A

Appendix A: Supplemental Tables

Appendix A Supplemental Tables

Table 2.1: Percentage of persons 5 to 29 years of age in the total population, 1994

Country	5 to 29	5 to 14	15 to 24	25 to 29
Australia	37.5	14.3	15.4	7.7
Austria	34.1	11.7	13.4	9.0
Belgium	32.7	12.0	13.0	7.7
Canada	35.5	13.6	13.8	8.1
Czech Republic	36.4	13.4	16.2	6.7
Denmark	32.6	10.8	13.7	8.0
Finland	32.4	12.7	12.4	7.3
France	35.0	13.4	14.2	7.5
Germany	31.6	11.0	11.8	8.7
Greece	35.1	12.6	15.0	7.6
Hungary	34.7	12.7	15.7	6.3
Iceland	39.8	16.1	15.6	8.0
Ireland	42.1	18.0	17.2	7.0
Italy	33.3	10.4	14.7	8.3
Japan	33.9	11.8	15.3	6.8
Korea	45.1	16.6	19.2	9.3
Mexico	54.5	24.3	21.5	8.7
Netherlands	34.4	12.0	14.0	8.5
New Zealand	37.8	14.8	15.5	7.5
Norway	34.3	12.3	14.1	7.9
Poland	38.4	16.9	15.1	6.4
Portugal	36.9	12.8	16.6	7.5
Russian Federation	36.1	15.7	13.6	6.8
Spain	37.3	12.4	16.5	8.4
Sweden	31.7	11.7	12.6	7.4
Switzerland	32.3	11.5	12.5	8.3
Turkey	51.0	22.3	20.2	8.5
United Kingdom	34.1	12.8	13.2	8.2
United States	35.8	14.4	13.9	7.5

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996, table C3.

Table 2.2: Percentage of all 9- and 14-year-olds who say that they usually speak a languge other than the official school language at home, by country, 1991

	9-year-olds		14 year-olds	
Country	Percent	S.E.	Percent	S.E.
Belgium (French Community)	11.0	1.2	9.0	1.1
Denmark	5.0	0.6	2.0	0.5
Finland	1.0	0.3	1.0	0.2
France	9.0	1.4	4.0	0.5
Greece	6.0	1.0	3.0	0.9
Iceland	3.0	0.2	0.0	0.0
Ireland	3.0	0.7	1.0	0.0
Italy	27.0	1.5	26.0	1.1
Netherlands	12.0	2.1	9.0	1.3
New Zealand	8.0	1.0	6.0	0.7
Norway	4.0	0.7	2.0	0.4
Portugal	3.0	0.6	2.0	0.3
Spain	13.0	1.4	11.0	1.2
Sweden	9.0	1.2	5.0	0.6
Switzerland	21.0	1.2	15.0	0.9
United States	3.0	0.5	4.0	0.8
West Germany (former)	10.0	0.9	8.0	0.9

NOTE: The figures reported here represent the percentage of all 9- and 14-year-olds who sometimes, hardly ever, or never spoke the school language at home.
SOURCE: The International Association for the Evaluation of Educational Achievement, *IEA Reading Literacy Study*, 1992.

Table 2.3: Percent of children 5- to 17-years-old who speak a language other than English at home and who speak English with difficulty, 1990

State	Percent of children who speak a language other than English at home	Percent of children who speak English with difficulty
Total U.S.	13.9	5.3
Alabama	3.0	1.0
Alaska	9.5	3.5
Arizona	22.8	8.9
Arkansas	3.0	0.9
California	35.0	14.9
Colorado	8.4	2.9
Connecticut	14.9	5.1
Delaware	6.5	2.4
District of Columbia	11.8	5.0
Florida	17.8	5.6
Georgia	4.5	1.6
Hawaii	14.9	5.7
Idaho	5.8	2.0
Illinois	14.4	4.9
Indiana	4.9	1.8
Iowa	3.9	1.4
Kansas	5.3	1.9
Kentucky	2.8	1.1
Louisiana	5.5	1.9
Maine	4.4	1.2
Maryland	8.4	2.7
Massachusetts	15.3	5.4
Michigan	5.4	1.6
Minnesota	5.1	2.0
Mississippi	3.0	1.1
Missouri	3.6	1.3
Montana	3.9	1.3
Nebraska	3.6	1.1
Nevada	11.8	4.4
New Hampshire	4.4	1.3
New Jersey	19.4	6.0
New Mexico	29.5	10.5
New York	23.3	8.2
North Carolina	4.7	1.9
North Dakota	2.7	0.7
Ohio	5.0	1.8
Oklahoma	4.6	1.5
Oregon	7.0	2.5
Pennsylvania	6.8	2.5
Rhode Island	16.3	5.6
South Carolina	3.5	1.2
South Dakota	4.1	1.3
Tennessee	3.2	1.1
Texas	28.2	11.3
Utah	5.5	1.8
Vermont	3.1	0.8
Virginia	7.0	2.2
Washington	8.8	3.4
West Virginia	2.7	0.8
Wisconsin	5.5	2.1
Wyoming	3.9	1.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, *The Condition of Education*, 1994. Table 46-2.

Table 2.4: Percentage of children (ages 17 or younger) whose family income is below 40 percent of adjusted median family income, by family status and country, various years

		All children		Children in single parent families	
Country	Year	Before transfer	After transfer	Before transfer	After transfer
Australia	1989	19.6	14.0	73.2	56.2
Canada	1991	22.5	13.5	68.2	50.2
France	1984	25.4	6.5	56.4	22.6
Germany	1989	9.0	6.8	43.9	—
Italy	1991	11.5	9.6	31.7	13.9
Netherlands	1991	13.7	6.2	79.7	39.5
Sweden	1992	19.1	2.7	54.9	5.2
Switzerland	1982	5.1	3.3	33.7	25.6
United Kingdom	1986	29.6	9.9	76.2	18.7
United States	1991	25.9	21.5	69.9	59.5

— Data unavailable.
NOTE: Government programs include income and payroll taxes and all types of government cash and near cash transfers.
SOURCE: Luxembourg Income Study estimates, appendix table A-2.

Table 2.5: Staff employed in primary and secondary education as a percentage of the total labor force, 1994

Country	Primary and secondary education
Austria	3.0
Belgium	4.5
Canada	1.9
Czech Republic	2.5
Denmark	3.1
France	2.8
Germany	1.9
Greece	2.6
Hungary	3.7
Ireland	3.1
Italy	3.8
Japan	1.7
Korea	1.6
Mexico	2.8
Netherlands	2.3
New Zealand	2.8
Poland	2.5
Portugal	3.1
Russian Federation	2.0
Spain	2.8
Sweden	3.4
Turkey	2.0
United Kingdom	2.4
United States	2.1

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996, table P31.1.

Table 2.6: Total number of years of education required in private schools by level of education, 1992

	Primary		Lower secondary		Upper secondary	
Country	Government Dependent	Independent	Government Dependent	Independent	Government Dependent	Independent
Belgium	15	—	15	—	16	—
West Germany (former)	19	—	19	—	20	—
Ireland	—	—	17	—	17	—
Italy	—	12	—	16	—	16
Netherlands	17	—	17	—	17	—
Norway	15	—	15	—	16	—
Spain	15	15	15	15	17	17
Turkey	—	15	—	15	—	15
United Kingdom	—	17	—	17	—	—
United States	—	16	—	16	—	16

— Data unavailable.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1995, table P34.

Table 2.7: Total number of years of education required in public schools by level of education, 1992

Country	Early childhood	Primary	Lower secondary	Upper secondary
Austria	—	15	15	16
Belgium	15	15	15	16
Finland	15	17	18	18
France	16	16	16	16
West Germany (former)	15	19	19	20
Ireland	16	16	17	17
Italy	12	13	17	17
Netherlands	17	17	17	17
New Zealand	17	17	17	19
Norway	15	15	15	16
Portugal	16	17	17	17
Spain	15	15	15	17
Sweden	14	16	16	16
Turkey	15	15	15	15
United Kingdom	17	—	—	—
United States	16	16	16	16

— Data unavailable.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators* , 1995, table P34.

Table 2.8: Percentage of primary and secondary school teachers, by level of education taught and gender, 1994

	Primary and lower secondary		Upper secondary education	
Country	Female	Male	Female	Male
Austria	71.2	28.8	48.6	51.4
Belgium	68.2	31.8	45.9	54.1
Canada	64.8	35.2	64.9	35.1
Czech Republic	81.7	18.3	50.3	49.7
Denmark	58.0	42.0	44.6	55.4
France	62.7	37.3	—	—
Germany	51.1	48.9	23.7	76.3
Greece	58.2	41.8	45.8	54.2
Hungary	83.1	16.9	51.6	48.4
Iceland	60.8	39.2	—	—
Ireland	77.2	22.8	53.7	46.3
Italy	83.0	17.0	56.4	43.6
Japan	52.0	48.0	24.6	75.4
Korea	55.2	44.8	23.7	76.3
Netherlands	27.1	72.9	10.5	89.5
New Zealand	67.8	32.2	47.6	52.4
Spain	65.3	34.7	47.7	52.3
Sweden	72.6	27.4	38.7	61.3
Turkey	42.0	58.0	40.4	59.6
United Kingdom	69.5	30.5	45.5	54.5
United States	78.0	22.0	50.1	49.9

— Data unavailable.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996, table P31.2.

Table 2.9: Total hours of intended instruction time to students in lower secondary education per year, by age, 1994

	Age of student in years			
Country	12	13	14	12–14
Austria	1,105	1,073	1,073	3,251
Belgium	987	987	—	—
Denmark	840	900	930	2,670
Finland	730	912	912	2,554
France	810	1,026	1,026	2,862
Germany	930	960	960	2,850
Greece	918	918	945	2,781
Ireland	935	935	935	2,805
Italy	1,020	1,020	1,020	3,060
Netherlands	1,067	1,067	1,067	3,200
New Zealand	979	875	900	2,755
Norway	805	833	833	2,470
Portugal	949	949	949	2,848
Spain	900	900	900	2,700
Sweden	828	828	828	2,484
Turkey	720	720	696	2,136
United States	—	—	980	—

— Data unavailable.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996, table P11.

Table 2.10: Time in formal instruction for 13-year-olds, 1991

Country	Average hours per day	Average days per year
Canada	5.1	188
France	6.2	174
West Germany (former)	4.6	219
Japan	4.0	220
Korea	4.4	222
United States	5.6	178

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Education Indicators: An International Perspective,* 1996.

Table 2.11: Ratio of students to teaching staff by level of education in primary and secondary schools, 1994

Country	Primary	Secondary
Australia	18.5	—
Austria	11.8	7.4
Belgium	13.3	8.5
Czech Republic	19.6	12.9
Denmark	11.1	10.2
Ireland	24.4	16.4
Italy	9.9	8.6
Spain	23.2	20.3
Sweden	12.5	12.7
Switzerland	15.3	23.4
United States	17.7	17.4

— Data unavailable.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996, unpublished draft, figure 1.6.

Table 2.12: Ratio of students to teaching staff in secondary schools, 1985–1992

Country	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Canada	16.0	15.7	15.4	15.3	15.3	15.2	16.9	—	18.8	19.1
United States	—	—	—	—	—	—	15.5	15.9	15.7	15.6
Japan	—	—	—	—	18.2	17.7	17.3	16.6	—	15.7
Germany	19.1	18.4	17.9	17.4	17.0	16.6	—	—	16.5	16.8
Italy	10.0	9.9	9.9	9.3	9.6	9.6	9.3	8.9	—	8.5
Spain	17.8	17.7	18.0	18.0	17.5	16.9	17.0	16.6	16.3	16.0
United Kingdom	18.4	14.6	14.7	14.8	14.3	14.8	14.7	15.2	15.3	16.1

— Data unavailable.

NOTE: Pupil / teacher ratios were derived by adding enrollments for primary and secondary education and dividing the sum by the total number of primary and secondary teachers at each reference year.

SOURCE: Organization for Economic Cooperation and Development, Education Database, 1998.

Table 3.1: Public expenditures for elementary and secondary education as a percentage of GDP, 1993

Country	Percent of GDP
Australia	3.6
Austria	3.5
Belgium	3.7
Canada	4.3
Czech Republic	3.4
Denmark	4.5
France	4.0
Germany	3.0
Greece	2.6
Hungary	4.1
Iceland	3.5
Ireland	3.7
Italy	3.5
Japan	3.0
Korea	3.0
Mexico	3.0
New Zealand	4.4
Portugal	3.8
Spain	3.4
Sweden	4.7
Switzerland	4.2
Turkey	2.4
United Kingdom	3.9
United States	3.8

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996, Table F1.1b.

Table 3.2: Public and private expenditures for elementary and secondary education as a percentage of GDP, 1993

Country	Percent of GDP
Australia	4.1
Austria	3.6
Canada	4.5
Denmark	4.5
Finland	4.7
France	4.4
Germany	3.9
Hungary	4.5
Iceland	3.5
Ireland	3.8
Italy	3.5
Japan	3.2
Korea	3.8
Netherlands	3.2
Portugal	3.9
Spain	3.8
Sweden	4.7
Turkey	2.4
United States	4.1

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996, Table F1.1b.

Table 3.3: Public expenditures per pupil for elementary and secondary education, 1993

Country	Per pupil expenditures (in U.S. dollars)*
Australia	$3,344
Austria	4,699
Belgium	4,313
Canada	4,961
Denmark	5,731
France	4,626
Germany	3,910
Greece	1,474
Ireland	2,328
Italy	4,823
Japan	4,181
Korea	1,463
Mexico	890
Portugal	2,383
Spain	2,426
Sweden	5,297
Switzerland	6,690
Turkey	735
United Kingdom	3,686
United States	5,434

*Purchasing power parity (PPP) indices were used to convert other currencies to U.S. dollars. Because the fiscal year has a different starting date in different countries, within-country Consumer Price Indexes (CPI) were used to adjust the PPP indices to account for inflation.
SOURCE: Organization for Economic Cooperation and Development, unpublished data, 1997.

Table 3.4: Gross domestic product per capita, 1993

Country	GDP per capita (in U.S. dollars)*
Australia	$17,351
Austria	19,166
Belgium	19,323
Canada	19,360
Czech Republic	8,480
Denmark	19,154
Finland	15,646
France	18,698
Germany	18,506
Greece	8,769
Hungary	6,009
Iceland	18,696
Ireland	13,791
Italy	17,709
Japan	20,279
Korea	9,854
Mexico	6,793
Netherlands	17,743
New Zealand	14,979
Portugal	11,796
Russian Federation	5,187
Spain	13,323
Sweden	16,829
Switzerland	23,200
Turkey	5,562
United Kingdom	16,873
United States	24,252

*Purchasing power parity (PPP) indices were used to convert other currencies to U.S. dollars. Because the fiscal year has a different starting date in different countries, within-country Consumer Price Indexes (CPI) were used to adjust the PPP indices to account for inflation.
NOTE: GDP per capita is calculated by dividing Gross Domestic Product (adjusted using Purchasing Power Parity exchange rates) by population size.
SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996, Table A2.

Table 3.5: Population ages 5 to 14 as a percentage of total population, 1994

Country	Percent of total population
Australia	14.3
Austria	11.7
Belgium	12.0
Canada	13.6
Czech Republic	13.4
Denmark	10.8
Finland	12.7
France	13.4
Germany	11.0
Greece	12.6
Hungary	12.7
Iceland	16.1
Ireland	18.0
Italy	10.4
Japan	11.8
Korea	16.6
Mexico	24.3
Netherlands	12.0
New Zealand	14.8
Portugal	12.8
Russian Federation	15.7
Spain	12.4
Sweden	11.7
Switzerland	11.5
Turkey	22.3
United Kingdom	12.8
United States	14.4

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996, Table C3.

Table 3.6: Public expenditures for elementary and secondary education as a percentage of total public expenditures, 1993

Country	Percent of total public expenditures
Australia	10.1
Austria	6.7
Belgium	6.5
Canada	8.3
Czech Republic	8.8
Denmark	7.9
Finland	7.8
France	7.4
Germany	6.2
Greece	6.4
Hungary	11.8
Iceland	8.9
Ireland	8.8
Italy	6.2
Japan	8.5
Korea	14.5
Netherlands	5.7
New Zealand	11.5
Spain	8.5
Sweden	6.9
Switzerland	11.9
United Kingdom	8.7
United States	10.1

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996, Table F13.

Table 3.7: Expenditures for staff compensation as a percentage of current expenditures in public and private elementary and secondary schools, 1993

Country	Percent of current expenditures
Australia	76.9
Austria	*80.6*
Belgium	84.1
Canada	80.5
Czech Republic	64.2
Denmark	81.3
Finland	72.6
France	78.6
Germany	87.2
Greece	95.4
Hungary	72.0
Iceland	72.7
Ireland	88.7
Italy	91.5
Japan	87.0
Korea	89.8
Netherlands	80.5
Portugal	92.4
Spain	81.0
Sweden	62.9
Switzerland	85.7
Turkey	97.9
United Kingdom	72.7
United States	79.5

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996, Table F5.1.

Table 3.8: Expenditures per pupil for staff compensation in public and private elementary and secondary schools, 1993

Country	Expenditures (in U.S. dollars)*
Australia	$2,714
Austria	4,202
Belgium	3,612
Canada	4,073
Czech Republic	1,016
Denmark	4,277
Finland	3,004
France	3,312
Germany	3,052
Greece	1,353
Hungary	1,090
Iceland	1,836
Ireland	2,086
Italy	4,297
Japan	3,016
Korea	1,344
Netherlands	2,619
Portugal	2,239
Spain	2,097
Sweden	3,340
Turkey	673
United Kingdom	2,715
United States	4,028

*Purchasing power parity (PPP) indices were used to convert other currencies to U.S. dollars. Because the fiscal year has a different starting date in different countries, within-country Consumer Price Indexes (CPI) were used to adjust the PPP indices to account for inflation.
SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996, Table F5.1.

Table 3.9: Pupil/teacher ratios in public elementary and secondary schools, 1994

Country	Pupil/teacher ratio
Australia	15.4
Austria	10.1
Belgium	9.4
Canada	17.8
Czech Republic	14.5
Denmark	10.1
France	15.4
Germany	18.2
Greece	14.0
Hungary	11.1
Iceland	9.4
Ireland	19.7
Italy	9.1
Japan	17.2
Korea	28.6
Mexico	24.7
New Zealand	17.2
Portugal	12.5
Russian Federation	16.7
Spain	15.6
Sweden	12.4
Switzerland	14.2
Turkey	26.1
United Kingdom	18.4
United States	17.3

SOURCE: Organization for Economic Cooperation and Development, unpublished data, 1997.

Table 3.10: Regional variation in expenditures per pupil for public elementary and secondary schools, 1993

Country	Variation
Australia	0.092
Canada	0.096
France	0.081
Sweden	0.066
Switzerland	0.172
United States	0.221

SOURCE: Organization for Economic Cooperation and Development, unpublished data, 1997.

Table 3.11: Regional variation in pupil/teacher ratios in public elementary and secondary schools, 1993

Country	Variation
Australia	0.056
Austria	0.044
Canada	0.070
Finland	0.127
France	0.044
Germany	0.062
Italy	0.077
Korea	0.176
Mexico	0.104
Netherlands	0.017
Spain	0.094
Sweden	0.042
Switzerland	0.177
United States	0.162

SOURCE: Organization for Economic Cooperation and Development, unpublished data, 1997.

Table 3.12: Public expenditures for elementary and secondary education, by source of funds, 1993

	Funding source		
Country	Central	Regional	Local
Australia	25.0	75.1	(1)
Austria	33.5	43.7	22.8
Belgium	(1)	94.3	5.7
Canada	3.5	63.9	32.6
Czech Republic	80.5	(1)	19.5
Denmark	31.6	11.3	57.1
Finland	53.3	(1)	46.7
France	75.7	11.3	13.0
Germany	3.5	76.9	19.6
Greece	88.5	11.5	(1)
Hungary	67.1	(2)	32.9
Iceland	64.8	(3)	35.2
Ireland	99.9	(1)	0.1
Italy	83.1	3.6	13.2
Japan	24.1	75.9	(2)
Netherlands	93.6	0.1	6.2
New Zealand	100.0	(1)	(1)
Portugal	100.0	(1)	(1)
Spain	40.9	53.0	6.1
Switzerland	3.7	53.2	43.1
Turkey	100.0	(1)	(1)
United Kingdom	7.5	(4)	92.5
United States	7.9	47.7	44.3

(1) Data not applicable because the question does not apply.
(2) Data included in another category of question, or in another question.
(3) Magnitude is either negligible or zero.
(4) Data unavailable.
SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996, Table F12.2.

