



	Public expenditure per student						Public expenditure on education		Trained teachers in primary education	Primary school pupil-teacher ratio
	Primary		% of GDP per capita Secondary		Tertiary		% of GDP	% of total government expenditure	% of total	pupils per teacher
	1991	2007 ^a	1999	2007 ^a	1999	2007 ^a	2007 ^a	2007 ^a	2007 ^a	2007 ^a
Afghanistan	..	..	..	..	..	..	..	..	..	..
Albania	..	..	..	..	..	..	..	..	..	..
Algeria	26.5	..	..	..	..	..	..	..	99.2	24
Angola	..	3.7	..	36.9	..	78.3	2.6	..	..	41
Argentina	..	12.0	..	19.6	17.7	..	..	..	..	17
Armenia	..	..	..	..	..	..	2.7	15.0	77.5	19
Australia	..	17.3	15.4	15.4	27.2	23.1	4.8	..	..	..
Austria	18.2	23.5	29.9	26.3	51.6	50.0	5.4	10.9	..	12
Azerbaijan	..	..	15.4	..	..	..	2.6	12.6	..	13
Bangladesh	..	..	13.4	..	50.1	46.2	2.6	15.8	..	..
Belarus	30.1	14.4	..	27.0	..	18.3	5.2	9.3	99.8	16
Belgium	15.8	20.2	23.7	33.4	38.3	35.1	6.0	12.1	..	11
Benin	..	13.4	26.3	..	170.4	165.4	3.9	18.0	71.8	44
Bolivia	..	..	11.7	..	44.1	..	..	..	..	..
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..
Botswana	..	16.1	..	41.2	..	449.6	8.1	21.0	86.9	24
Brazil	..	15.4	9.5	13.2	57.1	35.1	4.5	14.5	..	21
Bulgaria	..	24.5	18.8	23.4	17.9	24.8	4.5	..	..	16
Burkina Faso	..	36.0	..	23.3	..	236.5	4.5	15.4	87.7	48
Burundi	13.4	19.9	..	77.5	1,078.2	363.1	5.1	17.7	87.4	52
Cambodia	..	..	11.5	..	43.7	8.5	1.6	12.4	98.4	51
Cameroon	..	7.6	16.8	41.6	64.4	126.3	3.9	17.0	36.3	44
Canada	..	..	..	..	47.1	..	4.9	..	..	..
Central African Republic	11.9	7.5	..	..	..	305.2	1.4	..	..	102 ^b
Chad	8.0	7.1	28.3	29.2	..	348.2	1.9	10.1	26.8	60
Chile	..	11.1	14.8	12.4	19.4	11.8	3.2	16.0	..	26
China	..	..	11.5	..	90.1	..	..	..	..	18
Hong Kong, China	..	12.5	17.7	16.5	..	47.3	3.5	23.2	94.6	17
Colombia	..	15.6	16.9	12.6	39.6	52.7	4.9	12.6	..	28
Congo, Dem. Rep.	..	..	..	..	..	..	..	..	96.0	38
Congo, Rep.	..	3.0	..	..	379.5	..	1.8	8.1	86.6	58
Costa Rica	7.8	..	23.2	..	55.0	..	4.9	20.6	89.5	19
Côte d'Ivoire	..	..	55.5	..	216.6	..	..	..	100.0	41
Croatia	..	..	..	..	41.5	..	4.6	9.3	..	17
Cuba	21.6	51.1	41.4	60.1	86.6	43.5	13.3	20.6	100.0	10
Czech Republic	..	12.6	21.7	22.9	33.7	27.2	4.3	9.5	..	16
Denmark	..	25.1	38.1	35.0	65.9	55.3	8.3	15.5	..	..
Dominican Republic	..	10.3	..	4.7	..	..	2.4	11.0	88.3	24
Ecuador	..	..	9.7	..	..	..	..	..	71.6	23
Egypt, Arab Rep.	..	..	..	..	..	..	3.8	12.6	..	27
El Salvador	..	9.0	7.9	10.5	9.4	15.5	3.0	13.1	93.3	40
Eritrea	..	9.6	38.5	9.6	444.1	..	2.4	..	87.1	48
Estonia	..	19.4	27.9	23.0	32.6	18.3	4.9	14.6	..	11
Ethiopia	22.1	12.5	..	8.9	..	785.5	5.5	23.3	..	..
Finland	21.7	18.0	25.8	32.3	40.3	34.4	6.3	12.5	..	16
France	11.8	17.4	28.5	27.0	29.7	33.3	5.7	10.6	..	19
Gabon	..	..	..	..	..	..	..	..	..	..
Gambia, The	13.2	..	..	..	..	..	..	..	76.3	41
Georgia	..	..	..	..	..	..	2.7	7.8	..	..
Germany	..	16.3	20.5	21.5	..	..	4.5	9.7	..	14
Ghana	..	18.4	..	29.1	..	213.4	5.4	..	56.3	35
Greece	7.5	14.1	13.5	18.2	22.8	21.5	3.5	9.2	..	11
Guatemala	..	10.5	4.3	6.0	..	19.3	3.1	..	..	30
Guinea	..	..	..	..	..	192.9	1.7	..	98.8	45
Guinea-Bissau	..	..	..	..	..	..	..	..	..	..
Haiti	9.1	..	..	..	..	..	..	..	..	..

