	15.5*	10.5	15.9	23.1
Educational, drill and practice programs	93.9	95.7	90.4	90.5	93.7	94.7	94.3	90.5	91	95.6	94.9
Simulation programs	56.6	56.6	54.9	60.9	56.7	56.2	57.3	50.7	48.3	59.6	62.4
Geographical Information Systems	21.3	18.1	27.3	26.6	21.1	21.8	21.2	21.7	14.9	21.3	28.7
Internet browsers	96.9	96.8	97.8	95.1	96.6	98	99.1	87.7	92.4	98.5	100
E-mail software	61.8	55.1	75.9	70.1	63	56.9	62.5	59.8	55.8	66	63.3
Other	66.4	60.4	77.6	x	72.2	x	72	x	44.1*	x	94.2
% of schools with Internet-connected computers available to students outside instructional hours ...											
Before and/or after school ...											
Desktops computers... Frequent access	47.7	33.7	76	71	46.4	53.3	47	54.5	48.7	43.9	51.6
Infrequent access	40.9	51.5	19.9	22.7*	40.6	42.2	42.7	28.5	34.6	46.6	40.4
Never access	11.3	14.8	x	x	13	4.6**	10.2	17.0*	16.7	9.5	8.1*
Laptops and notebook... Frequent access	28.8	27	27.8*	46.9*	25.7	44.4	29	33.0*	28.5*	31.6	26.3
Infrequent access	33.6	32	38.6	x	36.7	17.9**	33.3	33.6*	18.2**	29.7	45.7
Never access	37.6	40.9	33.6*	x	37.6	37.7*	37.7	33.5*	53.3	38.7	28
During school... Desktops computers... Frequent access	59.9	48.1	85.9	73.7	60.2	58.8	60	62.3	54.6	61.7	63.4
Infrequent access	34.2	44.4	11.1*	23.4*	33.4	37.2	35.3	26	35	34.5	32.8
Never access	5.9	7.5	x	x	6.4	4.0**	4.7	11.7*	10.4	3.8*	3.8**
Laptops and notebooks... Frequent access	34.1	30.8	38.7	46.9*	31.9	46.1	34.2	43.2*	29.7*	39.5	31.5
Infrequent access	32.2	32.2	34.2	x	35.1	17.4**	32.5	28.6**	24.0*	26.8	41.9
Never access	33.6	37	27.1*	x	33.1	36.6*	33.4	28.2**	46.3	33.7	26.5
On weekends... Desktops computers... Frequent access	1.6*	x	x	x	x	x	x	x	x	x	x
Infrequent access	16.5	10.5	28.6	25.0*	15.6	20	15.4	24.4	13.5	15.3	21.3
Never access	81.9	88.8	69.5	67.9	83.3	76.3	83.5	70.2	84.7	83.3	77
Laptops and notebook... Frequent access	9.7*	8.6*	x	x	6.3**	27.8*	9.5*	x	15.0**	x	10.0**
Infrequent access	17.5	13.1*	30.7*	x	16.3	24.2**	17.5	x	x	15.7*	22.3*
Never access	72.8	78.3	62.7	59.2*	77.4	48	73	62	72.8	78.3	67.7