Table 4.1: Mean scale score in mathematics and science at grade 4, 1995

	Mathematics			Science		
Country	Mean	S.E.	Relationship to U.S.	Mean	S.E.	Relationship to U.S.
Australia	546	3.1	o	562	2.9	o
Austria	559	3.1	+	565	3.3	o
Canada	532	3.3	o	549	3.0	-
Cyprus	502	3.1	-	475	3.3	-
Czech Republic	567	3.3	+	557	3.1	o
England	513	3.2	-	551	3.3	-
Greece	492	4.4	-	497	4.1	-
Hong Kong	587	4.3	+	533	3.7	-
Hungary	548	3.7	o	532	3.4	-
Iceland	474	2.7	-	505	3.3	-
Iran, Islamic Repub.	429	4.0	-	416	3.9	-
Ireland	550	3.4	o	539	3.3	-
Israel	531	3.5	o	505	3.6	-
Japan	597	2.1	+	574	1.8	o
Korea	611	2.1	+	597	1.9	+
Kuwait	400	2.8	-	401	3.1	-
Latvia (LSS)	525	4.8	-	512	4.9	-
Netherlands	577	3.4	+	557	3.1	o
New Zealand	499	4.3	-	531	4.9	-
Norway	502	3.0	-	530	3.6	-
Portugal	475	3.5	-	480	4.0	-
Scotland	520	3.9	-	536	4.2	-
Singapore	625	5.3	+	547	5.0	-
Slovenia	552	3.2	o	546	3.3	-
Thailand	490	4.7	-	473	4.9	-
United States	545	3.0	o	565	3.1	o

SOURCE: International Association for the Evaluation of Educational Achievement
TIMSS International Study Center, *Mathematics Achievement in the Primary School Years,* Table 1.1 , *Science Achievement In the Primary School Years*, Table 1.1, IEA's Third International Mathematics and Science Study, 1996.

Table 4.2: Mean scale score in mathematics and science at grade 8, 1995

	Mathematics				Science		
Country	Mean	S.E.	Relationship to U.S.		Mean	S.E.	Relationship to U.S.
Australia	530	4.0	+	Australia	545	3.9	o
Austria	539	3.0	+	Austria	558	3.7	+
Belgium (Fl)	565	5.7	+	Belgium (Fl)	550	4.2	+
Belgium (Fr)	526	3.4	+	Belgium (Fr)	471	2.8	-
Bulgaria	540	6.3	+	Bulgaria	565	5.3	+
Canada	527	2.4	+	Canada	531	2.6	o
Colombia	385	3.4	-	Colombia	411	4.1	-
Cyprus	474	1.9	-	Cyprus	463	1.9	-
Czech Republic	564	4.9	+	Czech Republic	574	4.3	+
Denmark	502	2.8	o	Denmark	478	3.1	-
England	506	2.6	o	England	552	3.3	+
France	538	2.9	+	France	498	2.5	-
Germany	509	4.5	o	Germany	531	4.8	o
Greece	484	3.1	-	Greece	497	2.2	-
Hong Kong	588	6.5	+	Hong Kong	522	4.7	o
Hungary	537	3.2	+	Hungary	554	2.8	+
Iceland	487	4.5	-	Iceland	494	4.0	-
Iran, Islamic Repub.	428	2.2	-	Iran, Islamic Repub.	470	2.4	-
Ireland	527	5.1	+	Ireland	538	4.5	o
Israel	522	6.2	+	Israel	524	5.7	o
Japan	605	1.9	+	Japan	571	1.6	+
Korea	607	2.4	+	Korea	565	1.9	+
Kuwait	392	2.5	-	Kuwait	430	3.7	-
Latvia (LSS)	493	3.1	o	Latvia (LSS)	485	2.7	-
Lithuania	477	3.5	-	Lithuania	476	3.4	-
Netherlands	541	6.7	+	Netherlands	560	5.0	+
New Zealand	508	4.5	o	New Zealand	525	4.4	o
Norway	503	2.2	o	Norway	527	1.9	o
Portugal	454	2.5	-	Portugal	480	2.3	-
Romania	482	4.0	-	Romania	486	4.7	-
Russian Federation	535	5.3	+	Russian Federation	538	4.0	o
Scotland	498	5.5	o	Scotland	517	5.1	-
Singapore	643	4.9	+	Singapore	607	5.5	+
Slovak Republic	547	3.3	+	Slovak Republic	544	3.2	o
Slovenia	541	3.1	+	Slovenia	560	2.5	+
South Africa	354	4.4	-	South Africa	326	6.6	-
Spain	487	2.0	-	Spain	517	1.7	-
Sweden	519	3.0	+	Sweden	535	3.0	o
Switzerland	545	2.8	+	Switzerland	522	2.5	-
Thailand	522	5.7	+	Thailand	525	3.7	o
United States	500	4.6	o	United States	534	4.7	o

SOURCE: International Association for the Evaluation of Educational Achievement

TIMSS International Study Center, *Mathematics Achievement in the Middle School Years,* Table 1.1, *Science Achievement In the Middle School Years*, Table 1.1, IEA's Third International Mathematics and Science Study, 1996.

Table 4.3 Mathematics and science achievement at the end of secondary school, scale score, 1995

	Mathematics		Science	
Country	Mean	Standard error	Mean	Standard error
Australia[1]	522	9.3	527	9.8
Austria[1]	518	5.3	520	5.6
Canada[1]	519	2.8	532	2.6
Cyprus	446	2.5	448	3.0
Czech Republic	466	12.3	487	8.8
Denmark[3]	547	3.3	509	3.6
France[1]	523	5.1	487	5.1
Germany[2]	495	5.9	497	5.1
Hungary	483	3.2	471	3.0
Iceland[1]	534	2.0	549	1.5
Italy[1]	476	5.5	475	5.3
Lithuania	469	6.1	461	5.7
Netherlands[3]	560	4.7	558	5.3
New Zealand	522	4.5	529	5.2
Norway[1]	528	4.1	544	4.1
Russian Federation	471	6.2	481	5.7
Slovenia[3]	512	8.3	517	8.2
South Africa[3]	356	8.3	349	10.5
Sweden	552	4.3	559	4.4
Switzerland	540	5.8	523	5.3
United States[1]	461	3.2	480	3.3

[1]Countries not satisfying guidelines for sample participation rates.

[2]Countries with unapproved student sampling.

[3]Countries with unapproved sampling procedures and low participation rates.

SOURCE: International Associaton for the Evaluation of Educaitonal Achievement, *Mathematics and Science Achievement in the Final Year of Secondary School: IEA's Third International Mathematics and Science Study*, 1998.

Table 4.4: Achievement in mathematics and science at age 13 in percentage of questions answered correctly, 1991

	Mathematics			Science	
Country	Mean	S.E.		Mean	S.E.
Canada	62	0.6	Canada	69	0.4
China	80	1.0	China	67	1.1
Emilia Romagna-Italy	64	0.9	Emilia Romagna-Italy	70	0.7
England	61	2.2	England	69	1.2
Fortaleza, Brazil	32	0.6	Fortaleza, Brazil	46	0.6
France	64	0.8	France	69	0.6
Hungary	68	0.8	Hungary	73	0.5
Ireland	61	0.9	Ireland	63	0.6
Israel	63	0.8	Israel	70	0.7
Jordan	40	1.0	Jordan	57	0.7
Korea	73	0.6	Korea	78	0.5
Mozambique	28	0.3	Portugal	63	0.8
Portugal	48	0.8	Sao Paolo, Brazil	53	0.6
Sao Paolo, Brazil	37	0.8	Scotland	68	0.6
Scotland	61	0.9	Slovenia	70	0.5
Slovenia	57	0.8	Soviet Union (former)	71	1.0
Soviet Union (former)	70	1.0	Spain	68	0.6
Spain	55	0.8	Switzerland	74	0.9
Switzerland	71	1.3	Taiwan	76	0.4
Taiwan	73	0.7	United States	67	1.0
United States	55	1.0			

SOURCE: Educational Testing Service, *Learning Science,* Figure 1.1, *Learning Mathematics,* Figure 1.1, International Assessment of Educational Progress, 1991.

Table 4.5: Achievement in mathematics and science at age 9 in percentage of questions answered correctly, 1991

	Mathematics			Science	
Country	Mean	S.E.		Mean	S.E.
Korea	75	0.6	Korea	68	0.5
Hungary	68	0.6	Taiwan	67	0.5
Taiwan	68	0.8	Emilia-Romagna, Italy	67	0.9
Emilia-Romagna, Italy	68	0.9	United States	65	0.9
Soviet Union (former)	66	1.3	Canada	63	0.4
Scotland	66	0.9	England	63	0.9
Israel	64	0.7	Hungary	63	0.5
Spain	62	1.0	Spain	62	0.7
Canada	60	0.5	Soviet Union (former)	62	1.2
Ireland	60	0.8	Scotland	62	0.7
England	59	1.9	Israel	61	0.7
United States	58	1.0	Slovenia	58	0.5
Slovenia	56	0.6	Ireland	57	0.7
Portugal	55	0.9	Portugal	55	0.7

SOURCE: Educational Testing Service, *Learning Science,* Figure 6.1, *Learning Mathematics,* Figure 6.1, International Assessment of Educational Progress, 1991.

Table 4.6: Reading achievement total scale score (mean) at grades 4 and 9, 1991

	Grade 4			Grade 9	
Country	Mean	S.E.	Country	Mean	S.E.
Belgium (Fr)	507	3.2	Belgium (Fr)	481	4.9
Canada (BC)	500	3.0	Botswana	330	2.0
Cyprus	481	2.3	Canada (BC)	522	3.0
Denmark	475	3.5	Cyprus	497	2.2
Finland	569	3.4	Denmark	525	2.1
France	531	4.0	Finland	560	2.5
Germany (East)	499	4.3	France	549	4.3
Germany (West)	503	3.0	Germany (East)	526	3.5
Greece	504	3.7	Germany (West)	522	4.4
Hong Kong	517	3.9	Greece	509	2.9
Hungary	499	3.1	Hong Kong	535	3.7
Iceland	518	0.0	Hungary	536	3.3
Indonesia	394	3.0	Iceland	536	0.0
Ireland	509	3.6	Ireland	511	5.2
Italy	529	4.3	Italy	515	3.4
Netherlands	485	3.6	Netherlands	514	4.9
New Zealand	528	3.3	New Zealand	545	5.6
Norway	524	2.6	Norway	516	2.3
Portugal	478	3.6	Philippines	430	3.9
Singapore	515	1.0	Portugal	523	3.1
Slovenia	498	2.6	Singapore	534	1.1
Spain	504	2.5	Slovenia	532	2.3
Sweden	539	2.8	Spain	490	2.5
Switzerland	511	2.7	Sweden	546	2.5
Trinidad/Tobago	451	3.4	Switzerland	536	3.2
United States	547	2.8	Thailand	477	6.2
Venezuela	383	3.4	Trinidad/Tobago	479	1.7
			United States	535	4.8
			Venezuela	417	3.1
			Zimbabwe	372	3.8

SOURCE: U.S. Department of Education, National Center for Education Statistics,*Reading Literacy in the* United States: Findings from the IEA Literacy Study, Tables 1 & 2, 1996.

Table 4.7: Difference in literacy of 9- and 14-year-old students, scale score, 1991

	Age 9		Age 14		Difference in Score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Belgium (Fr)	334	5.9	446	4.3	126	7.3
Canada (BC)	325	4.5	494	3.1	168	5.5
Denmark	291	5.1	500	2.5	209	5.7
Finland	419	4.3	545	2.3	126	4.9
France	367	5.8	531	4.4	154	7.3
West Germany (former)	329	6.4	498	2.5	164	6.8
East Germany (former)	322	6.1	501	3.5	180	7.0
Greece	332	5.6	482	2.2	147	6.0
Iceland	350	0.0	514	0.1	163	0.0
Ireland	337	6.2	484	5.1	142	8.0
Italy	365	6.1	488	3.3	146	7.0
Netherlands	304	6.1	486	4.6	178	7.7
New Zealand	364	5.8	528	6.0	163	8.3
Norway	358	3.3	489	2.6	131	4.2
Spain	330	3.6	456	3.0	150	4.7
Sweden	379	4.5	529	2.4	150	5.1
Switzerland	340	4.3	516	3.3	172	5.4
United States	389	4.9	514	5.1	125	7.1

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1995. Table R04.

Table 4.8: Mathematics achievement for boys and girls at grade 4, scale score, 1995

	Boys		Girls		Difference In Score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Australia	547	3.5	545	3.7	2	5.1
Austria	563	3.6	555	3.6	8	5.1
Canada	534	3.4	531	3.9	3	5.2
Cyprus	506	3.5	499	3.3	8	4.8
Czech Republic	568	3.4	566	3.6	3	5.0
England	515	3.4	510	4.4	5	5.5
Greece	491	5.0	493	4.5	2	6.8
Hong Kong	586	4.7	587	4.2	1	6.3
Hungary	552	4.2	546	3.9	5	5.8
Iceland	474	3.3	473	3.0	1	4.5
Iran, Islamic Repub.	433	6.0	424	5.0	9	7.8
Ireland	548	3.9	551	4.3	3	5.8
Israel	537	4.4	528	4.1	9	6.0
Japan	601	2.5	593	2.2	8	3.3
Korea	618	2.5	603	2.6	15	3.6
Latvia (LSS)	521	5.5	530	5.2	9	7.5
Netherlands	585	3.8	569	3.4	15	5.1
New Zealand	494	5.7	504	4.3	10	7.1
Norway	5.4	3.5	499	3.6	5	5.0
Portugal	478	3.8	473	3.7	4	5.3
Scotland	520	4.3	520	3.8	0	5.8
Singapore	620	5.5	630	6.4	10	8.4
Slovenia	5551	3.4	554	4.0	3	5.2
Thailand	485	5.8	496	4.2	11	7.1
United States	545	3.1	544	3.3	2	4.5

SOURCE: International Association for the Evaluation of Educational Achievement
TIMSS International Study Center, *Mathematics Achievement in the Primary School Years,* Table 1.6,
IEA's Third International Mathematics and Science Study, 1996.

Table 4.9: Mathematics achievement for boys and girls at grade 8, scale score, 1995

	Girls		Boys		Difference In Score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Australia	532	4.6	527	5.1	-5	6.9
Austria	536	4.5	544	3.2	8	5.6
Belgium (Fl)	567	7.4	563	8.8	4	11.5
Belgium (Fr)	524	3.7	530	4.7	6	6.0
Canada	530	2.7	526	3.2	-4	4.2
Colombia	384	3.6	386	6.9	2	7.7
Cyprus	475	2.5	472	2.8	3	3.7
Czech Republic	558	6.3	569	4.5	11	7.7
Denmark	494	3.4	511	3.2	17	4.7
England	504	3.5	508	5.1	4	6.2
France	536	3.8	542	3.1	6	4.9
Germany	509	5.0	512	5.1	3	7.1
Greece	478	3.1	490	3.7	12	4.8
Hungary	537	3.6	537	3.6	0	5.1
Iceland	486	5.6	488	5.5	2	7.8
Iran, Islamic Rep.	421	3.3	434	2.9	13	4.4
Ireland	520	6.0	535	7.2	14	9.3
Japan	600	2.1	609	2.6	9	3.3
Korea	598	3.4	615	3.4	17	4.7
Lithuania	478	4.1	477	4.0	1	5.7
Netherlands	536	6.4	545	7.8	8	10.1
Norway	501	2.7	505	2.8	4	3.9
Portugal	449	2.7	460	2.8	11	3.9
Russian Federation	536	5.0	535	6.3	-1	8.0
Scotland	490	5.2	506	6.6	16	8.4
South Africa	349	4.1	360	6.3	11	7.5
Spain	483	2.6	492	2.5	10	3.6
Sweden	518	3.1	520	3.6	2	4.7
Switzerland	543	3.1	548	3.5	5	4.7
United States	497	4.5	502	5.2	5	6.9

SOURCE: International Association for the Evaluation of Educational Achievement
TIMSS International Study Center, *Mathematics Achievement in the Middle School Years,* Table 1.6,
IEA's Third International Mathematics and Science Study, 1996.

Table 4.10: Mathematics achievement for boys and girls in their final year of secondary school, scale score, 1995

	Boys		Girls		Difference In Score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Australia	540	10.3	510	9.3	30	13.9
Austria	545	7.2	503	5.5	41	9.0
Canada	537	3.8	504	3.5	34	5.2
Cyprus	454	4.9	439	3.7	15	6.1
Czech Republic	488	11.3	443	16.8	45	20.2
Denmark	575	4.0	523	4.0	52	5.7
France	544	5.6	506	5.3	38	7.7
Germany	509	8.8	580	8.8	29	12.4
Hungary	485	4.9	481	4.8	5	6.9
Iceland	558	3.4	541	2.2	44	4.1
Italy	490	7.4	464	6.0	26	9.5
Lithuania	485	7.3	461	7.7	23	10.6
Netherlands	585	5.6	533	5.9	53	8.2
New Zealand	536	4.9	507	6.2	29	7.9
Norway	555	5.3	501	4.8	54	7.1
Russian Federation	488	6.5	460	6.6	27	9.2
Slovenia	535	12.7	490	8.0	46	15.0
South Africa	365	9.3	348	10.8	17	14.3
Sweden	573	5.9	531	3.9	42	7.0
Switzerland	555	6.4	522	7.4	33	9.8
United States	466	4.1	456	3.6	11	5.5

SOURCE: International Association for the Evaluation of Educational Achievement*Mathematics and Science Achievement in the Final Year of Secondary School* IEA's Third International Mathematics and Science Study, 1998.

Table 4.11: Science achievement for boys and girls at grade 4, scale score, 1995

	Boys		Girls		Difference In Score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Australia	569	3.3	556	3.2	13	4.6
Austria	572	3.9	556	3.7	15	5.3
Canada	553	3.7	545	3.2	8	4.9
Cyprus	480	4.0	471	3.1	10	5.1
Czech Republic	565	3.4	548	3.6	17	5.0
England	555	4.0	548	3.4	7	5.3
Greece	501	4.5	494	4.3	7	6.2
Hong Kong	540	4.1	526	3.8	14	5.6
Hungary	539	3.8	525	3.9	14	5.4
Iceland	514	4.3	496	3.3	18	5.4
Iran, Islamic Repub.	421	5.9	412	4.7	9	7.6
Ireland	543	3.5	536	4.5	7	5.7
Israel	512	4.5	501	3.8	11	5.9
Japan	580	2.0	567	2.0	14	2.9
Korea	604	2.2	590	2.5	14	3.3
Latvia (LSS)	512	5.4	513	5.5	1	7.7
Netherlands	570	3.6	544	3.5	26	5.0
New Zealand	527	6.1	535	4.8	8	7.7
Norway	534	4.7	526	3.7	8	5.9
Portugal	481	4.5	478	4.2	3	6.2
Scotland	538	4.5	533	4.3	4	6.2
Singapore	549	5.4	545	6.3	4	8.3
Slovenia	548	3.3	544	4.0	4	5.2
Thailand	471	5.9	474	4.3	3	7.3
United States	571	3.3	560	3.3	12	4.6

SOURCE: International Association for the Evaluation of Educational Achievement
TIMSS International Study Center, *Science Achievement in the Primary School Years,* Table 1.6,
IEA's Third International Mathematics and Science Study, 1996.

Table 4.12: Science achievement for boys and girls at grade 8, scale score, 1995

	Girls		Boys		Difference In Score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Korea	551	2.3	576	2.7	24	3.6
England	542	4.2	562	5.6	20	7.1
Germany	524	4.9	542	5.9	18	7.6
Spain	508	2.3	526	2.1	18	3.1
Japan	562	2.0	579	2.4	17	3.1
Sweden	528	3.4	543	3.4	15	4.8
Switzerland	514	3.0	529	3.2	15	4.4
Canada	525	3.7	537	3.1	12	4.8
United States	530	5.2	539	4.9	9	7.2
Australia	540	4.1	550	5.2	10	6.6
France	490	3.3	506	2.7	16	4.3
Austria	549	4.6	566	4.0	18	6.1
Belgium (Fl)	543	5.8	558	6.0	15	8.4
Belgium (Fr)	463	2.9	479	4.8	16	5.6
Czech Republic	562	5.8	586	4.2	24	7.2
Denmark	463	3.9	494	3.6	31	5.3
Hungary	545	3.4	563	3.1	18	4.7
Iceland	486	4.6	501	5.1	16	6.9
Ireland	532	5.2	544	6.6	12	8.4
Netherlands	550	4.9	570	6.4	20	8.1
Norway	520	2.0	534	3.2	14	3.8
Russian Federation	533	3.7	544	4.9	11	6.2
Scotland	507	4.7	527	6.4	20	7.9
South Africa	315	6.0	337	9.5	21	11.3
Lithuania	470	4.0	484	3.8	14	5.5
Portugal	468	2.7	490	2.8	22	3.9
Cyprus	465	2.7	461	2.2	-4	3.4
Iran, Islamic Rep.	461	3.2	477	3.8	17	4.9
Greece	489	3.1	505	2.6	16	4.0
Colombia	405	4.6	418	7.3	13	8.6

SOURCE: International Association for the Evaluation of Educational Achievement
TIMSS International Study Center, *Science Achievement in the Middle School Years,* Table 1.6,
IEA's Third International Mathematics and Science Study, 1996.