Education inputs

2.11

PEOPLE

	Public expenditure per student						Public expenditure on education		Trained teachers in primary education	Primary school pupil-teacher ratio
	Primary		% of GDP per capita Secondary		Tertiary		% of GDP	% of total government expenditure	% of total	pupils per teacher
	1991	2007 ^a	1999	2007 ^a	1999	2007 ^a	2007 ^a	2007 ^a	2007 ^a	2007 ^a
Honduras	..	..	..	..	..	..	..	..	..	28
Hungary	..	25.7	19.1	23.1	34.2	23.8	5.5	10.9	..	10
India	..	8.9	24.7	16.7	90.8	57.8	3.2	..	..	..
Indonesia	..	..	..	..	..	..	3.5	17.5	..	20
Iran, Islamic Rep.	..	15.4	9.9	22.3	34.8	27.7	5.5	19.5	70.8	19
Iraq	..	..	..	..	..	..	..	..	..	..
Ireland	11.5	14.7	16.8	21.8	28.5	24.8	4.8	13.9	..	17
Israel	..	20.7	22.4	20.5	31.7	23.1	6.3	..	..	13
Italy	14.9	23.1	27.7	26.9	27.6	22.3	4.4	9.2	..	11
Jamaica	9.9	14.6	23.6	21.5	79.0	..	5.3	8.8	..	28
Japan	..	22.2	20.9	22.4	15.1	19.2	3.5	9.5	..	19
Jordan	..	15.4	15.8	19.0	..	..	..	..	..	..
Kazakhstan	..	..	..	..	..	8.0	2.9	..	..	17 ^b
Kenya	..	22.4	15.2	22.1	209.4	..	7.1	17.9	..	40
Korea, Dem. Rep.	..	..	..	..	..	..	..	..	..	..
Korea, Rep.	11.8	18.8	15.7	23.4	8.4	9.3	4.4	15.3	..	27
Kuwait	35.4	9.2	..	14.1	..	79.8	3.6	12.9	100.0	10
Kyrgyz Republic	..	..	..	..	27.7	22.3	5.6	..	62.4	24
Lao PDR	..	9.1	4.3	4.7	66.5	25.2	3.2	15.8	89.7	30
Latvia	..	..	23.7	..	27.9	..	..	..	..	12
Lebanon	..	8.3	..	8.8	14.2	14.8	2.7	9.6	12.2	14
Lesotho	..	25.0	71.6	49.8	1,295.1	1,141.5	13.3	29.8	66.1	40
Liberia	..	6.0	..	..	..	..	..	..	40.2 ^b	24 ^b
Libya	..	..	..	..	23.9	..	..	..	..	..
Lithuania	..	15.9	..	20.2	34.2	18.2	5.0	14.7	..	14
Macedonia, FYR	..	..	..	..	..	..	..	..	..	19
Madagascar	..	9.5	..	12.7	182.1	145.2	3.4	16.4	55.2	49
Malawi	7.2	..	..	..	..	..	..	..	..	..
Malaysia	10.1	..	22.6	..	84.3	..	..	..	..	17
Mali	..	21.3	53.0	31.7	227.7	..	4.6	16.8	100.0	52
Mauritania	..	9.6	35.3	24.2	77.8	39.2	2.9	10.1	100.0	43
Mauritius	10.1	10.3	15.3	17.4	40.4	29.8	3.9	12.7	100.0	22
Mexico	4.8	15.1	14.2	15.6	47.8	40.0	5.5	..	..	28
Moldova	..	33.6	..	40.7	..	41.4	8.3	19.8	..	16
Mongolia	..	14.9	..	14.8	..	..	5.1	..	98.7	32
Morocco	15.4	14.6	44.5	39.3	94.8	73.9	5.5	26.1	100.0	27
Mozambique	..	15.1	..	86.9	..	..	5.2	21.0	63.2	65
Myanmar	..	..	6.8	..	27.5	..	..	..	99.0	29
Namibia	..	21.4	36.2	22.0	156.9	141.3	..	..	94.8	30
Nepal	..	15.3 ^b	13.1	11.3 ^b	141.6	..	3.8 ^b	..	61.4 ^b	38 ^b
Netherlands	12.1	17.7	21.1	24.2	42.8	39.9	5.2	11.5	..	..
New Zealand	17.2	17.8	24.3	20.6	41.6	26.4	6.2	15.5	..	16
Nicaragua	..	9.8	..	4.5	..	..	..	..	73.6	33
Niger	..	28.7	60.9	46.1	..	371.4	3.4	17.6	98.2	40
Nigeria	..	..	..	..	..	..	..	..	51.2	40
Norway	32.7	18.9	26.8	28.8	45.8	49.2	7.0	16.7	..	..
Oman	10.5	15.1	21.9	12.7	..	14.0	4.0	31.1	100.0	14
Pakistan	..	..	..	..	..	..	2.9	11.2	84.6	39
Panama	11.3	12.4	19.1	15.1	33.6	..	..	..	90.8	25
Papua New Guinea	..	..	..	..	..	..	..	..	..	36
Paraguay	..	..	18.4	..	58.9	..	..	..	..	..
Peru	..	7.0	10.7	9.0	20.9	10.5	2.5	15.4	..	22
Philippines	..	8.6	10.8	9.1	15.1	11.5	2.5	15.2	..	35
Poland	..	23.7	16.5	22.2	21.1	21.4	5.5	..	..	11
Portugal	16.3	23.2	27.5	34.7	28.1	27.1	5.4	11.3	..	11
Puerto Rico	..	..	..	..	..	..	..	..	..	..