Table 4.13: Science achievement for boys and girls in their final year of secondary school, scale score, 1995

	Boys		Girls		Difference In Score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Australia	547	11.5	513	9.4	34	14.8
Austria	554	8.7	501	5.8	53	10.4
Canada	550	3.6	518	3.8	32	5.2
Cyprus	459	5.8	439	3.0	20	6.5
Czech Republic	512	8.8	460	11.0	51	14.0
Denmark	532	5.4	490	4.1	41	6.8
France	508	6.7	468	4.8	39	8.3
Germany	514	7.9	478	8.5	35	11.6
Hungary	484	4.2	455	4.3	29	6.0
Iceland	572	2.7	530	2.1	41	3.4
Italy	495	6.7	458	5.6	37	8.8
Lithuania	481	6.4	450	7.3	31	9.7
Netherlands	582	5.7	532	6.2	49	8.4
New Zealand	543	7.1	515	5.2	28	8.8
Norway	574	5.1	513	4.5	61	6.8
Russian Federation	510	5.7	463	6.7	47	8.8
Slovenia	541	12.7	494	6.4	47	14.3
South Africa	367	11.5	333	13.0	34	17.4
Sweden	585	5.9	534	3.5	50	6.8
Switzerland	540	6.1	500	7.8	40	9.9
United States	492	4.5	469	3.9	23	5.9

SOURCE: International Association for the Evaluation of Educational Achievement*Mathematics and Science Achievement in the Final Year of Secondary School,* IEA's Third International Mathematics and Science Study, 1998.

Table 4.14: Difference in mathematics scores for boys and girls at age 13, in percentage of questions answered correctly, 1991

	Boys		Girls		Difference in score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Canada	63	0.7	61	0.6	2	0.9
China	82	1.0	79	1.1	3	1.5
Emilia Romagna-Italy	66	1.1	62	0.9	4	1.4
England	61	3.0	60	2.2	1	3.7
Fortaleza, Brazil	35	0.9	31	0.6	4	1.1
France	66	0.9	63	0.9	3	1.3
Hungary	69	1.0	68	0.9	1	1.3
Ireland	63	1.2	58	1.1	5	1.6
Israel	64	0.9	62	1.1	2	1.4
Jordan	41	1.2	39	1.9	2	2.2
Korea	74	0.9	72	1.0	2	1.3
Mozambique	29	0.5	28	0.3	1	0.6
Portugal	49	1.3	48	0.9	1	1.6
Sao Paolo, Brazil	38	0.9	36	0.9	2	1.3
Scotland	60	1.0	61	1.1	-1	1.5
Slovenia	58	0.8	56	1.0	2	1.3
Soviet Union (former)	70	1.3	70	0.9	0	1.6
Spain	57	1.1	54	0.8	3	1.4
Switzerland	73	1.5	69	1.1	4	1.9
Taiwan	73	0.9	72	0.9	1	1.3
United States	56	1.1	55	1.3	1	1.7

SOURCE: Educational Testing Service, *Learning Mathematics*, Data Appendix, p. 145, International Assessment of Educational Progress, 1991.

Table 4.15: Difference in science scores for boys and girls at age 13, in percentage of questions answered correctly, 1991

	Boys		Girls		Difference in score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Canada	71	0.5	67	0.4	4	0.6
China	69	1.2	65	1.1	4	1.6
Emilia Romagna-Italy	72	0.8	68	0.8	4	1.1
England	70	1.6	67	1.8	3	2.4
Fortaleza, Brazil	49	0.7	44	0.8	5	1.1
France	71	0.7	67	0.7	4	1.0
Hungary	76	0.6	71	0.7	5	0.9
Ireland	66	0.9	61	0.8	5	1.2
Israel	72	0.8	68	0.8	4	1.1
Jordan	57	0.8	56	1.3	1	1.5
Korea	80	0.6	75	0.7	5	0.9
Portugal	65	1.0	60	0.8	5	1.3
Sao Paolo, Brazil	56	0.8	50	0.7	6	1.1
Scotland	70	0.7	66	0.9	4	1.1
Slovenia	73	0.7	68	0.6	5	0.9
Soviet Union (former)	73	1.1	70	1.0	3	1.5
Spain	69	0.8	66	0.7	3	1.1
Switzerland	76	1.1	71	0.8	5	1.4
Taiwan	76	0.6	75	0.6	1	0.8
United States	69	1.2	65	0.9	4	1.5

SOURCE: Educational Testing Service, *Learning Science*, Data Appendix, p. 143, International Assessment of Educational Progress, 1991.

Table 4.16: Difference in mathematics scores for boys and girls at age 9, in percentage of questions answered correctly, 1991

	Boys		Girls		Difference in score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Canada	60	0.7	60	0.6	0	0.9
Emilia-Romagna, Italy	70	1.0	66	1.1	4	1.5
England	59	1.5	60	2.9	1	3.3
Hungary	68	0.8	68	0.8	0	1.1
Ireland	60	0.9	60	1.1	0	1.4
Israel	66	0.8	63	0.9	3	1.2
Korea	77	0.7	72	0.8	5	1.1
Portugal	57	1.1	54	1.1	3	1.6
Scotland	66	1.1	66	1.1	0	1.6
Slovenia	56	0.7	56	0.7	0	1.0
Soviet Union (former)	66	1.2	65	1.4	1	1.8
Spain	62	1.3	62	1.1	0	1.7
Taiwan	68	0.8	68	0.9	0	1.2
United States	59	1.1	58	1.2	1	1.6

SOURCE: Educational Testing Service, *Learning Mathematics*, Data Appendix, p. 150, International Assessment of Educational Progress, 1991.

Table 4.17: Difference in science scores for boys and girls at age 9, in percentage of questions answered correctly, 1991

	Boys		Girls		Difference in score	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Canada	64	0.4	62	0.5	2	0.6
Emilia-Romagna, Italy	68	1.0	66	1.0	2	1.4
England	64	1.3	62	1.2	2	1.8
Hungary	63	0.6	62	0.6	1	0.8
Ireland	58	1.0	55	0.9	3	1.3
Israel	63	0.9	59	0.7	4	1.1
Korea	70	0.7	65	0.5	5	0.9
Portugal	56	0.9	53	0.9	3	1.3
Scotland	62	0.7	63	1.0	-1	1.2
Slovenia	58	0.6	57	0.6	1	0.8
Soviet Union (former)	63	1.4	60	1.2	3	1.8
Spain	63	0.9	60	0.7	3	1.1
Taiwan	69	0.6	65	0.7	4	0.9
United States	66	1.1	64	0.8	2	1.4

SOURCE: Educational Testing Service, *Learning Science*, Data Appendix, p. 150, International Assessment of Educational Progress, 1991.

Table 4.18: Achievement scores for boys and girls in reading at age 9, scale score, 1991

	Boys		Girls		Difference	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Belgium (Fr)	503	4.5	512	4.5	9	6.4
Canada (BC)	495	5.4	506	5.4	11	7.6
Cyprus	479	3.2	484	3.2	5	4.5
Denmark	463	5.5	489	4.9	26	7.1
E. Germany	490	6.3	509	6.1	19	8.8
France	530	5.7	533	5.6	3	8.0
Greece	499	4.4	510	4.2	11	6.1
Hong Kong	512	3.7	524	3.6	12	5.2
Hungary	495	3.8	504	3.6	9	5.2
Iceland	508	0.0	528	0.0	20	0.0
Indonesia	394	3.6	397	3.7	3	5.2
Ireland	502	5.2	517	5.0	15	7.2
Italy	525	5.2	537	5.1	12	7.3
Netherlands	483	5.4	488	5.2	5	7.5
New Zealand	519	4.1	539	4.0	20	5.7
Norway	517	4.6	533	4.0	16	6.1
Portugal	474	4.5	483	4.5	9	6.4
Singapore	510	1.3	521	1.3	11	1.8
Slovenia	491	3.3	506	3.4	15	4.7
Spain	500	3.4	508	3.3	8	4.7
Sweden	533	4.4	546	4.3	13	6.2
Switzerland	507	4.2	517	4.2	10	5.9
Trinidad/Tobago	443	4.3	460	4.1	17	5.9
United States	543	3.6	552	3.4	9	5.0
Venezuela	379	4.2	392	3.9	13	5.7
W. Germany	501	3.9	508	3.8	7	5.4

SOURCE: Elley, Warwick B., *How in the World do Students Read?* Table 6.1, International Association for the Evaluation of Educational Achievement, 1992.

Table 4.19: Achievement scores for boys and girls in reading at age 14, scale score, 1991

	Boys		Girls		Difference	
Country	Mean	S.E.	Mean	S.E.	Mean	S.E.
Belgium (Fr)	480	5.2	486	5.4	6	7.5
Botswana	327	3.2	333	2.8	6	4.3
Canada (BC)	513	3.4	534	3.3	21	4.7
Cyprus	493	3.0	501	3.2	8	4.4
Denmark	523	2.9	527	2.8	4	4.0
E. Germany	523	4.0	530	4.0	7	5.7
France	553	5.0	549	4.2	4	6.5
Greece	509	3.3	510	3.1	1	4.5
Hong Kong	533	4.0	538	3.8	5	5.5
Hungary	528	3.8	542	3.7	14	5.3
Iceland	530	0.0	543	0.0	13	0.0
Ireland	502	5.1	525	5.0	23	7.1
Italy	511	4.0	520	3.9	9	5.6
Netherlands	511	4.9	520	5.2	9	7.1
New Zealand	544	5.9	549	5.5	5	8.1
Norway	516	3.2	520	3.1	4	4.5
Portugal	528	3.4	520	3.2	8	4.7
Singapore	534	1.6	534	1.5	0	2.2
Slovenia	529	3.3	534	3.3	5	4.7
Spain	488	3.3	492	3.1	4	4.5
Sweden	540	3.3	555	3.2	15	4.6
Switzerland	535	3.5	538	3.3	3	4.8
Trinidad/Tobago	466	2.6	492	2.2	26	3.4
United States	530	6.3	543	5.9	13	8.6
Venezuela	419	4.0	421	3.5	2	5.3
W. Germany	522	4.4	526	4.4	4	6.2
Zimbabwe	380	4.4	363	4.1	17	6.0

SOURCE: Elley, Warwick B., *How in the World do Students Read?* Table 6.2
International Association for the Evaluation of Educational Achievement, 1992.

Table 4.20: Attitudes about science and achievement at age 13, by gender, 1991

Country	Percent of students who think science equally important for boys & girls		Score in science for boys		Score in science for girls		Difference in score	
	Percent	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
Canada	96	0.4	71	0.5	67	0.4	4	0.6
China	99	0.2	69	1.2	65	1.1	4	1.6
Emilia Romagna-Italy	94	0.6	72	0.8	68	0.8	4	1.1
England	97	0.7	70	1.6	67	1.8	3	2.4
Fortaleza, Brazil	92	0.8	49	0.7	44	0.8	5	1.1
France	93	0.7	71	0.7	67	0.7	4	1.0
Hungary	95	0.6	76	0.6	71	0.7	5	0.9
Ireland	95	0.6	66	0.9	61	0.8	5	1.2
Israel	88	1.0	72	0.8	68	0.8	4	1.1
Jordan	70	1.7	57	0.8	56	1.3	1	1.5
Korea	62	1.4	80	0.6	75	0.7	5	0.9
Portugal	97	0.6	65	1.0	60	0.8	5	1.3
Sao Paolo, Brazil	95	0.6	56	0.8	50	0.7	6	1.1
Scotland	97	0.5	70	0.7	66	0.9	4	1.1
Slovenia	91	0.8	73	0.7	68	0.6	5	0.9
Soviet Union (former)	74	1.8	73	1.1	70	1.0	3	1.5
Spain	96	0.5	69	0.8	66	0.7	3	1.1
Switzerland	93	0.6	76	1.1	71	0.8	5	1.4
Taiwan	78	1.1	76	0.6	75	0.6	1	0.8
United States	91	0.9	69	1.2	65	0.9	4	1.5

SOURCE: Educational Testing Service, *Learning Science,* Figure 1.2, International Assessment of Educational Progress, 1991.

Table 4.21: Attitudes about mathematics and achievement at age 13, by gender, 1991

Country	Percent of students who think mathematics equally Important for boys & girls		Score in mathematics for boys		Score in mathematics for girls		Difference in score	
	Percent	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
Canada	97	0.3	63	0.7	61	0.6	2	0.9
China	99	0.2	82	1.0	79	1.1	3	1.5
Emilia Romagna-Italy	93	0.7	66	1.1	62	0.9	4	1.4
England	97	0.8	61	3.0	60	2.2	1	3.7
Fortaleza, Brazil	91	0.9	35	0.9	31	0.6	4	1.1
France	94	0.6	66	0.9	63	0.9	3	1.3
Hungary	93	0.7	69	1.0	68	0.9	1	1.3
Ireland	95	0.5	63	1.2	58	1.1	5	1.6
Israel	92	0.6	64	0.9	62	1.1	2	1.4
Jordan	76	1.4	41	1.2	39	1.9	2	2.2
Korea	56	1.2	74	0.9	72	1.0	2	1.3
Mozambique	84	1.1	29	0.5	28	0.3	1	0.6
Portugal	97	0.7	49	1.3	48	0.9	1	1.6
Sao Paolo, Brazil	95	0.8	38	0.9	36	0.9	2	1.3
Scotland	98	0.3	60	1.0	61	1.1	-1	1.5
Slovenia	91	1.0	58	0.8	56	1.0	2	1.3
Soviet Union (former)	81	1.0	70	1.3	70	0.9	0	1.6
Spain	97	0.5	57	1.1	54	0.8	3	1.4
Switzerland	92	0.6	73	1.5	69	1.1	4	1.9
Taiwan	76	1.0	73	0.9	72	0.9	1	1.3
United States	94	0.8	56	1.1	55	1.3	1	1.7

SOURCE: Educational Testing Service, *Learning Mathematics,* Figure 1.2, International Assessment of Educational Progress, 1991.

Table 4.22: Total amount of daily out-of-school study time at grade 8, 1995

	Average hours per day studying mathematics or doing mathematics homework		Average hours per day studying science or doing science homework	
Country	Mean	S.E.	Mean	S.E.
Australia	0.7	0.02	0.5	0.01
Austria	0.8	0.02	0.7	0.03
Belgium (Fl)	1.1	0.03	0.8	0.02
Belgium (Fr)	1.0	0.02	0.8	0.02
Canada	0.7	0.02	0.6	0.02
Colombia	1.3	0.06	1.2	0.06
Cyprus	1.2	0.02	0.9	0.02
Czech Republic	0.6	0.02	0.6	0.02
Denmark	0.5	0.02	0.3	0.02
France	0.9	0.02	0.6	0.01
Germany	0.6	0.02	0.6	0.02
Greece	1.2	0.03	1.2	0.03
Hong Kong	0.9	0.02	0.6	0.02
Hungary	0.8	0.02	1.1	0.02
Iceland	0.9	0.03	0.6	0.03
Iran, Islamic Repub.	2.0	0.05	1.9	0.05
Ireland	0.7	0.02	0.6	0.01
Israel	1.0	0.04	0.6	0.03
Japan	0.8	0.01	0.6	0.01
Korea	0.8	0.02	0.6	0.02
Kuwait	1.6	0.04	1.5	0.05
Latvia (LSS)	0.9	0.02	0.6	0.02
Lithuania	0.8	0.02	0.7	0.02
Netherlands	0.6	0.01	0.6	0.01
New Zealand	0.7	0.02	0.6	0.01
Norway	0.7	0.02	0.6	0.01
Portugal	1.0	0.02	0.9	0.02
Romania	1.8	0.70	1.6	0.06
Russian Federation	0.9	0.02	1.0	0.02
Scotland	0.6	0.02	0.5	0.01
Singapore	1.4	0.02	1.3	0.02
Slovak Republic	0.7	0.01	0.8	0.02
Slovenia	0.9	0.02	1.0	0.02
Spain	1.2	0.02	1.0	0.02
Sweden	0.7	0.01	0.7	0.01
Switzerland	0.9	0.02	0.7	0.01
Thailand	1.2	0.03	1.0	0.02
United States	0.8	0.02	0.6	0.01

Table 4.22 (continued): Total amount of daily out-of-school study time at grade 8, 1995

Country	Average hours per day studying or doing homework in other subjects		Total hours each day on average	
	Mean	S.E.	Mean	S.E.
Australia	0.9	0.02	2.0	0.04
Austria	0.8	0.02	2.4	0.07
Belgium (Fl)	1.5	0.03	3.4	0.07
Belgium (Fr)	1.2	0.03	3.0	0.07
Canada	0.9	0.03	2.2	0.07
Colombia	2.0	0.70	4.6	0.15
Cyprus	1.5	0.03	3.6	0.06
Czech Republic	0.6	0.02	1.8	0.05
Denmark	0.5	0.02	1.4	0.05
France	1.2	0.03	2.7	0.05
Germany	0.8	0.02	2.0	0.05
Greece	2.0	0.05	4.4	0.08
Hong Kong	1.1	0.03	2.5	0.06
Hungary	1.2	0.03	3.1	0.06
Iceland	0.9	0.03	2.4	0.07
Iran, Islamic Repub.	2.5	0.05	6.4	0.13
Ireland	1.4	0.03	2.7	0.05
Israel	1.2	0.05	2.8	0.10
Japan	1.0	0.02	2.3	0.04
Korea	1.1	0.02	2.5	0.05
Kuwait	2.3	0.07	5.3	0.12
Latvia (LSS)	1.2	0.03	2.7	0.05
Lithuania	1.2	0.04	2.7	0.06
Netherlands	1.0	0.03	2.2	0.04
New Zealand	0.9	0.02	2.1	0.05
Norway	1.0	0.02	2.3	0.04
Portugal	1.1	0.02	3.0	0.05
Romania	1.6	0.06	5.0	0.18
Russian Federation	1.0	0.02	2.9	0.05
Scotland	0.7	0.02	1.8	0.04
Singapore	1.9	0.03	4.6	0.04
Slovak Republic	0.9	0.02	2.4	0.04
Slovenia	0.9	0.02	2.9	0.05
Spain	1.4	0.03	3.6	0.06
Sweden	0.9	0.02	2.3	0.04
Switzerland	1.0	0.02	2.7	0.04
Thailand	1.3	0.02	3.5	0.06
United States	0.9	0.02	2.3	0.04

SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, *Mathematics Achievement In the Middle School Years,* Table 4.7, IEA's Third International Mathematics and Science Study, 1996.

Table 4.23: Total amount of daily out-of-school study time in mathematics at grade 8, 1995

	Less than 1 hour				1 to less than 2 hours			
Country	Percent	S.E.	Scale score	S.E.	Percent	S.E.	Scale score	S.E.
Australia	15	0.1	486	5.7	46	1.0	541	4.4
Austria	9	0.8	524	6.7	46	1.3	551	4.1
Belgium (Fl)	2	0.4	(*)	(*)	25	1.3	552	8.9
Belgium (Fr)	7	0.8	466	7.4	32	1.0	543	4.6
Canada	14	1.2	514	5.6	47	1.1	538	2.8
Colombia	2	0.4	(*)	(*)	17	1.1	394	5.2
Cyprus	9	0.5	442	5.8	19	0.7	475	3.9
Czech Republic	13	1.1	551	7.1	57	1.1	571	5.1
Denmark	39	1.6	517	4.4	39	1.4	508	3.8
France	8	0.7	505	8.0	33	1.2	545	3.6
Germany	14	1.1	476	6.7	51	1.2	521	4.3
Greece	6	0.6	450	7.4	14	0.7	483	5.2
Hong Kong	13	1.0	539	9.3	32	0.9	586	6.6
Hungary	4	0.4	483	11.3	33	1.1	536	5.0
Iceland	5	1.0	450	12.0	46	1.7	501	5.1
Iran, Islamic Repub.	1	0.2	(*)	(*)	5	0.5	428	5.6
Ireland	5	0.6	465	8.8	29	1.0	517	5.3
Israel	5	0.6	539	10.9	36	2.2	546	6.3
Japan	13	0.8	578	5.3	39	0.8	607	2.6
Korea	15	0.9	582	4.9	32	1.1	604	3.5
Kuwait	3	0.6	358	10.3	13	1.5	401	5.5
Latvia (LSS)	4	0.5	467	9.4	35	1.1	507	4.4
Lithuania	5	0.6	453	9.4	39	1.4	487	3.9
Netherlands	3	0.9	492	16.2	54	1.7	539	9.0
New Zealand	12	0.9	472	5.6	51	1.2	519	4.7
Norway	6	0.5	481	6.8	50	1.2	514	2.9
Portugal	3	0.3	458	8.1	41	1.1	463	3.1
Romania	9	0.7	459	10.4	16	1.0	464	7.0
Russian Federation	4	0.5	493	10.3	33	1.1	538	5.3
Scotland	17	1.4	461	4.8	54	1.2	506	5.7
Singapore	2	0.3	(*)	(*)	7	0.4	642	8.0
Slovak Republic	6	0.5	549	8.3	46	0.9	556	3.9
Slovenia	5	0.5	551	9.8	36	1.0	561	4.1
Spain	3	0.4	443	5.5	26	1.0	490	3.1
Sweden	7	0.6	496	6.9	55	1.2	528	3.1
Switzerland	4	0.3	523	7.9	44	1.2	556	3.4
Thailand	3	0.3	495	11.9	26	1.0	514	5.4
United States	17	1.1	471	7.2	42	0.9	514	4.2

Table 4.23 (continued): Total amount of daily out-of-school study time in mathematics at grade 8, 1995

	2 to 3 hours				More than 3 hours			
	Percent	S.E.	Scale score	S.E.	Percent	S.E.	Scale score	S.E.
Australia	22	0.6	543	5.2	17	0.7	532	4.8
Austria	21	0.9	544	4.5	24	1.2	528	5.3
Belgium (Fl)	28	1.1	592	5.9	45	1.6	560	4.6
Belgium (Fr)	21	1.3	544	5.5	40	1.5	519	4.5
Canada	18	0.7	534	3.7	21	1.1	511	3.6
Colombia	20	1.2	389	3.6	61	1.9	390	3.5
Cyprus	26	0.8	491	4.0	46	0.9	475	2.9
Czech Republic	17	0.9	568	8.2	13	0.8	542	7.6
Denmark	13	0.8	479	4.1	9	0.7	468	6.9
France	28	1.0	547	4.5	31	1.2	537	3.7
Germany	18	1.0	524	7.0	17	0.9	498	5.0
Greece	21	0.7	485	3.9	59	1.2	491	3.3
Hong Kong	25	0.9	607	6.1	30	1.1	604	7.2
Hungary	22	0.9	541	5.2	41	1.3	545	3.7
Iceland	25	1.3	489	5.4	23	1.4	477	7.3
Iran, Islamic Repub.	12	1.0	436	4.8	82	1.3	431	2.4
Ireland	40	1.1	547	5.5	26	1.2	533	5.7
Israel	26	1.5	521	6.8	33	2.1	502	6.3
Japan	20	0.6	609	4.0	28	1.0	612	2.7
Korea	25	0.8	607	4.0	29	1.2	628	4.3
Kuwait	19	1.3	397	5.1	65	1.8	392	2.0
Latvia (LSS)	32	1.2	497	4.9	29	1.2	487	3.4
Lithuania	28	1.0	481	4.6	28	1.4	474	5.4
Netherlands	27	1.7	562	7.0	16	0.8	524	6.0
New Zealand	21	1.0	518	6.1	17	0.9	495	5.6
Norway	24	0.9	510	3.6	21	0.9	483	3.6
Portugal	18	0.7	455	3.3	38	1.2	448	3.0
Romania	15	0.7	481	5.4	60	1.6	494	4.2
Russian Federation	25	1.0	538	5.2	38	1.4	544	6.9
Scotland	17	1.0	517	8.6	12	0.8	503	7.4
Singapore	13	0.6	652	6.6	78	0.9	643	4.9
Slovak Republic	25	0.7	548	4.4	23	1.0	532	4.1
Slovenia	21	0.8	537	4.8	37	1.1	523	3.4
Spain	18	0.9	495	3.3	53	1.3	487	2.4
Sweden	17	0.8	525	4.3	21	0.9	503	4.2
Switzerland	19	0.8	548	5.1	33	1.1	536	4.0
Thailand	18	0.7	515	5.7	54	1.5	531	6.6
United States	17	0.7	507	5.5	24	0.8	498	5.9

(*) Insufficient data to report achievement.

SOURCE: International Association for the Evaluation of Educational Achievement, TIMSS International Study Center, *Mathematics Achievement In the Middle School Years,* Table 4.9, IEA's Third International Mathematics and Science Study, 1996.

Table 4.24: Total amount of daily out-of-school study time in science at grade 8, 1995

	Less than 1 hour				1 to less than 2 hours			
Country	Percent	S.E.	Scale score	S.E.	Percent	S.E.	Scale score	S.E.
Australia	15	0.9	505	6.9	46	1.0	556	4.1
Austria	9	0.8	551	9.9	46	1.3	563	4.8
Belgium (Fl)	2	0.4	(*)	(*)	25	1.3	545	5.0
Belgium (Fr)	7	0.8	428	6.9	32	1.0	481	4.7
Canada	14	1.2	524	6.1	47	1.1	541	2.8
Colombia	2	0.4	(*)	(*)	17	1.1	421	5.3
Cyprus	9	0.5	430	7.0	19	0.7	468	4.4
Czech Republic	13	1.1	558	9.0	57	1.1	579	3.9
Denmark	39	1.6	494	4.4	39	1.4	479	4.1
France	8	0.7	481	6.8	33	1.2	497	3.3
Germany	14	1.1	505	8.2	51	1.2	541	4.6
Greece	6	0.6	473	4.8	14	0.7	497	5.0
Hong Kong	13	1.0	489	7.3	32	0.9	519	4.7
Hungary	4	0.4	519	10.0	33	1.1	553	4.4
Iceland	5	1.0	470	8.7	46	1.7	505	5.6
Iran, Islamic Republic	1	0.2	(*)	(*)	5	0.5	476	6.0
Ireland	5	0.6	475	9.0	29	1.0	529	5.4
Israel	5	0.6	532	13.5	36	2.2	555	7.7
Japan	13	0.8	551	4.4	39	0.8	573	2.2
Korea	15	0.9	544	5.0	32	1.1	564	2.9
Kuwait	3	0.6	400	10.4	13	1.5	436	7.8
Latvia (LSS)	4	0.5	468	8.5	35	1.1	492	4.1
Lithuania	5	0.6	457	9.1	39	1.4	484	4.5
Netherlands	3	0.9	519	17.1	54	1.7	559	6.1
New Zealand	12	0.9	488	7.6	51	1.2	536	4.6
Norway	6	0.5	501	7.3	50	1.2	533	2.5
Portugal	3	0.3	465	8.8	41	1.1	488	2.9
Romania	9	0.7	460	11.7	16	1.0	468	7.0
Russian Federation	4	0.5	511	10.1	33	1.1	542	4.4
Scotland	17	1.4	470	5.3	54	1.2	526	5.1
Singapore	2	0.3	(*)	(*)	7	0.4	604	8.4
Slovak Republic	6	0.5	551	7.1	46	0.9	552	3.7
Slovenia	5	0.5	559	9.2	36	1.0	580	3.5
Spain	3	0.4	482	7.9	26	1.0	522	2.8
Sweden	7	0.6	520	6.0	55	1.2	544	3.2
Switzerland	4	0.3	500	8.3	44	1.2	530	3.1
Thailand	3	0.3	510	8.8	26	1.0	520	4.0
United States	17	1.1	507	9.5	42	0.9	548	4.1

Table 4.24 (continued): Total amount of daily out-of-school study time in science at grade 8, 1995

	2 to 3 hours				More than 3 hours			
Country	Percent	S.E.	Scale score	S.E.	Percent	S.E.	Scale score	S.E.
Australia	22	0.6	557	4.9	17	0.7	546	5.0
Austria	21	0.9	561	5.0	24	1.2	553	4.8
Belgium (Fl)	28	1.1	562	5.9	45	1.6	547	3.6
Belgium (Fr)	21	1.3	481	4.5	40	1.5	467	4.0
Canada	18	0.7	531	3.9	21	1.1	517	3.6
Colombia	20	1.2	422	4.9	61	1.9	413	5.8
Cyprus	26	0.8	475	3.4	46	0.9	466	2.9
Czech Republic	17	0.9	582	7.2	13	0.8	560	6.4
Denmark	13	0.8	459	5.5	9	0.7	457	6.8
France	28	1.0	506	4.0	31	1.2	499	3.4
Germany	18	1.0	544	7.0	17	0.9	525	6.5
Greece	21	0.7	500	3.1	59	1.2	502	2.5
Hong Kong	25	0.9	534	4.8	30	1.1	534	5.2
Hungary	22	0.9	557	5.6	41	1.3	557	3.0
Iceland	25	1.3	493	4.5	23	1.4	488	7.5
Iran, Islamic Republic	12	1.0	479	5.2	82	1.3	471	2.7
Ireland	40	1.1	550	4.7	26	1.2	550	4.9
Israel	26	1.5	523	6.9	33	2.1	505	5.2
Japan	20	0.6	572	3.0	28	1.0	577	2.4
Korea	25	0.8	562	3.1	29	1.2	581	3.7
Kuwait	19	1.3	432	7.1	65	1.8	431	3.4
Latvia (LSS)	32	1.2	490	4.1	29	1.2	481	3.0
Lithuania	28	1.0	483	3.8	28	1.4	472	4.7
Netherlands	27	1.7	578	5.4	16	0.8	545	5.7
New Zealand	21	1.0	537	5.7	17	0.9	516	5.7
Norway	24	0.9	536	3.4	21	0.9	516	3.7
Portugal	18	0.7	478	4.1	38	1.2	474	2.8
Romania	15	0.7	487	5.7	60	1.6	499	5.2
Russian Federation	25	1.0	538	4.4	38	1.4	543	4.6
Scotland	17	1.0	537	8.5	12	0.8	532	6.5
Singapore	13	0.6	617	7.3	78	0.9	607	5.4
Slovak Republic	25	0.7	541	3.8	23	1.0	536	4.7
Slovenia	21	0.8	557	3.2	37	1.1	544	3.3
Spain	18	0.9	522	3.5	53	1.3	516	2.2
Sweden	17	0.8	539	4.9	21	0.9	523	4.9
Switzerland	19	0.8	526	6.2	33	1.1	514	3.5
Thailand	18	0.7	519	4.3	54	1.5	532	4.1
United States	17	0.7	541	5.2	24	0.8	533	5.7

(*) Insufficient data to report achievement.

SOURCE: International Association for the Evaluation of Educational Achievement
TIMSS International Study Center, *Science Achievement in the Middle School Years,* Table 4.9
IEA's Third International Mathematics and Science Study, 1996.

Table 4.25: Achievement, time spent on homework, and assistance with homework in science for 13-year-olds, 1991

	Score		Percent of students who spend 4 or more hours per week on science homework		Percent of students who receive help on science homework	
Country	Mean	S.E.	Percent	S.E.	Percent	S.E.
Canada	69	0.4	4	0.3	47	1.0
China	67	1.1	16	1.5	40	1.8
Emilia Romanga-Italy	70	0.7	2	0.4	14	1.0
England	69	1.2	2	0.4	60	2.4
Fortaleza, Brazil	46	0.6	8	0.9	39	1.5
France	69	0.6	1	0.2	44	1.5
Hungary	73	0.5	13	.0.8	61	1.5
Ireland	63	0.6	5	0.7	44	1.9
Israel	70	0.7	4	0.5	31	1.3
Jordan	57	0.7	12	1.0	40	1.7
Korea	78	0.5	9	1.0	44	1.1
Portugal	63	0.8	6	0.7	37	2.1
Sao Paulo, Brazil	53	0.6	8	0.8	39	1.5
Scotland	68	0.6	2	0.4	47	1.6
Slovenia	70	0.5	7	0.7	59	1.7
Soviet Union	71	1.0	59	0.8	26	1.0
Spain	68	0.6	12	0.9	61	1.5
Switzerland	74	0.9	1	0.4	26	1.4
Taiwan	76	0.4	10	0.8	45	1.1
United States	67	1.0	7	0.8	53	1.8

SOURCE: Educational Testing Service, *Learning Science,* Figures 3.1 and 4.1, International Assessment of Educational Progress, 1991.

Table 4.26: Achievement, time spent on homework, and assistance with homework in mathematics for 13-year-olds, 1991

	Score		Percent of students who spend 4 or more hours per week on mathematics homework		Percent of students who receive help on mathematics homework	
Country	Mean	S.E.	Percent	S.E.	Percent	S.E.
Canada	62	0.6	15	0.8	69	1.1
China	80	1.0	37	1.8	37	2.2
Emilia-Romanga-Italy	64	0.9	27	1.4	34	1.4
England	61	2.2	6	0.8	65	4.9
Fortaleza, Brazil	32	0.6	18	1.4	46	1.8
France	64	0.8	17	1.3	53	1.0
Hungary	68	0.8	11	0.7	80	1.0
Ireland	61	0.9	17	1.3	61	1.4
Israel	63	0.8	17	1.1	53	1.4
Jordan	40	1.0	14	1.0	43	1.3
Korea	73	0.6	33	1.1	53	1.4
Mozambique	28	0.3	11	1.2	65	2.0
Portugal	48	0.8	9	0.8	27	1.5
Sao Paulo, Brazil	37	0.8	16	1.2	48	1.8
Scotland	61	0.9	4	0.6	65	1.7
Slovenia	57	0.8	15	0.9	62	1.5
Soviet Union	70	1.0	33	1.5	32	1.3
Spain	55	0.8	22	1.3	58	1.5
Switzerland	71	1.3	15	1.2	42	1.3
Taiwan	73	0.7	24	1.2	51	1.1
United States	55	1.0	15	1.3	74	1.4

SOURCE: Educational Testing Service, *Learning Mathematics,* Figures 3.1 and 4.1, International Assessment of Educational Progress, 1991.

Table 4.27: Total education hours per year at age 13, 1991

Country	Minutes of instruction per day		Days of instruction per year		Total minutes of instruction per year		Total education/ hours per year	
	Total	S.E.	Total	S.E.	Total	S.E.	Total	S.E.
Canada	304	0.8	188	0.2	57,152	211.2	953	3.5
China	305	7.1	251	2.1	76,555	2422.6	1276	40.4
Emilia Romagna-Italy	289	5.0	204	0.5	58,956	1164.5	983	19.4
England	300	4.4	192	1.8	57,600	1384.8	960	23.1
Fortaleza, Brazil	223	9.8	183	1.1	40,809	2038.7	680	34.0
France	370	3.4	174	1.7	64,380	1220.6	1073	20.3
Hungary	223	1.3	177	1.5	39,471	564.6	658	9.4
Ireland	323	4.4	173	0.9	55,879	1051.9	931	17.5
Israel	278	6.5	215	2.2	59,770	2009.1	996	33.5
Jordan	260	2.9	191	1.6	49,660	969.9	828	16.2
Korea	264	2.4	222	0.4	58,608	638.4	977	10.6
Mozambique	272	0.0	193	0.0	52,496	0.0	875	0.0
Portugal	334	6.5	172	1.1	57,448	1485.4	957	24.8
Sao Paolo, Brazil	271	9.3	181	0.2	49,051	1737.5	818	29.0
Scotland	324	2.3	191	0.9	61,884	730.9	1031	12.2
Slovenia	248	2.5	190	1.5	47,120	847.0	785	14.1
Soviet Union (former)	243	2.6	198	2.1	48,114	1025.1	802	17.1
Spain	285	3.2	188	2.3	53,580	1257.1	893	21.0
Switzerland	305	7.4	207	3.2	63,135	2507.8	1052	41.8
Taiwan	318	6.9	222	2.5	70,596	2326.8	1177	38.8
United States	338	5.0	178	0.4	60,164	1025.2	1003	17.1

SOURCE: Educational Testing Service, *Learning Science,* Figure 5.2, International Assessment of Educational Progress, 1991.

Table 4.28: Instructional time and achievement in science and mathematics at age 13, 1991

Country	Science score		Minutes of science instruction per week		Mathematics score		Minutes of mathematics Instruction per week	
	Mean	S.E.	Total	S.E.	Mean	S.E.	Total	S.E.
Canada	69	0.4	156	1.9	62	0.6	225	1.9
China	67	1.1	331	(2)	80	1.0	307	(2)
Emilia Romagna-Italy	70	0.7	138	3.1	64	0.9	219	3.6
England	69	1.2	194	4.9	61	2.2	190	4.8
Fortaleza, Brazil	46	0.6	124	3.9	32	0.6	230	8.5
France	69	0.6	174	8.1	64	0.8	230	1.8
Hungary	73	0.5	207	(2)	68	0.8	186	2.3
Ireland	63	0.6	159	4.1	61	0.9	189	2.2
Israel	70	0.7	181	(2)	63	0.8	205	3.6
Jordan	57	0.7	180	0.7	40	1.0	180	0.6
Korea	78	0.5	144	2.8	73	0.6	179	2.0
Mozambique	(1)	(1)	(1)	(1)	28	0.3	217	0.0
Portugal	63	0.8	157	3.4	48	0.8	207	2.7
Sao Paolo, Brazil	53	0.6	178	7.3	37	0.8	226	7.3
Scotland	68	0.6	179	4.5	61	0.9	210	2.3
Slovenia	70	0.5	283	7.0	57	0.8	188	4.3
Soviet Union (former)	71	1.0	387	6.0	70	1.0	258	1.9
Spain	68	0.6	189	7.2	55	0.8	235	3.3
Switzerland	74	0.9	152	(2)	71	1.3	251	3.9
Taiwan	76	0.4	245	(2)	73	0.7	204	2.1
United States	67	1.0	233	7.9	55	1.0	228	5.6

(1) Data unavailable.

(2) Indicates standard error greater than 9.9.

SOURCE: Educational Testing Service, *Learning Science,* Figure 3.1, International Assessment of Educational Progress, 1991.

Table 4.29: Classroom practices and achievement in mathematics at age 13, 1991

Country	Score		Percent of students who listen to mathematics lesson every day		Percent of students who work in groups at least once a week		Percent of schools where mathematics classes are based on ability	
	Mean	S.E.	Percent	S.E.	Percent	S.E.	Percent	S.E.
Canada	62	0.6	51	1.0	40	1.4	10	1.3
China	80	1.0	74	2.0	68	2.1	3	1.9
Emilia Romagna-Italy	64	0.9	33	1.3	78	1.1	17	4.7
England	61	2.2	17	2.1	44	3.1	92	4.7
Fortaleza, Brazil	32	0.6	26	2.0	69	1.7	36	6.3
France	64	0.8	65	1.3	31	1.2	27	7.3
Hungary	68	0.8	40	1.4	55	1.6	0	0.0
Ireland	61	0.9	67	1.7	42	1.6	67	6.1
Israel	63	0.8	5	1.2	48	1.7	74	7.2
Jordan	40	1.0	62	1.6	83	1.1	5	2.6
Korea	73	0.6	32	1.0	28	1.6	0	0.0
Mozambique	28	0.3	63	1.4	79	1.5	25	0.0
Portugal	48	0.8	28	1.2	51	1.6	6	3.6
Sao Paolo, Brazil	37	0.8	34	2.0	60	1.5	15	4.2
Scotland	61	0.9	23	1.7	27	1.6	16	4.1
Slovenia	57	0.8	97	0.6	43	1.5	2	1.6
Soviet Union (former)	70	1.0	62	1.0	54	1.8	18	3.0
Spain	55	0.8	58	1.4	63	1.5	3	1.8
Switzerland	71	1.3	60	2.3	47	1.5	18	7.3
Taiwan	73	0.7	64	1.4	38	1.2	63	7.6
United States	55	1.0	78	1.4	49	2.4	56	([6])

Country	Score		Percent of students who own a calculator		Average number of computers in school	
	Mean	S.E.	Percent	S.E.	Mean	S.E.
Canada	62	0.6	91	0.5	17	0.8
China	80	1.0	21	2.9	2	0.7
Emilia Romagna-Italy	64	0.9	97	0.4	7	0.7
England	61	2.2	93	1.0	26	2.5
Fortaleza, Brazil	32	0.6	39	1.4	0	0.2
France	64	0.8	98	0.3	13	0.6
Hungary	68	0.8	87	1.0	6	0.3
Ireland	61	0.9	58	1.6	9	0.7
Israel	63	0.8	94	0.7	14	1.1
Jordan	40	1.0	53	1.9	1	0.4
Korea	73	0.6	20	1.1	15	1.5
Mozambique	28	0.3	21	1.3	0	0.0
Portugal	48	0.8	89	1.1	2	0.5
Sao Paolo, Brazil	37	0.8	67	1.6	2	0.7
Scotland	61	0.9	90	0.8	40	2.8
Slovenia	57	0.8	86	1.1	5	0.4
Soviet Union (former)	70	1.0	47	5.0	2	0.4
Spain	55	0.8	86	1.3	3	0.4
Switzerland	71	1.3	85	1.2	4	1.4
Taiwan	73	0.7	58	1.3	15	1.2
United States	55	1.0	89	0.9	24	6.0

SOURCE: Educational Testing Service, *Learning Mathematics,* Figure 3.4, International Assessment of Educational Progress, 1991.

Table 4.30: Classroom practices and achievement in science at age 13, 1991

	Score		Percent of students who listen to lesson every day		Percent of students who never conduct experiments		Percent of schools where classes are based on ability	
Country	Mean	S.E.	Percent	S.E.	Percent	S.E.	Percent	S.E.
Canada	69	0.4	21	1.0	13	0.7	5	0.8
China	67	1.1	23	2.2	29	2.4	1	0.8
Emilia Romagna-Italy	70	0.7	10	0.9	59	1.9	14	4.1
England	69	1.2	11	1.9	2	0.6	58	(*)
Fortaleza, Brazil	46	0.6	10	1.1	44	1.9	35	6.6
France	69	0.6	27	1.4	20	1.7	11	3.8
Hungary	73	0.5	40	1.3	31	1.7	0	0.0
Ireland	63	0.6	23	1.5	27	2.1	38	5.1
Israel	70	0.7	0	0.2	35	1.4	14	3.5
Jordan	57	0.7	60	1.8	26	1.4	10	3.8
Korea	78	0.5	21	1.0	35	1.7	1	0.6
Portugal	63	0.8	16	0.9	48	1.7	6	3.7
Sao Paolo, Brazil	53	0.6	12	1.0	35	1.6	12	3.5
Scotland	68	0.6	15	1.2	3	0.3	3	2.4
Slovenia	70	0.5	16	1.1	22	1.5	0	0.0
Soviet Union (former)	71	1.0	80	1.9	13	0.8	13	3.0
Spain	68	0.6	38	1.5	51	2.3	0	0.0
Switzerland	74	0.9	28	1.6	36	1.7	17	7.3
Taiwan	76	0.4	25	1.4	25	1.3	57	7.4
United States	67	1.0	66	1.6	25	1.9	29	(*)

	Score		Percent of schools with science laboratories		Average number of computers in school	
Country	Mean	S.E.	Percent	S.E.	Percent	S.E.
Canada	69	0.4	62	2.9	17	0.8
China	67	1.1	68	7.9	2	0.7
Emilia Romagna-Italy	70	0.7	40	9.1	7	0.7
England	69	1.2	100	0.0	26	2.5
Fortaleza, Brazil	46	0.6	12	3.0	0	0.2
France	69	0.6	93	3.5	13	0.6
Hungary	73	0.5	34	3.8	6	0.3
Ireland	63	0.6	77	5.9	9	0.7
Israel	70	0.7	76	5.6	14	1.1
Jordan	57	0.7	65	7.2	1	0.4
Korea	78	0.5	87	7.4	15	1.5
Portugal	63	0.8	79	(*)	2	0.5
Sao Paolo, Brazil	53	0.6	36	6.3	2	0.7
Scotland	68	0.6	100	0.0	40	2.8
Slovenia	70	0.5	50	5.5	5	0.4
Soviet Union (former)	71	1.0	94	3.1	2	0.4
Spain	68	0.6	69	5.9	3	0.4
Switzerland	74	0.9	48	8.3	4	1.4
Taiwan	76	0.4	99	1.1	15	1.2
United States	67	1.0	76	6.8	24	6.0

(*) Indicates standard error greater than 9.9.

SOURCE: Educational Testing Service, *Learning Science,* Figures 3.1 & 3.5, International Assessment of Educational Progress, 1991.

Table 5.1: Total enrollment at all levels (net enrollment rate) for 15- to 20-year-olds by single year of age, 1994

Country	Ending age of compulsory schooling	Percent of students enrolled following last year of compulsory schooling	Net enrollment by single year (in percentage)					
			15	16	17	18	19	20
Australia	15	95.8	97.5	95.8	92.3	64.7	52.8	45.1
Austria	15	92.2	95.3	92.2	86.4	60.9	33.6	22.6
Belgium	18	72.4	103.3	103.5	101.4	86.8	72.4	61.1
Canada	16	88.1	96.3	94.2	88.1	72.2	60.6	59.6
Czech Republic	15	88.0	98.3	88.0	61.0	35.6	22.9	18.2
Denmark	16	81.0	98.0	93.7	81.0	69.6	53.2	40.9
Finland	16	91.8	99.6	96.1	91.8	82.5	37.3	40.3
France	16	92.2	97.8	96.1	92.2	84.1	68.6	53.6
Germany	18	65.8	98.3	96.3	92.5	85.2	65.8	46.2
Greece	15	81.6	81.3	81.6	57.0	58.7	52.6	38.7
Hungary	16	70.2	91.9	86.1	70.2	43.1	28.4	20.2
Iceland	—	—	99.2	86.4	74.5	66.8	63.6	43.3
Ireland	15	93.2	94.8	93.2	83.2	93.4	47.7	35.2
Italy	14	—	—	—	—	—	—	—
Japan	15	96.4	99.8	96.4	93.4	—	—	—
Korea	14	86.3	86.3	93.4	85.2	47.5	37.0	34.7
Mexico	15	38.9	50.7	38.9	30.1	18.3	9.3	6.1
Netherlands	16	90.6	98.9	97.5	90.6	79.8	67.3	57.1
New Zealand	16	78.7	104.8	94.3	78.7	56.8	48.5	42.8
Norway	16	90.6	99.2	93.9	90.6	83.0	51.6	45.9
Poland	15	—	—	—	—	—	—	21.9
Portugal	14	84.8	84.8	74.2	66.8	54.6	44.1	36.8
Spain	16	74.5	94.4	81.9	74.5	62.8	52.2	49.1
Sweden	16	94.8	96.6	96.2	94.8	82.7	34.3	28.3
Switzerland	15	87.3	96.7	87.3	83.3	76.2	56.3	33.1
Turkey	15	40.9	46.2	40.9	24.2	17.8	17.1	11.4
United Kingdom	16	73.6	98.7	87.1	73.6	52.7	43.9	36.5
United States	*	61.2	97.1	95.4	85.9	61.2	45.4	34.9

— Data unavailable.

*Varies by state. The range is from 15 to 18 with an average of 17.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996. Table P3.1.

Table 5.2: Percentage of 17- to 20-year-olds who are enrolled, by single year of age and level of education, 1994

	Age 17		Age 18	
Country	Secondary education	University Education	Secondary education	University Education
Australia	76.7	12.6	32.1	23.0
Austria	86.4	(1)	55.5	5.3
Belgium	100.5	0.6	55.7	18.9
Canada	72.0	11.9	40.2	22.7
Czech Republic	61.0	(1)	24.2	8.2
Denmark	80.9	(1)	69.3	0.2
Finland	91.3	(1)	80.3	0.5
France	90.0	2.0	60.9	18.6
Germany	91.6	(1)	82.3	1.0
Greece	57.0	(1)	17.5	32.4
Hungary	70.2	(1)	36.3	6.8
Iceland	74.5	(1)	66.8	0.02
Ireland	74.8	3.9	60.4	16.8
Japan	93.4	(1)	2.0	(1)
Korea	85.2	(1)	22.1	15.6
Mexico	29.9	(3)	17.8	(2)
Netherlands	88.4	2.0	67.5	12.2
New Zealand	75.7	1.5	30.8	19.9
Norway	90.6	(1)	82.6	0.2
Poland	85.4	(4)	63.8	0.4
Portugal	66.4	(3)	39.1	(3)
Spain	74.3	(1)	43.3	18.9
Sweden	94.7	(1)	81.7	0.8
Switzerland	82.2	(1)	74.6	0.5
Turkey	20.6	2.6	9.4	6.3
United Kingdom	71.7	1.3	32.1	16.7
United States	82.9	1.7	26.3	20.5

Table 5.2 (continued): Percentage of 17- to 20-year-olds who are enrolled, by single year of age and level of education, 1994

	Age 19		Age 20	
	Secondary education	University Education	Secondary education	University Education
Australia	19.6	23.3	16.1	20.3
Austria	21.5	12.0	7.8	14.7
Belgium	31.5	20.3	19.3	18.4
Canada	16.3	29.0	14.6	27.4
Czech Republic	4.6	13.6	2.9	12.5
Denmark	49.1	3.4	28.8	10.2
Finland	23.9	9.3	17.5	15.7
France	34.1	24.0	14.7	25.7
Germany	57.6	5.5	31.6	11.7
Greece	8.4	37.5	6.1	24.8
Hungary	16.5	11.8	6.4	13.8
Iceland	62.8	0.6	33.1	9.2
Ireland	11.0	22.0	3.9	19.7
Japan	0.5	([2])	([2])	([2])
Korea	2.6	20.7	0.3	22.1
Mexico	8.5	([3])	5.2	([3])
Netherlands	45.8	21.5	30.8	26.3
New Zealand	13.8	26.4	8.6	26.5
Norway	36.5	6.4	22.2	12.2
Poland	31.9	12.2	([3])	16.3
Portugal	24.1	([3])	15.2	([3])
Spain	25.9	25.6	20.1	28.0
Sweden	22.4	11.7	10.3	17.8
Switzerland	51.7	2.9	22.6	7.1
Turkey	5.8	8.7	([1])	9.1
United Kingdom	16.0	21.8	10.2	21.0
United States	7.1	20.8	1.4	21.4

([1]) Magnitude is either negligible or zero.

([2]) Data unavailable.

([3]) Data included in another category of question, or in another question.

([4]) Data not applicable because the question does not apply.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996. Table P3.3.

Table 5.3: Number of students enrolled per 100 persons in the population ages 5 to 29, by level of education, 1994

Country	Early childhood education	Primary and lower secondary	Upper secondary education	Total
Australia	([1])	43.2	14.4	([1])
Austria	4.3	28.0	14.5	46.8
Belgium	3.8	33.9	20.3	58.0
Canada	2.9	35.1	11.9	49.9
Czech Republic	4.1	30.3	15.7	50.1
Denmark	6.3	32.5	13.2	52.0
Finland	3.5	35.9	15.5	54.9
France	3.8	37.3	12.4	53.5
Germany	5.6	34.1	11.5	51.2
Greece	1.5	31.8	11.3	44.6
Hungary	5.6	29.5	17.1	52.2
Iceland	([1])	39.9	16.2	([1])
Ireland	5.9	40.1	11.8	57.8
Italy	8.3	25.5	15.5	49.3
Japan	3.0	32.3	12.6	47.9
Korea	1.4	33.2	10.6	45.2
Mexico	3.5	39.5	4.6	47.6
Netherlands	3.5	37.1	14.2	54.8
New Zealand	0.1	40.4	14.9	55.4
Norway	6.0	31.4	17.0	54.4
Poland	5.1	35.8	15.9	56.8
Portugal	2.0	39.2	12.0	53.2
Russian Federation	10.4	34.8	7.9	53.1
Spain	2.9	29.7	20.5	53.1
Sweden	6.1	34.5	16.1	56.7
Switzerland	5.5	33.3	11.7	50.5
Turkey	0.4	29.9	6.0	36.3
United Kingdom	([2])	33.3	21.7	55.0
United States	3.7	37.0	10.7	51.4

([1]) Data unavailable.

([2]) Magnitude is less than 0.05.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996. Table P1.1.

Table 5.4: Total enrollment at all levels of education as a percentage of population, by age group, 1994

Country	Students ages 5-14 as percentage of population ages 5-14	Students ages 15-29 as percentage of population ages 15-29
Australia	97.1	40.0
Austria	98.0	29.2
Belgium	99.4	43.1
Canada	97.8	40.4
Czech Republic	98.9	28.2
Denmark	97.5	40.0
Finland	89.2	45.4
France	100.2	39.5
Germany	98.8	36.8
Greece	93.8	30.2
Hungary	99.7	30.3
Iceland	88.6	41.2
Ireland	100.3	38.1
Japan	101.2	19.3
Korea	91.8	31.6
Mexico	91.6	17.4
Netherlands	99.1	41.0
New Zealand	101.3	37.0
Norway	94.4	43.7
Poland	91.5	37.9
Portugal	98.7	34.0
Spain	104.7	37.5
Sweden	95.3	37.8
Switzerland	97.4	32.7
Turkey	71.0	15.2
United Kingdom	98.9	31.0
United States	97.7	37.6

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996. Table P1.2.

Table 5.5: Number of students enrolled per 100 persons in the population ages 5 to 29, 1975 to 1994

	Upper secondary education			
Country	1975	1985	1990	1994
Canada	12.5	10.6	10.9	11.9
United States	7.3	10.3	9.7	10.7
Australia	6.9	6.5	—	6.5
Japan	9.7	12.0	13.5	12.2
France	8.7	9.6	12.0	12.4
West Germany (former)	11.0	15.2	13.0	11.4
Italy	10.0	11.8	15.5	15.5
Spain	9.0	12.4	15.7	18.2
Sweden	7.4	11.1	10.4	12.0
United Kingdom	11.2	12.7	11.7	12.9
Switzerland	3.2	13.9	13.2	11.5
Korea	10.2	10.1	11.0	10.4
New Zealand	6.6	7.5	9.5	12.0
Austria	13.4	16.3	15.0	13.9
Denmark	7.4	12.1	12.8	13.2
Finland	9.4	13.2	13.2	15.5
Greece	6.8	—	—	10.9
Ireland	6.1	8.5	10.1	10.7
Netherlands	5.1	8.7	9.3	12.3
Norway	—	12.7	15.1	16.6
Mexico	—	—	4.6	4.6
Turkey	3.3	3.8	4.6	6.0

Table 5.5 (continued): Number of students enrolled per 100 persons in the population age 5 to 29, 1975 to 1994

	All levels of education combined except preprimary			
	1975	1985	1990	1994
Australia	—	—	—	53.7
Austria	53.0	48.9	49.0	50.2
Canada	54.5	52.7	55.6	57.9
Denmark	53.2	55.6	55.2	55.6
Finland	49.2	53.2	58.3	63.2
France	51.3	55.1	57.1	60.0
West Germany (former)	57.2	53.0	49.6	53.7
Ireland	51.1	52.4	55.9	57.0
Italy	50.8	48.4	48.9	50.3
Japan	47.6	—	57.1	53.0
Korea	—	52.1	52.4	52.3
Mexico	—	—	49.1	46.9
Netherlands	51.0	52.3	51.1	55.8
New Zealand	55.1	50.9	53.5	59.7
Norway	—	52.7	53.6	57.5
Spain	—	53.9	56.4	57.9
Sweden	—	52.2	49.8	50.5
Switzerland	41.2	49.4	48.0	50.0
Turkey	36.1	37.7	38.8	39.6
United Kingdom	—	48.5	47.1	54.7
United States	55.6	50.2	52.6	56.5

— Data unavailable.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996. Table P1t.

Table 5.6: Enrollment as a proportion of theoretical school-age population, by age group and level of education, 1985 to 1991

	Primary and lower secondary enrollment as a ratio of 5- to 13-year olds						
Country	1985	1986	1987	1988	1989	1990	1991
Australia	95.4	95.7	96.2	97.1	—	—	97.1
Austria	94.1	—	—	—	96.5	—	—
Belgium	99.5	100.2	99.0	98.0	—	—	99.0
Canada	100.0	100.4	100.5	100.9	101.4	101.9	101.9
Denmark	89.4	89.5	89.9	89.7	90.2	89.9	89.1
Finland	83.5	—	—	—	—	83.7	—
France	101.3	101.2	101.1	101.1	101.0	100.5	100.5
Ireland	99.3	99.7	99.7	100.5	100.0	99.2	99.2
Japan	97.5	97.9	98.2	98.4	98.3	98.0	97.7
Luxembourg	—	95.7	95.3	96.5	95.3	—	—
Netherlands	99.4	99.0	99.5	100.0	100.0	99.9	99.9
New Zealand	100.0	100.1	100.3	100.9	101.8	102.1	101.3
Norway	89.4	89.8	90.4	91.0	91.3	92.0	92.3
Portugal	—	—	—	90.9	—	—	92.3
Spain	102.8	103.9	104.6	103.9	104.6	104.7	104.6
Sweden	88.5	88.6	88.6	88.7	88.3	88.0	87.5
Switzerland	91.6	91.4	91.5	91.5	91.9	92.6	93.0
Turkey	—	—	—	—	73.7	75.7	77.6
United Kingdom	104.3	103.7	102.6	102.6	101.6	101.4	101.1
United States	98.3	98.6	98.7	99.7	98.7	99.7	99.6
West Germany (former)	97.2	96.5	96.7	97.9	97.2	96.6	96.6

Table 5.6 (continued): Enrollment as a proportion of theoretical school-age population, by age group and level of education, 1985 to 1991

	Lower and upper secondary enrollment as a ratio of 14- to 17-year olds						
	1985	1986	1987	1988	1989	1990	1991
Australia	—	—	—	—	—	—	91.4
Austria	—	—	—	—	—	—	—
Belgium	91.7	93.2	92.5	92.6	—	—	94.6
Canada	92.5	92.6	92.6	92.7	94.7	95.8	94.0
Denmark	89.9	90.3	90.9	91.1	91.0	90.0	90.0
Finland	89.8	—	—	—	—	98.2	—
France	93.0	93.4	93.1	94.4	95.3	95.1	95.4
Ireland	83.6	84.7	86.6	87.8	87.2	87.2	89.7
Japan	95.7	94.0	94.0	94.0	94.5	95.7	96.1
Luxembourg	—	81.0	82.3	82.0	80.7	—	—
Netherlands	93.0	92.2	92.3	92.2	92.0	92.5	92.7
New Zealand	74.4	74.0	76.2	80.0		84.2	88.4
Norway	90.0	90.4	90.4	89.7	91.2	93.2	93.5
Portugal	—	—	—	—	—	—	69.1
Spain	67.3	69.5	71.5	75.0	77.4	79.1	81.6
Sweden	91.3	92.4	92.2	92.3	91.7	91.4	91.6
Switzerland	88.9	89.0	89.1	89.3	89.3	89.8	90.0
Turkey	—	—	—	33.0	32.5	32.6	33.9
United Kingdom	77.7	81.3	79.7	80.7	82.5	83.3	84.2
United States	92.1	92.7	92.5	91.6	92.6	92.9	92.9
West Germany (former)	94.7	94.9	95.9	88.0	88.7	94.2	93.6

Table 5.6 (continued): Enrollment as a proportion of theoretical school-age population, by age group and level of education, 1985 to 1991

	Tertiary enrollment as a ratio of 18- to 24-year olds						
	1985	1986	1987	1988	1989	1990	1991
Australia	—	—	—	—	—	—	22.2
Belgium	17.6	18.2	18.6	19.2	—	—	21.9
Canada	19.0	19.6	20.1	20.6	21.3	22.0	22.9
Denmark	11.3	11.3	11.4	11.9	12.2	12.6	13.3
Finland	13.2	—	—	—	—	17.6	—
France	15.9	16.5	16.9	17.6	18.8	20.0	21.6
Ireland	10.6	11.4	11.7	12.2	13.5	14.7	14.9
Japan	—	18.8	18.5	18.8	—	—	—
Luxembourg	—	2.1	2.3	2.6	2.6	—	—
Netherlands	13.7	13.9	14.2	14.9	15.6	16.7	18.0
New Zealand	11.6	12.4	15.3	15.8	17.1	16.4	18.4
Norway	11.3	11.1	12.2	12.6	13.8	15.8	17.1
Portugal	5.9	5.0	6.0	—	—	—	9.6
Spain	13.7	14.7	15.3	16.5	17.5	18.6	19.1
Sweden	9.5	9.4	9.6	9.8	10.0	10.2	10.8
Switzerland	8.0	8.0	8.3	8.4	8.7	9.3	9.7
Turkey	—	—	—	4.9	5.8	6.4	6.9
United Kingdom	—	—	—	—	11.1	11.8	12.8
United States	25.4	25.4	26.3	28.0	28.6	28.9	29.0
West Germany (former)	11.9	11.7	11.4	11.3	11.7	12.2	12.8

Table 5.6 (continued): Enrollment as a proportion of theoretical school-age population, by age group and level of education, 1985 to 1991

	Enrollment at all levels as a ratio of 5 to 24 year olds						
	1985	1986	1987	1988	1989	1990	1991
Australia	—	—	—	—	—	—	70.0
Belgium	68.8	69.8	69.4	69.3	—	—	71.9
Canada	68.2	69.1	69.8	70.8	72.1	73.2	73.9
Denmark	66	65.5	65.2	64.9	65.2	64.9	65.0
Finland	62.3	—	—	—	—	66.6	—
France	71.3	71.8	72.1	72.9	73.8	74.0	74.8
Ireland	69.4	70.2	70.8	71.7	72.2	72.6	71.9
Japan	—	71.8	71.1	70.5	—	—	—
Luxembourg	—	57.9	58.3	59.3	59.1	—	—
Netherlands	68.8	68.4	68.3	68.3	68.2	68.6	69.1
New Zealand	63.3	63.4	66.2	66.8	([1])	68.6	70.0
Norway	65.9	65.6	65.4	65.1	65.5	67.8	68.6
Portugal	—	—	—	—	—	—	59.6
Spain	66.5	67.3	67.9	68.3	69.1	69.7	69.9
Sweden	63.0	62.5	62.1	62.0	61.7	61.7	62.0
Switzerland	64.5	64.0	63.7	63.6	63.8	64.7	65.3
Turkey	—	—	—	—	45.2	45.9	46.6
United Kingdom	59.7	59.8	60.7	60.9	62.9	63.7	64.7
United States	69.6	70.2	71.2	72.5	72.9	73.6	73.6
West Germany (former)	66.6	65.6	64.9	63.2	61.7	64.5	65.1

— Data unavailable.

NOTE: For Spain, data are for full-time students only; no data for part-time enrollment.
SOURCE: *International Education Indicators: A Time Series Perspective,* NCES, 1996. Table 2.

Table 5.7: Ratio of secondary school graduates to population at typical age of graduation, 1994

Country	Men	Women	Total
Austria	84.5	79.2	81.9
Belgium	89.1	104.7	96.7
Canada	66.4	75.4	70.8
Czech Republic	81.5	73.6	77.6
Denmark	75.6	89.3	82.3
Finland	85.5	101.6	93.4
France	78.4	83.4	80.8
Germany	90.5	86.4	88.5
Greece	72.5	77.8	75.1
Hungary	—	—	80.8
Iceland	—	—	—
Italy	72.6	80.0	76.2
Japan	88.9	95.4	92.1
Korea	91.3	91.4	91.3
Mexico	—	—	25.0
Netherlands	—	—	69.4
New Zealand	59.8	68.0	63.9
Norway	117.5	85.9	102.0
Poland	90.2	90.4	90.3
Spain	61.0	75.3	67.9
Sweden	76.5	72.7	74.6
Switzerland	86.6	77.3	82.1
Turkey	46.6	29.9	38.4
United States	71.0	76.3	73.6

— Data unavailable.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators* , 1996. Table R11.1.

Table 5.8: Number of new entrants into university education per 100 persons in the population at the theoretical starting age, by gender, 1992

Country	Men	Women	Total
Australia	33.7	43.0	38.3
Austria	27.9	27.9	27.9
Belgium	29.4	25.1	27.3
Czech Republic	15.9	11.8	13.9
Denmark	36.4	47.0	41.5
Finland	—	—	—
France	26.6	34.8	30.6
Germany	41.4	24.1	33.0
Greece	—	—	15.9
Hungary	—	—	8.7
Ireland	21.9	22.3	22.1
Italy	41.4	41.2	41.3
Japan	34.1	15.9	25.2
Netherlands	40.7	39.4	40.1
New Zealand	23.9	26.0	24.9
Norway	15.9	23.9	19.8
Poland	19.6	19.7	19.7
Spain	40.8	45.9	43.3
Sweden	14.1	15.3	14.7
Switzerland	16.9	13.4	15.2
Turkey	14.7	9.0	12.0
United Kingdom	27.5	25.6	26.6
United States	—	—	33.4

— Data unavailable.
NOTE: United States data derived from the *Digest of Education Statistics,* 1996. Table 177.
SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1995. Table P05.

Table 5.9: Percentage of population ages 25 to 64 years by highest level of completed education, 1994

Country	Did not complete secondary education	Completed secondary education	Non-university tertiary education	University education
Australia	50	27	10	13
Austria	32	60	2	6
Belgium	51	27	12	10
Canada	26	28	29	17
Czech Republic	27	63	([1])	10
Denmark	40	40	6	14
Finland	36	44	9	11
France	33	50	8	9
Germany	16	62	10	13
Greece	55	27	6	12
Ireland	55	27	10	9
Italy	67	26	([2])	8
Netherlands	40	38	([2])	21
New Zealand	43	34	14	9
Norway	19	53	11	16
Portugal	81	8	3	7
Spain	74	11	4	11
Sweden	28	46	14	12
Switzerland	18	61	13	8
Turkey	80	13	([2])	7
United Kingdom	26	54	9	12
United States	15	53	8	24

([1]) Data included in another category of question, or in another question.

([2]) Data not applicable because the question does not apply.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996. Table C1.1.

Table 5.10: Enrollment in higher education as a percentage of 18- to 21-year-olds by gender, 1994

Country	Total	Men	Women
Australia	29.3	26.8	31.8
Austria	12.0	11.2	12.8
Belgium	37.4	33.5	41.5
Canada	40.3	35.0	45.8
Czech Republic	14.8	15.2	14.4
Denmark	9.1	8.9	9.4
Finland	16.6	13.7	19.6
France	33.2	29.0	37.6
Germany	14.0	11.2	8.5
Greece	36.7	35.7	37.7
Hungary	11.0	—	—
Iceland	7.9	7.3	8.5
Ireland	30.5	30.1	30.9
Korea	30.8	35.1	26.3
Netherlands	22.1	21.3	23.0
New Zealand	30.9	27.8	34.1
Norway	17.1	14.6	19.8
Poland	14.6	11.5	17.9
Portugal	19.3	15.7	23.0
Spain	25.4	22.2	28.8
Sweden	12.3	10.3	14.4
Switzerland	7.6	8.0	7.2
Turkey	10.5	12.3	8.6
United Kingdom	23.6	23.3	23.8
United States	34.9	31.5	38.5

— Data unavailable.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators* , 1996. Table P6.1.

Table 5.11: Enrollment rates in upper secondary institutions for a single year of age: 1985–95

	16-year-olds										
Country	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Australia	—	—	—	—	—	—	64.0	63.4	76.1	77.1	78.1
Austria	84.1	—	—	—	—	—	—	—	89.7	91.0	92.3
Belgium	90.0	92.4	92.8	91.2	—	—	90.2	93.4	98.8	99.5	98.9
Canada	—	—	—	—	—	—	84.0	87.6	87.7	87.7	86.5
Czech Republic	—	—	—	—	—	—	—	88.1	—	88.4	—
Denmark	31.2	31.3	32.5	34.9	35.4	34.6	33.8	31.9	31.3	29.5	28.9
Finland	74.6	—	—	—	—	89.7	—	83.6	82.7	87.8	84.3
France	67.0	65.7	64.3	65.3	66.3	68.2	70.0	72.2	—	77.2	78.6
Germany[1]	52.3	53.0	54.0	53.6	42.0	46.5	—	—	40.0	41.6	42.6
Greece	—	—	—	—	—	—	—	78.9	80.2	81.6	79.0
Hungary	—	—	—	—	—	—	72.3	78.5	—	84.9	86.8
Iceland	—	—	—	—	—	—	—	—	—	85.4	88.5
Ireland	—	70.0	71.2	75.5	76.0	79.2	79.1	81.6	83.9	84.9	83.8
Italy	52.4	—	—	—	—	—	—	—	—	—	—
Japan	—	—	—	—	—	93.5	98.0	99.6	—	98.4	100.4
Korea	—	—	—	—	—	—	—	—	86.6	89.6	90.5
Luxembourg	—	60.4	60.6	59.3	55.6	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	26.7	—	28.2
Netherlands	41.7	41.0	42.8	43.1	44.3	45.0	46.0	52.0	—	51.8	53.0
New Zealand	—	65.9	73.3	76.3	79.0	79.9	84.2	85.5	—	95.6	98.5
Norway	83.4	84.5	85.3	85.2	87.2	90.4	91.3	91.9	—	92.4	94.1
Poland	—	—	—	—	—	—	—	83.8	87.8	88.1	—
Portugal	18.0	19.9	17.5	29.8	—	—	40.8	—	40.2	49.5	49.3
Russia[2]	—	—	—	—	—	—	—	44.9	—	—	—
Spain	58.2	60.4	61.0	65.0	68.6	70.6	72.3	74.4	78.1	79.9	82.3
Sweden	86.7	88.1	84.9	84.6	83.8	83.1	82.9	86.2	91.2	92.1	92.4
Switzerland	58.1	58.4	58.6	59.5	59.9	61.9	61.4	56.7	55.1	54.5	52.9
Turkey	20.5	21.6	23.5	24.2	25.9	27.3	29.2	31.8	—	37.7	37.8
United Kingdom	67.0	68.1	68.3	71.2	74.7	75.6	77.2	—	85.3	86.4	83.9
United States	83.6	84.4	85.6	86.9	87.6	84.8	82.3	85.2	86.1	88.8	81.7
Average[3]	63.6	64.5	64.5	66.2	67.1	67.0	66.5	66.9	68.3	69.0	67.6

Table 5.11 (continued): Enrollment rates in upper secondary institutions for a single year of age: 1985–95

	17-year-olds										
Country	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Australia	—	—	—	—	—	—	55.9	57.0	70.7	71.4	72.9
Austria	77.0	—	—	—	—	—	—	—	81.5	85.7	87.0
Belgium	80.9	82.6	84.7	85.9	—	—	87.4	92.1	98.4	97.8	96.7
Canada	—	—	—	—	—	—	66.9	66.2	70.5	71.3	68.5
Czech Republic	—	—	—	—	—	—	58.9	—	—	61.9	72.4
Denmark	69.3	69.5	70.6	72.3	72.9	73.1	73.1	73.6	72.5	73.4	73.3
Finland	80.5	—	—	—	—	81.7	—	84.7	87.2	89.6	88.5
France	72.4	73.8	73.8	75.5	77.8	79.7	81.5	82.9	—	85.8	86.5
Germany[1]	82.7	83.3	84.5	82.8	—	81.2	—	—	76.1	80.3	80.1
Greece	—	—	—	—	—	—	—	57.7	57.7	57.0	55.8
Hungary	—	—	—	—	—	—	49.4	49.4	—	70.3	72.2
Iceland	—	—	—	—	—	—	—	—	—	74.4	77.4
Ireland	—	56.4	59.1	60.5	64.5	68.0	67.1	70.0	72.7	75.1	74.9
Italy	45.3	—	—	—	—	—	—	—	—	—	—
Japan	—	—	—	—	—	88.6	91.0	95.5	—	97.2	96.6
Korea	—	—	—	—	—	—	—	—	80.9	82.3	88.0
Luxembourg	—	65.0	65.8	66.3	65.5	—	—	—	—	—	59.7
Mexico	—	—	—	—	—	—	—	—	23.3	24.0	24.9
Netherlands	55.6	55.1	56.6	56.6	57.3	58.5	59.8	73.7	—	70.9	73.7
New Zealand	—	34.1	44.2	47.0	53.3	57.2	59.6	64.8	—	75.7	76.9
Norway	76.1	77.1	75.9	75.3	78.2	82.6	84.8	87.0	—	90.6	90.2
Poland	—	—	—	—	—	—	—	80.1	83.1	86.0	—
Portugal	22.3	25.8	25.2	33.6	—	—	49.2	—	47.8	54.8	58.8
Russia[2]	—	—	—	—	—	—	—	17.4	—	—	—
Spain	50.9	51.9	53.6	56.6	59.5	62.1	63.0	65.8	69.4	72.8	74.4
Sweden	82.4	84.7	85.6	85.9	85.6	84.6	85.0	87.6	92.1	94.1	95.6
Switzerland	78.8	79.4	79.5	80.1	81.0	81.7	82.0	77.5	77.2	76.6	76.4
Turkey	12.7	14.1	15.0	16.1	17.2	17.3	18.3	—	—	21.0	23.9
United Kingdom	45.9	45.9	48.7	50.7	54.6	57.4	59.3	75.9	70.1	73.2	72.0
United States	78.1	73.9	72.7	72.5	80.1	78.4	74.1	69.9	83.5	79.2	73.9
Average[3]	67.6	67.5	68.5	69.7	72.3	72.9	72.8	75.1	77.5	78.2	77.6

Table 5.11 (continued): Enrollment rates in upper secondary institutions for a single year of age: 1985–95

	18-year-olds										
Country	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Australia	—	—	—	—	—	—	14.4	13.6	30.6	28.8	29.4
Austria	42.4	—	—	—	—	—	—	—	53.4	55.2	56.0
Belgium	40.4	41.4	42.6	43.8	—	—	46.6	48.1	53.8	53.5	52.1
Canada	—	—	—	—	—	—	34.2	35.3	35.8	40.3	34.2
Czech Republic	—	—	—	—	—	—	—	—	—	24.6	30.7
Denmark	64.1	65.6	67.0	67.4	67.8	66.7	67.2	68.4	67.9	68.6	70.1
Finland	65.2	—	—	—	—	68.8	—	79.5	79.7	80.0	79.3
France	39.2	42.5	45.0	47.9	51.2	54.2	56.3	57.8	—	59.1	58.3
Germany[1]	75.3	77.9	78.3	76.1	—	78.4	—	—	75.0	80.4	79.4
Greece	—	—	—	—	—	—	—	17.2	16.7	17.5	13.9
Hungary	—	—	—	—	—	—	17.8	16.8	—	36.7	39.9
Iceland	—	—	—	—	—	—	—	—	—	66.8	65.4
Ireland	—	21.8	22.8	23.9	25.0	30.6	31.2	33.0	36.5	48.6	47.9
Italy	34.5	—	—	—	—	—	—	—	—	—	—
Japan	—	—	—	—	—	2.9	2.7	2.6	—	2.0	2.0
Korea	—	—	—	—	—	—	—	—	24.8	21.5	22.7
Luxembourg	—	49.3	52.5	54.0	54.7	—	—	—	—	—	64.7
Mexico	—	—	—	—	—	—	—	—	12.9	13.2	13.3
Netherlands	44.8	46.4	47.0	47.1	48.2	49.1	50.5	64.4	—	62.5	64.4
New Zealand	—	6.3	15.4	13.3	16.4	17.7	19.0	22.5	—	30.5	32.9
Norway	61.5	62.5	61.1	61.1	63.6	72.2	74.4	77.5	—	82.6	82.6
Poland	—	—	—	—	—	—	—	48.7	60.0	62.8	—
Portugal	20.9	23.4	26.5	27.1	—	—	35.2	—	32.4	34.0	38.3
Russia[2]	—	—	—	—	—	—	—	—	—	—	—
Spain	26.7	27.6	28.4	30.1	30.8	33.2	34.3	35.0	38.7	42.2	43.1
Sweden	45.6	45.6	48.2	49.3	50.3	51.2	54.8	62.8	70.1	81.4	87.1
Switzerland	73.3	74.0	74.2	74.6	75.1	75.5	75.3	73.8	73.9	73.8	74.4
Turkey	8.6	7.4	8.2	8.2	9.3	9.0	9.5	—	—	9.5	10.5
United Kingdom	21.4	21.3	21.2	21.3	21.8	24.1	24.8	35.2	31.6	32.6	31.9
United States	18.5	17.2	19.7	18.3	20.5	22.3	21.1	20.2	26.3	26.0	20.9
Average[3]	41.6	41.9	43.1	43.5	44.4	45.5	46.3	49.2	51.4	54.1	54.6

Table 5.11 (continued): Enrollment rates in upper secondary institutions for a single year of age: 1985–95

	19-year-olds										
Country	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Australia	—	—	—	—	—	—	4.6	2.6	17.7	17.2	17.5
Austria	13.5	—	—	—	—	—	—	—	20.9	21.3	21.6
Belgium	17.9	19.4	19.9	20.6	—	—	22.9	23.9	28.8	29.2	28.7
Canada	—	—	—	—	—	—	10.9	10.7	11.4	16.1	10.4
Czech Republic	—	—	—	—	—	—	—	—	—	4.6	6.0
Denmark	44.5	47.0	48.5	49.4	49.9	47.5	45.9	48.4	47.7	48.6	51.3
Finland	21.8	—	—	—	—	23.2	—	26.7	24.9	23.7	27.4
France	14.7	17.0	19.7	22.8	26.0	28.8	31.4	33.8	—	34.0	34.2
Germany[1]	45.7	47.6	49.0	49.0	—	53.7	—	—	53.5	57.2	56.7
Greece	—	—	—	—	—	—	—	9.4	8.6	8.4	6.3
Hungary	—	—	—	—	—	—	10.4	9.3	—	15.6	17.8
Iceland	—	—	—	—	—	—	—	—	—	62.8	63.3
Ireland	—	4.1	4.5	4.7	5.3	—	—	12.5	13.8	14.2	13.2
Italy	10.5	—	—	—	—	—	—	—	—	—	—
Japan	—	—	—	—	—	0.4	0.4	0.4	—	0.6	0.6
Korea	—	—	—	—	—	—	—	—	2.9	2.6	2.7
Luxembourg	—	27.5	29.4	32.1	31.7	—	—	—	—	—	53.7
Mexico	—	—	—	—	—	—	—	—	6.5	6.7	6.5
Netherlands	27.3	30.0	29.5	30.0	30.6	31.5	32.5	44.5	—	43.9	45.1
New Zealand	—	—	10.5	6.9	10.5	9.2	10.7	8.1	—	13.5	16.7
Norway	24.8	24.4	21.9	21.9	22.1	32.0	33.9	35.0	—	36.5	33.2
Poland	—	—	—	—	—	—	—	17.1	29.9	31.3	—
Portugal	16.6	16.5	19.6	18.7	—	—	25.6	—	22.5	21.6	24.1
Russia[2]	—	—	—	—	—	—	—	—	—	—	—
Spain	14.0	14.8	15.2	16.5	17.1	18.7	19.5	20.5	22.9	25.2	25.9
Sweden	10.2	9.5	9.7	9.3	9.1	9.0	9.9	16.9	17.7	22.1	23.7
Switzerland	49.5	50.1	50.6	50.6	50.4	50.3	50.6	48.9	50.3	51.5	51.9
Turkey	4.8	4.6	3.8	4.0	5.7	6.1	5.9	—	—	5.9	6.3
United Kingdom	11.2	10.9	11.2	10.7	11.0	11.3	11.8	14.7	15.9	16.2	15.5
United States	3.2	3.9	3.7	4.2	3.8	4.3	5.0	5.7	5.5	6.8	4.1
Average[3]	22.1	22.7	23.1	23.4	23.5	23.5	23.8	25.9	26.7	28.4	28.7

— No data were reported or data were incomplete or inconsistent.

[1]Pre-1991 numbers refer to Western Germany (Federal Republic of Germany before unification).

[2]Not an OECD member country.

[3]Average is for countries reporting data for all years included in the table.

NOTE: Enrollment data include full-time and part-time enrollments. Countries in bold are G7 countries.

SOURCES: Organization for Economic Cooperation and Development (OECD), Education Database; U.S. Department of Commerce, Bureau of the Census, International Database.

Table 5.12: Distribution of 25- to 64-year old population, by level of prose literacy, educational attainment, and country, 1994

	Primary or less			
Country	Level 1	Level 2	Level 3	Level 4/5
Canada	69.4	18.96	11.12	0.52
Switzerland (Germany)	71.23	23.85	4.92	0.00
Switzerland (French)	54.41	29.82	13.00	2.76
Germany	63.89	18.94	15.39	1.78
United States	71.57	18.55	8.33	1.55
Ireland	58.63	29.80	10.23	1.34
Netherlands	44.25	41.44	13.89	0.42
Poland	78.49	17.59	3.72	0.20
Sweden	26.02	41.69	25.81	6.48
New Zealand	71.63	22.40	5.07	0.90
United Kingdom	69.14	21.65	9.05	0.16
Belgium	52.84	30.80	15.27	1.10

	Lower secondary			
	Level 1	Level 2	Level 3	Level 4/5
Canada	22.74	35.50	34.47	7.30
Switzerland (Germany)	39.50	44.32	15.05	1.14
Switzerland (French)	31.50	52.58	15.57	0.35
Germany	17.85	40.46	33.28	8.42
United States	61.70	28.01	9.76	0.54
Ireland	22.65	42.04	29.80	5.51
Netherlands	11.58	46.57	37.83	4.02
Poland	50.43	37.70	10.83	1.04
Sweden	9.05	24.68	45.54	20.73
New Zealand	24.04	38.01	30.86	7.10
United Kingdom	27.53	36.08	28.46	7.92
Belgium	26.66	40.25	27.03	6.07

	Completed secondary			
	Level 1	Level 2	Level 3	Level 4/5
Canada	8.03	27.66	42.03	22.29
Switzerland (Germany)	12.20	37.07	41.85	8.88
Switzerland (French)	11.04	37.15	43.64	8.17
Germany	8.31	33.25	42.38	16.05
United States	14.83	29.02	37.76	18.39
Ireland	6.84	27.08	47.42	18.66
Netherlands	2.68	24.99	54.76	17.57
Poland	24.65	44.61	26.88	3.86
Sweden	4.36	19.01	43.50	33.12
New Zealand	8.61	21.85	41.87	27.67
United Kingdom	10.33	27.90	41.09	20.68
Belgium	9.33	27.81	46.77	16.09

	Completed university program			
	Level 1	Level 2	Level 3	Level 4/5
Canada	0.50	10.90	32.93	55.67
Switzerland (Ger.)	6.39	19.72	46.99	26.90
Switzerland (Fr.)	6.14	12.79	51.31	29.76
Germany	3.76	18.28	40.14	37.81
United States	5.31	10.86	35.06	48.77
Ireland	1.51	15.11	40.79	42.59
Netherlands	1.28	12.08	52.86	33.79
Poland	11.38	30.46	41.74	16.42
Sweden	0.90	7.55	33.37	58.17
New Zealand	6.58	11.86	34.76	46.80
United Kingdom	3.04	12.03	40.13	44.80
Belgium	2.08	11.79	42.34	43.80

SOURCE: Organization for Economic Cooperation and Development and Statistics Canada, *Literacy, Economy, and Society,* 1995. Table B-9a.

Table 5.13: Distribution of 25- to 64-year old population, by level of document literacy, educational attainment, and country, 1994

	Primary or less			
	Level 1	Level 2	Level 3	Level 4/5
Canada	74.45	15.28	9.47	0.80
Switzerland (Germany)	75.30	17.17	5.38	2.15
Switzerland (French)	46.15	38.43	12.66	2.76
Germany	58.84	16.04	22.99	2.13
United States	78.43	15.09	5.85	0.63
Ireland	63.69	24.97	9.94	1.40
Netherlands	44.64	38.08	16.12	1.16
Poland	77.93	16.61	4.83	0.63
Sweden	24.04	37.18	30.19	8.58
New Zealand	81.74	15.57	2.43	0.27
United Kingdom	67.86	22.72	8.84	0.57
Belgium	46.44	31.67	20.09	1.79

	Lower secondary			
	Level 1	Level 2	Level 3	Level 4/5
Canada	22.42	44.41	25.31	7.86
Switzerland (Ger.)	40.85	37.72	17.82	3.62
Switzerland (Fr.)	31.70	43.50	22.47	2.34
Germany	12.57	37.13	37.97	12.33
United States	64.38	26.86	7.93	0.82
Ireland	28.23	41.13	26.11	4.53
Netherlands	11.58	39.21	41.69	7.52
Poland	52.52	32.90	12.48	2.10
Sweden	8.42	21.15	38.60	31.82
New Zealand	28.73	38.63	26.83	5.81
United Kingdom	30.12	32.81	26.90	10.17
Belgium	19.81	36.54	37.10	6.55

	Completed secondary			
	Level 1	Level 2	Level 3	Level 4/5
Canada	9.10	23.70	40.29	26.90
Switzerland (Germany)	10.05	30.17	42.98	16.80
Switzerland (French)	8.42	31.57	44.29	15.72
Germany	5.44	27.13	44.42	23.01
United States	18.19	29.80	35.56	16.44
Ireland	9.36	31.57	44.37	14.70
Netherlands	2.93	21.46	51.81	23.79
Poland	28.71	36.97	26.93	7.39
Sweden	3.21	17.21	42.78	36.80
New Zealand	10.35	24.51	40.92	24.22
United Kingdom	11.57	26.06	37.01	25.35
Belgium	7.18	24.64	47.97	20.21

	Completed university program			
	Level 1	Level 2	Level 3	Level 4/5
Canada	2.52	10.81	35.07	51.60
Switzerland (Ger.)	6.41	15.40	40.88	37.32
Switzerland (Fr.)	5.51	9.71	45.87	38.91
Germany	1.55	19.51	33.62	45.32
United States	6.93	13.18	37.62	42.27
Ireland	1.44	19.30	40.73	38.53
Netherlands	1.74	13.07	49.79	35.40
Poland	15.70	30.12	33.08	21.09
Sweden	0.89	9.11	30.78	59.22
New Zealand	6.81	12.22	37.65	43.32
United Kingdom	3.80	11.14	35.99	49.07
Belgium	1.76	8.58	47.77	41.89

SOURCE: Organization for Economic Cooperation and Development and Statistics Canada, *Literacy, Economy, and Society,* 1995. Table B-9a.

Table 5.14: Distribution of 25- to 64-year old population, by level of quantitative literacy, educational attainment, and country, 1994

			Primary or less	
	Level 1	Level 2	Level 3	Level 4/5
Canada	70.52	18.61	10.54	0.33
Switzerland (Germany)	55.62	27.97	15.79	0.62
Switzerland (French)	39.52	39.88	16.43	4.16
Germany	33.74	29.69	19.05	17.52
United States	70.61	19.94	8.53	0.93
Ireland	59.97	25.25	11.78	2.99
Netherlands	40.90	40.03	17.52	1.55
Poland	71.39	20.33	7.33	0.94
Sweden	21.67	33.33	33.27	11.73
New Zealand	78.89	16.27	3.76	1.08
United Kingdom	66.70	21.29	11.55	0.47
Belgium	50.45	26.41	19.40	3.74

			Lower secondary	
	Level 1	Level 2	Level 3	Level 4/5
Canada	23.28	42.69	26.78	7.24
Switzerland (Germany)	27.66	42.30	23.41	6.63
Switzerland (French)	23.97	45.18	27.55	3.30
Germany	9.31	29.72	43.37	17.60
United States	58.20	27.35	12.08	2.37
Ireland	25.99	36.67	27.84	9.50
Netherlands	11.13	37.19	42.30	9.38
Poland	44.23	33.79	18.35	3.62
Sweden	8.95	20.82	37.83	32.39
New Zealand	27.21	36.62	29.19	6.98
United Kingdom	29.60	32.57	28.38	9.46
Belgium	19.97	30.92	37.21	11.90

			Completed secondary	
	Level 1	Level 2	Level 3	Level 4/5
Canada	7.01	27.36	43.74	21.88
Switzerland (Germany)	6.74	25.39	47.70	20.18
Switzerland (French)	5.67	22.91	49.59	21.83
Germany	4.35	21.74	48.12	25.79
United States	15.71	27.08	38.26	18.95
Ireland	9.94	27.52	40.30	22.23
Netherlands	2.70	21.98	52.22	23.10
Poland	20.57	34.85	34.22	10.36
Sweden	3.44	18.11	41.45	37.01
New Zealand	9.56	24.55	41.22	24.67
United Kingdom	10.45	25.13	38.22	26.19
Belgium	8.74	22.40	42.19	26.68

			Completed university program	
	Level 1	Level 2	Level 3	Level 4/5
Canada	1.19	5.51	29.35	63.95
Switzerland (Germany)	5.74	13.01	43.09	38.16
Switzerland (French)	5.41	9.37	49.58	35.64
Germany	1.93	12.58	32.84	52.65
United States	5.52	10.36	31.14	52.98
Ireland	1.76	14.89	35.23	48.12
Netherlands	1.86	10.64	46.75	40.74
Poland	9.49	26.22	38.08	26.21
Sweden	1.11	6.90	28.63	63.36
New Zealand	5.63	10.43	38.88	45.06
United Kingdom	3.42	10.26	31.16	55.16
Belgium	1.07	5.54	35.36	58.04

SOURCE: Organization for Economic Cooperation and Development and Statistics Canada, *Literacy, Economy, and Society,* 1995. Table B-9a.

Table 5.15: Percentage of 25-to 64-year-olds who are unemployed, by document literacy level and country, 1994

Country	Level 1	Level 2	Level 3	Level 4/5
Canada	13.99	10.66	6.39	5.95
Switzerland (German)	3.88	1.87	2.48	2.27
Switzerland (French)	4.06	3.56	3.30	2.06
Germany	13.42	8.08	5.46	6.01
United States	6.06	3.48	2.35	2.62
Ireland	13.37	9.70	6.17	3.45
Netherlands	5.89	3.91	4.01	3.33
Poland	8.39	9.93	7.80	5.96
Sweden	10.03	7.18	5.49	4.49
New Zealand	13.57	6.06	2.77	1.62
United Kingdom	9.72	9.21	7.40	4.32
Belgium	9.96	9.27	6.12	2.95

SOURCE: Organization for Economic Cooperation and Development and Statistics Canada, *Literacy, Economy, and Society,* 1995. Table B-9a.

Table 5.16: Percentage of secondary school completers at each literacy level who are unemployed, by age, literacy level, and country, 1994

	Prose scale							
	Age 16-65				Age 26-35			
	Level 1	Level 2	Level 3	Level 4/5	Level 1	Level 2	Level 3	Level 4/5
Canada	10.30	8.98	8.49	4.76	10.80	5.68	7.21	6.81
Switzerland (German)	3.96	2.33	3.05	1.60	8.85	1.51	4.07	4.66
Switzerland (French)	4.55	4.28	5.61	5.19	0.00	9.67	2.31	3.96
Germany	15.83	7.62	6.56	3.17	0.00	5.73	7.65	4.00
United States	5.16	3.89	3.07	3.74	7.15	5.88	3.91	1.33
Ireland	10.22	12.10	8.92	5.26	15.96	10.18	3.41	2.10
Netherlands	1.51	4.33	4.06	2.71	10.36	5.99	5.31	1.86
Poland	7.60	13.19	11.45	12.56	15.86	19.48	10.36	11.31
Sweden	15.40	9.90	8.03	7.44	19.43	12.37	11.08	6.57
New Zealand	16.70	5.28	3.01	1.55	7.68	8.21	2.15	0.42
United Kingdom	15.12	8.46	7.91	8.42	13.43	11.85	4.36	3.25
Belgium	11.79	12.18	7.51	2.34	9.94	20.20	9.63	4.88

	Document scale							
	Age 16-65				Age 26-35			
	Level 1	Level 2	Level 3	Level 4/5	Level 1	Level 2	Level 3	Level 4/5
Canada	7.63	12.61	6.90	5.91	8.39	8.09	5.34	7.37
Switzerland (German)	4.82	1.79	2.64	3.48	9.39	1.00	3.99	3.99
Switzerland (French)	1.54	4.16	5.96	5.86	0.00	8.39	4.05	2.81
Germany	14.78	9.26	6.25	5.10	0.00	5.14	6.87	5.15
United States	4.87	3.57	2.92	4.67	6.72	5.83	2.68	4.23
Ireland	9.41	12.37	8.67	4.16	10.59	10.23	3.32	0.73
Netherlands	1.49	4.11	4.53	2.29	13.69	4.18	5.35	3.57
Poland	8.98	13.32	10.98	11.54	17.86	18.01	11.84	9.67
Sweden	10.14	11.13	8.83	6.86	20.16	12.87	11.18	6.93
New Zealand	11.97	5.90	3.21	1.94	5.95	8.75	20.90	1.08
United Kingdom	16.99	9.30	7.67	6.62	17.38	12.09	4.00	2.58
Belgium	7.14	11.10	9.74	3.65	6.33	13.08	13.52	8.82

	Quantitative scale							
	Age 16-65				Age 26-35			
	Level 1	Level 2	Level 3	Level 4/5	Level 1	Level 2	Level 3	Level 4/5
Canada	11.74	12.15	6.32	4.40	17.57	5.83	4.56	10.79
Switzerland (German)	5.09	3.02	2.86	1.34	14.84	1.05	3.82	3.67
Switzerland (French)	2.07	4.47	5.83	4.23	0.00	5.56	5.75	2.27
Germany	15.83	7.31	7.93	4.05	0.00	2.21	9.04	3.54
United States	5.83	4.11	2.71	3.30	7.46	6.19	3.59	0.95
Ireland	11.10	12.25	8.43	6.01	12.08	9.42	3.76	2.32
Netherlands	1.60	4.08	4.82	1.58	11.49	4.41	5.49	3.05
Poland	10.07	12.28	11.25	10.82	21.61	16.35	13.79	8.26
Sweden	8.36	10.57	8.47	7.78	21.52	9.85	10.64	8.27
New Zealand	12.87	6.12	2.83	1.84	5.62	8.55	2.47	0.79
United Kingdom	16.20	8.75	8.80	5.96	11.53	14.63	4.97	1.88
Belgium	6.75	15.05	8.86	2.78	4.89	16.28	15.19	5.78

SOURCE: Organization for Economic Cooperation and Development, International Adult Literacy Survey, unpublished tabulations.

Table 5.17: Proportion of secondary school completers age 26 to 35 at each level of literacy, by literacy type, 1994

	Prose scale			
	Level 1	Level 2	Level 3	Level 4/5
Belgium	10.89	28.31	49.44	11.37
Canada	9.68	36.22	32.27	21.83
Germany	8.60	28.59	39.78	23.04
Ireland	4.67	29.77	48.84	16.72
Netherlands	1.29	16.56	58.93	23.21
New Zealand	9.51	22.86	41.49	26.14
Poland	18.64	44.28	31.49	5.59
Sweden	3.85	14.28	45.76	36.11
Switzerland (French)	7.22	33.99	47.88	10.91
Switzerland (German)	8.00	31.49	47.61	12.90
United Kingdom	13.32	24.55	41.36	20.77
United States	15.84	31.72	37.33	15.11

	Document scale			
	Level 1	Level 2	Level 3	Level 4/5
Canada	10.80	28.57	33.12	27.51
Switzerland (German)	7.35	22.57	46.51	23.58
Switzerland (French)	5.07	26.90	48.74	19.28
Germany	5.74	20.33	41.03	32.91
United States	18.32	31.22	36.25	14.22
Ireland	7.94	33.39	43.83	14.84
Netherlands	1.03	15.01	52.84	31.11
Poland	22.29	38.32	30.92	8.47
Sweden	2.81	12.32	44.41	40.45
New Zealand	10.30	21.40	43.08	25.22
United Kingdom	14.26	21.37	37.55	26.82
Belgium	6.26	25.49	49.00	19.25

	Quantitative scale			
	Level 1	Level 2	Level 3	Level 4/5
Canada	6.96	27.27	43.01	22.77
Switzerland (German)	4.77	21.38	47.31	26.53
Switzerland (French)	3.21	22.76	52.81	21.22
Germany	5.03	15.57	43.80	35.59
United States	17.82	28.92	38.61	14.65
Ireland	8.13	30.74	38.80	22.33
Netherlands	1.23	18.31	52.45	28.01
Poland	17.09	33.17	38.47	11.27
Sweden	2.68	16.51	43.73	37.08
New Zealand	11.36	22.23	41.41	25.01
United Kingdom	14.92	20.44	38.22	26.42
Belgium	9.94	24.78	41.93	23.35

SOURCE: Organization for Economic Cooperation and Development, International Adult Literacy Survey, unpublished tabulations.

Table 5.18: Percentage of labor force ages 25 to 64 years by highest level of completed education and gender, 1994

	Men		
Country	Below upper secondary education	Upper secondary education	University Education
Australia	38	37	15
Austria	22	69	8
Belgium	43	31	15
Canada	23	27	20
Denmark	32	47	16
Finland	32	45	14
France	24	56	11
Germany	8	54	15
Greece	53	26	14
Ireland	55	24	11
Italy	62	29	10
Netherlands	31	42	26
New Zealand	34	44	11
Norway	16	54	19
Portugal	80	9	9
Spain	69	13	12
Sweden	28	45	15
Switzerland	11	56	11
Turkey	77	14	9
United Kingdom	17	59	16
United States	13	51	29

Table 5.18 (continued): Percentage of labor force ages 25 to 64, by highest level of completed education and gender, 1994

	Women		
	Below upper secondary education	Upper secondary education	University Education
Australia	54	18	17
Austria	31	59	6
Belgium	36	31	11
Canada	17	31	19
Denmark	38	39	15
Finland	30	49	11
France	29	51	9
Germany	14	57	10
Greece	48	26	18
Ireland	33	38	13
Italy	51	37	12
Netherlands	33	42	26
New Zealand	39	27	9
Norway	14	55	19
Portugal	74	10	10
Spain	61	15	19
Sweden	23	47	13
Switzerland	21	63	6
Turkey	74	13	13
United Kingdom	25	52	11
United States	9	55	26

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996. Table C11.3.

Table 5.19: Labor force participation rates for 25- to 64-year olds, by level of educational attainment and gender, 1994

	Men		
Country	Did not complete secondary education	Completed secondary education	University education
Australia	83	90	94
Austria	73	86	93
Belgium	71	88	91
Canada	75	89	92
Denmark	78	90	95
Finland	72	89	93
France	72	90	91
Germany	79	85	92
Greece	86	88	91
Ireland	82	93	94
Italy	77	88	92
Netherlands	76	87	90
New Zealand	80	91	94
Norway	75	89	95
Portugal	86	89	95
Spain	82	91	91
Sweden	91	92	94
Switzerland	93	95	94
Turkey	88	91	93
United Kingdom	75	90	94
United States	72	88	93

Table 5.19 (continued): Labor force participation rates for 25- to 64-year olds, by level of educational attainment and gender, 1994

	Women		
	Did not complete secondary education	Completed secondary education	University education
Australia	55	61	82
Austria	49	68	86
Belgium	39	68	85
Canada	48	72	85
Denmark	68	86	92
Finland	64	81	89
France	52	74	81
Germany	45	67	81
Greece	40	47	81
Ireland	31	58	81
Italy	33	66	83
Netherlands	40	66	79
New Zealand	56	72	81
Norway	55	77	90
Portugal	59	80	95
Spain	37	68	83
Sweden	81	89	93
Switzerland	62	69	78
Turkey	28	39	81
United Kingdom	57	73	88
United States	45	72	82

Table 5.19 (continued): Labor force participation rates for 25- to 64-year olds, by level of educational attainment and gender, 1994

	Total		
	Did not complete secondary education	Completed secondary education	University education
Australia	66	80	88
Austria	59	78	90
Belgium	55	78	89
Canada	62	80	89
Czech Republic	67	90	96
Denmark	73	89	94
Finland	68	85	92
France	61	83	87
Germany	56	76	88
Greece	62	67	87
Ireland	58	73	89
Italy	54	77	88
Netherlands	56	77	86
New Zealand	66	84	88
Norway	64	83	93
Portugal	72	84	95
Spain	58	80	87
Sweden	86	90	93
Switzerland	72	81	89
Turkey	63	73	89
United Kingdom	64	82	91
United States	58	79	88

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996. Table C11.1 and C11.2.

Table 5.20: Unemployment rates for 25- to 64-year olds in the labor force, by level of educational attainment, 1994

Country	Did not complete secondary education	Completed secondary education	University education
Australia	10.2	6.9	3.9
Austria	4.9	2.8	1.8
Belgium	12.5	7.1	4.0
Canada	14.3	9.0	5.2
Denmark	17.3	10.0	5.0
Finland	22.7	16.4	6.6
France	14.7	10.5	6.1
Germany	14.2	9.0	5.0
Greece	6.2	8.7	6.5
Ireland	18.9	9.7	3.4
Italy	8.4	7.5	6.4
Netherlands	8.2	4.8	4.3
Norway	6.5	4.7	1.5
Portugal	6.0	6.2	2.4
Spain	21.3	19.4	13.8
Sweden	8.8	7.6	3.4
Switzerland	5.1	3.4	3.7
Turkey	6.0	7.1	4.1
United Kingdom	13.0	8.3	3.9
United States	12.6	6.2	2.9

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators*, 1996. Table R21(A).

Table 5.21: Unemployment rates for 20- to 29-year olds in the labor force, by age group and level of educational attainment, 1994

	Did not complete secondary education		Completed secondary education		University education
Country	20 to 24	25 to 29	20 to 24	25 to 29	25 to 29
Australia	18.8	13.2	11.1	8.2	5.4
Austria	8.3	5.4	3.4	2.9	4.6
Belgium	29.1	18.5	16.9	11.1	8.7
Canada	—	—	14.1	12.5	6.4
Denmark	21.1	28.2	12.5	11.8	10.3
Finland	39.0	36.4	30.7	19.1	12.0
France	41.5	28.9	27.7	16.0	11.0
Germany	14.4	18.1	8.7	8.6	5.8
Greece	18.0	11.9	31.7	15.1	19.9
Ireland	33.3	25.7	15.3	10.6	5.1
Italy	27.4	15.9	34.5	16.3	28.4
Netherlands	11.4	10.0	7.5	5.4	7.4
Norway	16.0	16.0	11.5	6.7	4.5
Portugal	12.8	9.1	18.7	9.9	6.3
Spain	41.3	33.4	42.0	28.3	32.5
Sweden	28.6	15.8	16.4	10.6	5.6
Turkey	12.6	9.0	28.3	13.4	11.1
United Kingdom	31.8	24.2	13.8	10.7	4.3
United States	22.3	17.2	10.6	7.8	3.1

— Data unavailable.

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996. Table R21(B).

Table 5.22: Mean annual earnings of women as a percentage of mean annual earnings of men, by educational attainment, various years

Country	Year	Did not complete secondary education	Completed secondary education	University education
Australia	1993	59	65	68
Austria	1991	80	83	76
Canada	1994	54	60	63
Denmark	1993	73	73	68
Finland	1993	82	81	73
France	1994	66	75	66
Germany	1994	53	64	62
Ireland	1993	45	56	61
Italy	1993	67	75	60
Netherlands	1993	44	51	53
Norway	1993	63	63	62
Portugal	1993	72	69	73
Spain	1993	70	77	72
Sweden	1993	69	67	64
Switzerland	1994	47	53	60
United Kingdom	1994	41	49	61
United States	1994	60	61	64

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators* , 1996. Table R22.2.

Table 5.23: Relative earnings of 25- to 64-year olds by level of educational attainment and gender, 1991, 1993 and 1994

		Men		
Country	Year	Did not complete secondary education	Completed secondary education	University education
Australia	1993	90	100	144
Austria	1991	85	100	146
Belgium	1992	86	100	149
Canada	1994	81	100	152
Denmark	1993	86	100	142
Finland	1993	91	100	192
France	1994	85	100	187
Germany	1994	97	100	167
Ireland	1993	77	100	171
Italy	1993	76	100	141
Netherlands	1993	84	100	136
Norway	1993	79	100	158
Portugal	1993	65	100	179
Spain	1993	77	100	148
Sweden	1993	88	100	164
Switzerland	1994	76	100	142
United Kingdom	1994	79	100	164
United States	1994	64	100	168

		Women		
Country	Year	Did not complete secondary education	Completed secondary education	University education
Australia	1993	81	100	152
Austria	1991	81	100	134
Belgium	1992	78	100	164
Canada	1994	74	100	162
Denmark	1993	86	100	133
Finland	1993	94	100	175
France	1994	75	100	165
Germany	1994	81	100	162
Ireland	1993	62	100	187
Italy	1993	67	100	112
Netherlands	1993	73	100	141
Norway	1993	79	100	156
Portugal	1993	67	100	188
Spain	1993	71	100	139
Sweden	1993	92	100	158
Switzerland	1994	68	100	160
United Kingdom	1994	66	100	204
United States	1994	63	100	175

SOURCE: Organization for Economic Cooperation and Development, *Education at a Glance: OECD Indicators,* 1996. Table R22.1.

B

Appendix B: Technical Notes

Appendix B Technical Notes

Using Standard Errors

Many indicators in this publication provide tables of standard errors to accompany the table of percentages. Understanding what standard errors are and how to use them will facilitate the interpretation of the data.

The accuracy of any statistic is determined by the joint effects of "sampling" and "nonsampling" errors. Estimates based on a sample will differ somewhat from the figures that would have been obtained if a complete census had been taken using the same survey instruments, instructions, and procedures. In addition to such sampling errors, all surveys, both universe and sample, are subject to design, reporting, and processing errors and errors due to nonresponse. To the extent possible, these nonsampling errors are kept to a minimum by methods built into the survey procedures. In general, however, the effects of nonsampling errors are more difficult to gauge than those produced by sampling variability.

The estimated standard error of a statistic is a measure of the variation due to sampling and can be used to examine the precision obtained in a particular sample. Standard errors can help assess how valid a comparison between two estimates might be. Unless otherwise noted, all comparisons cited in the text were tested for significance using t-tests and are significant at the .05 level. However, when multiple comparisons are cited, a Bonferroni adjustment to the significance level was made.

To perform a t-test to determine if a difference between two groups is statistically significant, one must first calculate the standard error for the difference of the means. The standard error of a difference between two sample estimates is about equal to the square root of the sum of the squared standard errors of the estimates. The standard error (se) of the difference between sample estimate "a" and sample estimate "b" (if "a" and "b" are approximately independent) is:

$$se_{a-b} = \sqrt{se_a^2 + se_b^2}$$

The next step in determining whether a comparison is statistically significant is to calculate the difference score or statistic is by subtracting the smaller score or statistic from the larger score statistic:

$$d = a - b$$

Finally, the t-statistic is calculated by dividing the difference score by the standard error for the difference:

$$t = d/se_{ab}$$

To determine whether the t is significant, it must be compared to a critical t-value at which there is a greater than 5 percent probability that the difference is due to chance. If the t statistic is

greater than the critical t-value, then there is a less than 5 percent probability that the difference is due to chance, and the comparison is significant.

These critical t-values do not change. The only consideration is the number of comparisons being made, also called the k value. If there is only one comparison (k=1), e.g., the United States versus France, the critical t-value is 1.96. If, however, there is more than one comparison (k=2 or more), e.g., the United States versus France and versus Germany, a Bonferroni adjustment is made and the critical t-value increases. Below is a table of critical t-values for each number of comparisons.

K	critical t
1	1.96
2	2.24
3	2.39
4	2.50
5	2.58
6	2.64
7	2.69
8	2.73
9	2.77
10	2.81

To better understand how standard errors and t-test are used to determine significance, the following example walks through the procedures used in testing a statement regarding reading achievement. A statement reading "At age 14, students in the United States scored the same or higher than their peers in the other participating G-7 countries in reading" requires a t-test to determine that 14-year-olds in the other G-7 countries did not outperform 14-year-olds in the United States on the overall measure of reading literacy.

In this indicator, only four G-7 countries reported data: France, the former West Germany, Italy, and the United States. The average literacy scores for 14-year-olds in these countries were 549, 522, 515, and 535, respectively. The corresponding standard errors were 4.3, 4.4, 3.4, and 4.8, respectively. This comparison required three t-tests: one between the United States and France, one between the United States and the former West Germany, and one between the United States and Italy.

For the first comparison, it appeared that students in France outscore those in the United States. To determine whether this is true, the standard error of the difference needed to be calculated:

$$se_{a-b} = \sqrt{4.3^2+4.8^2} = 6.44$$

Next, the difference of the means was calculated: 549 - 535 = 14.

Then the t-statistic was determined by dividing the difference of the means by the standard error of the difference: 14 / 6.44 = 2.17.

Finally, the t-statistic was compared to the critical t-value. Because the original statement required three comparisons, the critical t was determined for k=3. The table shows that at k=3, the critical t-value is 2.39. Since the t-statistic was less than the critical t-value, the comparison was not significant. Thus 14-year-olds in France did not outperform 14-year-olds in the United States by a margin greater than what could appear by chance. Since the other two countries reported lower scores than that of the United States, it was not necessary to run a t-test for the statement "None of the participating G-7 countries outperformed U.S. students" to be true.

It should be noted that most of the standard errors presented in the indicators and in the original documents are approximations. That is, to derive estimates of standard errors that would be applicable to a wide variety of items and that could be prepared at a moderate cost, a number of approximations were required. As a result, most of the standard errors presented provide a general order of magnitude rather than the exact standard error for any specific item.

Participation in TIMSS

Twenty-six countries participated in the Third International Mathematics and Science Study (TIMSS) at the fourth-grade level while 45 countries participated at the eighth-grade level. Data from three countries (Argentina, Italy, and Indonesia) were excluded because the countries were unable to complete the necessary steps; data from Mexico were excluded because the country decided not to release its seventh- and eighth-grade results.

The accuracy of the survey results depends on the quality of the samples, so TIMSS developed procedures and guidelines to ensure that each nation's sample was of the highest quality possible. Standards were developed regarding universality, participation rates, and student's ages. Some countries, however, were unable to meet the TIMSS specifications in drawing their national samples. These countries, and their samples, are described below.

1) Notes for tables on fourth-grade achievement in mathematics and science derived from *IEA's Third International Mathematics and Science Study*, 1994. (Tables 4.1, 4.7, 4.9)

- Australia, Austria, Latvia, and the Netherlands did not satisfy guidelines for sample participation.
- Slovenia did not meet age/grade specifications.
- Hungary used unapproved sampling procedures at the classroom level.
- Israel, Kuwait, and Thailand used unapproved sampling procedures at the classroom level and did not meet other guidelines.
- England and Scotland met sample participation rates only after replacement schools were added.
- For Latvia and Israel, National Desired Population does not cover all of International Desired Population.
- Latvia (LSS) indicates Latvian Speaking Schools Only.
- For England, National Defined Population covers less than 90 percent of National Desired Population.

2) Notes for tables on eighth-grade achievement in mathematics and science derived from *IEA's Third International Mathematics and Science Study*, 1994. (Tables 4.2, 4.8, 4.10, 4.19, 4.20, 4.21)

- Australia, Austria, Bulgaria, and the Netherlands did not satisfy guidelines for sample participation rates.

- Colombia, Germany, Romania, and Slovenia did not meet age/grade specifications.
- Denmark, Greece, and Thailand used unapproved sampling procedures at the classroom level.
- Israel, Kuwait, and South Africa used unapproved sampling procedures at the classroom level and did not meet other guidelines.
- Belgium (Fl.), England, the United States, and Germany met guidelines for sample participation rates only after replacement schools were added.
- For Switzerland, Latvia, Lithuania, Germany, and Israel, National Desired Population does not cover all of International Desired Population.
- Latvia (LSS) indicates Latvian Speaking Schools Only.
- For England, National Defined Population covers less than 90 percent of National Desired Population.

3) Notes for tables on achievement in mathematics and science at age 13 derived from the *International Assessment of Educational Progress*, 1991. (Tables 4.3, 4.11, 4.17, 4.18, 4.22, 4.23, 4.24, 4.25, 4.26, 4.27)

- Data for Switzerland represent 15 of 26 cantons.
- In Emilia-Romagna, Italy, Scotland, the United States, and Portugal, combined school and student participation is below .8 but at least .7.
- In England, combined school and student participation is below .7.
- Data for China, Portugal, and Brazil represent restricted grades.

4) Notes for tables on achievement in mathematics and science at age 9 derived from the *International Assessment of Educational Progress*, 1991. (Tables 4.4, 4.13, 4.14)

- In the United States, combined school and student participation is below .8 but at least .7.
- In England, Emilia-Romagna, Italy, and Scotland, combined school and student participation is below .7.
- Data for Portugal represents restricted grades.

5) Notes for tables on achievement in reading at grades 4 and 9 derived from *Reading Literacy in the United States*, 1996, and *How in the World Do Students Read?*, 1991. (Tables 4.5, 4.15, 4.16)

- For Zimbabwe, Nigeria, and Thailand, sampling response rate of schools was below 80 percent.
- For Nigeria, insufficient data available to calculate standard error.

Interpreting IALS scores

The International Adult Literacy Survey (IALS) reports the results of a wide-ranging test of literacy skills given to a large sample of adults (ranging from 1,500 to 1,800 per country) in Europe and North America during the autumn of 1994 and in 1995. The IALS was a collaborative effort by 12 governments and 3 intergovernmental organizations. Each country was required to draw a probability sample from which results representative of the civilian, non-institutionalized population aged 16 to 65 could be derived. In 10 countries, the survey was carried out in the national language; in Canada, respondents were given a choice of English or French; in Switzerland, samples drawn from French-speaking and German-speaking cantons were required to respond in those respective languages.

As literacy cannot be narrowed down to a single skill suited for dealing with all types of text, nor defined as an infinite set of skills, the IALS defined literacy in terms of three domains, each encompassing a common set of skills relevant for diverse tasks:

1. **Prose literacy** — the knowledge and skills needed to understand and use information from texts including editorials, news stories, poems, and fiction;

2. **Document literacy** — the knowledge and skills required to locate and use information contained in various formats, including job applications, payroll forms, transportation schedules, maps, tables, and graphics; and

3. **Quantitative literacy** — the knowledge and skills required to apply arithmetic operations, either alone or sequentially, to numbers embedded in printed materials, such as balancing a checkbook, figuring out a tip, completing an order form, or determining the amount of interest on a loan from an advertisement.

In each of these three domains, rather than expressing a threshold for achieving literacy, a scale from 0 to 500 was constructed, upon which tasks of varying difficulty were placed. These scales were developed through the item response theory (IRT) scaling procedures. First, the difficulty of tasks was ranked on the scale according to how well respondents actually performed on them. Then, each scale was divided into five levels, reflecting the empirically determined progression of information-processing skills and strategies. Next, individuals were assigned scores between 0 and 500 according to how well they did on a variety of tasks at different levels. Finally, the percent of readers falling into each skill level was calculated.

A person's literacy ability in each domain can be expressed by a score, defined as the point at which he or she has an 80 percent chance of successfully performing a given task. If people's scores place them in level 2, it means that they have an 80 percent chance of successfully performing level 2 tasks and a greater than 80 percent chance of performing level 1 tasks. It does not mean, however, that individuals with low proficiency can never succeed at more difficult tasks—that is, on tasks that are rated at higher skill levels. It means only that their probability of success is relatively low. Below is a description of the three literacy scales and the tasks required at each proficiency level:

Prose literacy includes text from newspapers, magazines, and brochures accompanied by one or more questions or directives asking the reader to perform specific tasks. These tasks represent three major aspects of information processing: locating, integrating, and generating.

Locating tasks require the reader to find information in the text based on conditions or features specified in the question or directive. Integrating tasks ask the reader to pull together two or more pieces of information in the text. In the generating tasks, readers must produce a written response by processing information from the text and also by making text-based inferences or drawing on their own background knowledge.

Prose Level 1 (Difficulty values 0–225). Most of the tasks at this level require the reader to locate and match a single piece of information in the text that is identical or synonymous to the information given in the directive. If a plausible incorrect answer is present in the text, it tends not to be near the correct information.

Prose Level 2 (Difficulty values 226–275). Tasks at this level tend to require the reader to locate one or more pieces of information in the text, but several distracters may be present, or low-level inferences may be required. Tasks at this level also begin to ask readers to integrate two or more pieces of information, or to compare and contrast information.

Prose Level 3 (Difficulty values 276–325). Tasks at this level tend to direct readers to search texts to match information that requires low-level inferences or that meets specified conditions. Sometimes the reader is required to identify several pieces of information that are located in different sentences or paragraphs rather than in a single sentence. Readers may also be asked to integrate or to compare and contrast information across paragraphs or sections of text.

Prose Level 4 (Difficulty values 326–375). These tasks require readers to perform multiple-feature matching or to provide several responses where the requested information must be identified through text-based inferences. Tasks at this level may also require the reader to integrate or contrast pieces of information, sometimes presented in relatively lengthy texts. Typically, theses texts contain more distracting information, and the information that is requested is more abstract.

Prose Level 5 (Difficulty values 376–500). Some tasks at this level require the reader to search for information in dense text that contains a number of plausible distracters. Some require readers to make high-level inferences or use specialized knowledge.

Document literacy involves using materials such as tables, schedules, charts, graphs, maps, and forms. Questions or directives associated with the various document tasks are basically of four types: locating, cycling, integrating, and generating. Locating, integrating, and generating refer to the same skills in document literacy as in prose literacy. Cycling tasks require the reader to locate and match one ore more features of information, but differ from locating tasks because they require the reader to engage in a series of feature matches to satisfy conditions given in the question.

Document Level 1 (Difficulty values 0–225). Most of the tasks at this level require the reader to locate a piece of information based on a literal match. Distracting information, if present, is typically located away from the correct answer. Some tasks may direct the reader to enter personal information onto a form.

Document Level 2 (Difficulty values 226–275). Document tasks at this level are a bit more varied. While some still require the reader to match on a single feature, more distracting information may be present or the match may require a low-level inference. Some tasks at this level may require the reader to enter information onto a form or to cycle through information in a document.

Document Level 3 (Difficulty values 276–325). Tasks at this level appear to be most varied. Some require the reader to make literal or synonymous matches, but usually the matches require the reader to take conditional information in to account or to match on multiple features of information.

Document Level 4 (Difficulty values 326–375). Tasks at this level, like those in the previous levels, ask the reader to match on multiple features of information, to cycle through documents, and to integrate information; frequently, however, these tasks require the reader to make higher-order inferences to arrive at the correct answer. Sometimes, conditional information is present in the document, which must be taken into account by the reader.

Document Level 5 (Difficulty values 376–500). Tasks at this level require the reader to search through complex displays of information that contain multiple distracters, to make high-level inferences, process conditional information, or use specialized knowledge.

Quantitative literacy involves using numbers and arithmetic operations to complete a task. These numbers often must be located and extracted from different types of documents that contain similar but irrelevant information, be inferred from printed directions, or undergo multiple operations.

Quantitative Level 1 (Difficulty values 0–225). Although no quantitative tasks used in the IALS fall below the score value of 225, experience suggests that such tasks would require the reader to perform a single, relatively simple operation (usually addition) for which either the numbers are already entered onto the given document and the operation is stipulated, or the numbers are provided and the operation does not require the reader to borrow.

Quantitative Level 2 (Difficulty values 226–275). Tasks in this level typically require readers to perform a single arithmetic operation (frequently addition or subtraction) using numbers that are easily located in the text or document. The operation to be performed may be easily inferred from the wording of the question or the format of the material (for example, a bank deposit form or an order form).

Quantitative Level 3 (Difficulty values 276–325). Tasks found in this level typically require the reader to perform a single operation. However, the operations become more varied — some multiplication and division tasks are found in this level. Sometimes two or more numbers are needed to solve the problem and the numbers are frequently embedded in more complex displays. While semantic relation terms such as “how many” or “calculate the difference” are often used, some of the tasks require the reader to make higher-order inferences to determine the appropriate operation.

Quantitative Level 4 (Difficulty values 326–375). With one exception, the tasks at this level require the reader to perform a single arithmetic operation where typically either the quantities or the operation are not easily determined. That is, for most of the tasks at this level, the question or directive does not provide a semantic relation term such as “how many” or “calculate the difference” to help the reader.

Quantitative Level 5 (Difficulty values 376–500). These tasks require readers to perform multiple operations sequentially; they must pull out the features of the problem from the material provided or rely on background knowledge to determine the quantities or operations needed.

G

Glossary

Glossary

Consumer price index for all urban consumers (CPI-U): This price index measures the average change in the cost of a fixed basket of goods and services purchased by consumers living in urban areas.

Early childhood education: Education preceding the first level (primary). It also is called pre-primary education and includes kindergarten and pre-kindergarten in the United States. All types of establishments or group settings aimed at supporting and stimulating the child's social and intellectual development are included in early childhood education.

Educational attainment: The highest grade, year, or level of regular school attended and completed.

Educational expenditures: The sum of expenditures on instruction, research, public service, academic support, student services, institutional support, operation and maintenance of plant, and scholarship awards, from restricted and unrestricted funds (some of these expenditure categories do not apply to all levels of education). Expenditures per student consist of total educational expenditures divided by the number of students.

Elementary education: The equivalent of grades 1-6 in the United States.

Enrollment rate: The enrollment rate is the percentage of the population in a typical school-age cohort who are enrolled in full-time education. The typical age range for attendance in an education level may vary country by country.

Formal education: Formal education refers to education programs that are typically taking place in schools or other academic institutions with formal curriculums and educational requirements. Formal education usually leads to a publicly recognized academic credential, such as a graduation certificate, diploma, or degree.

Full-time-equivalent (FTE) enrollment: The sum of the enrollment of full-time students and the full-time equivalent of part-time students. Different conversion factors are sometimes used to convert enrollment of part-time students into full-time equivalents, depending upon education level. Conversion factors also may vary by country. For example, in some countries, two part-time students may be considered equal to one full-time student, while in other countries three part-time students may be considered equivalent to one full-time student.

Full-time-equivalent (FTE) teaching staff: The sum of the number of full-time teachers and the full-time equivalent of part-time teachers. Different conversion factors are sometimes used to convert part-time teachers into full-time equivalents.

Graduate degree: Any formal degree attained after the bachelor's degree. Graduate degrees include master's degrees, doctoral degrees, and professional degrees.

Gross domestic product (GDP): The gross domestic product (GDP) is equal to the total of all gross expenditures on the final use of domestically supplied goods and services, valued at the price to the purchaser minus the imports of all goods and services. GDP per capita is the GDP of a country divided by its total population.

Higher education: Study beyond secondary school at an institution that offers programs leading to an associate, baccalaureate, or higher degree (or equivalent degrees in other countries). It also is called tertiary or postsecondary education.

Labor force: Persons age 15- to 64-years-old either employed or actively seeking work.

Legal school-leaving age: The last year of legally mandated education. This age varies by country as indicated by Table S-2.

Lower secondary education: Education approximately equivalent to grades 7, 8, and 9 in the United States.

Organization for Economic Co-operation and Development (OECD): An organization of 29 nations whose purpose is to promote trade and economic growth in both member and non-member nations. OECD's research activities cover almost all aspects of economic and social policy. The member countries are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

Primary education: Education prior to secondary education, equivalent to elementary school education in the United States.

Private expenditures: Expenditures funded by private sources include funds spent mainly by households, private non-profit institutions, and firms and business. Typical private expenditures include expenditures on school fees, materials such as textbooks and teaching equipment, transport to school (if organized by the school and paid by parents or other private sources), meals (if provided by the school and paid for through a private source), boarding fees, and expenditures by employers for initial vocational training.

Private schools or institutions: Schools or institutions organized and controlled independently of public authorities, even though they may receive public funding.

Public direct expenditures: Expenditures funded by public authorities at all levels, excluding indirect expenditures in the form of student loans or subsidies to families. Expenditures on education by public agencies other than education departments, ministries, or boards are included. Expenditures by education departments, ministries, or boards that are not directly related to education are not included.

Public schools or institutions: Schools or institutions organized and controlled by public authorities, normally providing open access to education without any distinction of race, sex, or religion.

Purchasing Power Parities (PPP): The rates of currency conversion that equalize the purchasing power of different currencies. This means that a given sum of money, when converted into different currencies at the PPP rates, will buy the same basket of goods and services in all countries.

Student/teacher ratio: The ratio of the full-time-equivalent enrollment in a given level of education to the total full-time-equivalent teachers working at the same education level.

Teachers: A teacher is defined as a person whose professional activities involve the transmitting of knowledge, attitudes, and skills that are stipulated in a formal curriculum program to students enrolled in a formal educational institution. The definition does not depend upon the qualifications held by the teacher, as it is based upon three concepts: activity (thus excluding former teachers who no longer have active teaching duties); profession (thus excluding people who work occasionally or in a voluntary capacity in schools); and formal program or curriculum (thus excluding people who provide services other than formal instruction, e.g., supervisors, activity organizers, etc., whether the program is established at the country, district, or school level).

Tertiary education: See "Higher education."

Unemployment rate: The percentage of the labor force without work, but actively seeking work.

Upper secondary education: Education approximately equivalent to grades 10, 11, and 12 in the United States. Upper secondary education may include general, technical, or vocational education.

Youth unemployment rate: The percentage of the labor force under age 25 without work, but actively seeking work.

Index

Index