2.11 | Education inputs

	Public expenditure per student						Public expenditure on education		Trained teachers in primary education	Primary school pupil-teacher ratio
	Primary		% of GDP per capita Secondary		Tertiary		% of GDP 2007 ^a	% of total government expenditure 2007 ^a	% of total 2007 ^a	pupils per teacher 2007 ^a
	1991	2007 ^a	1999	2007 ^a	1999	2007 ^a				
Romania	..	10.7	16.0	16.0	32.6	23.7	3.5	..	..	17
Russian Federation	..	..	..	..	..	12.6	3.1	..	..	17
Rwanda	..	10.2	30.2	35.1	699.4	372.8	4.9	19.0	98.1	69
Saudi Arabia	..	18.5	..	18.4	..	..	..	..	91.5	11
Senegal	18.9	17.9	..	32.9	..	225.2	4.8	26.3	100.0	34
Serbia	..	..	..	..	..	..	4.2 ^b	9.4 ^b	..	13
Sierra Leone	..	..	..	..	..	..	3.8	..	49.4	44
Singapore	..	9.3 ^b	..	14.1 ^b	..	..	2.9 ^b	15.3 ^b	96.1	20
Slovak Republic	..	14.8	18.3	15.2	32.6	24.2	3.9	..	..	17
Slovenia	17.4	25.1	26.0	32.0	28.3	22.7	5.8	12.7	..	15
Somalia	..	..	..	..	..	..	..	..	..	..
South Africa	20.2	15.6	20.0	16.7	60.7	44.3	5.4	17.4	..	30
Spain	11.3	19.1	24.4	23.4	19.6	22.8	4.2	11.0	..	14
Sri Lanka	..	..	..	..	..	..	..	..	..	23
Sudan	..	..	..	..	..	..	..	..	58.7	37
Swaziland	6.7	15.4	26.1	43.7	388.4	343.6	7.6	..	90.8	33
Sweden	45.8	25.7	26.6	33.5	52.7	41.5	7.1	..	..	10
Switzerland	36.1	24.5	27.7	28.3	54.5	56.2	5.8	..	..	13
Syrian Arab Republic	..	20.3	21.7	..	..	..	..	..	..	..
Tajikistan	..	9.4 ^b	6.5	14.4 ^b	27.4	11.8	3.7 ^b	19.3 ^b	87.4	22
Tanzania	..	..	..	..	..	..	..	..	99.4 ^b	53 ^b
Thailand	11.6	..	15.5	..	35.1	28.0	4.3	25.0	..	18
Timor-Leste	..	27.6	..	..	..	..	..	..	..	31
Togo	..	9.8	31.1	20.0	..	162.5	3.7	15.8 ^b	14.6	39
Trinidad and Tobago	..	..	12.3	..	149.3	..	..	..	..	17
Tunisia	..	20.9	27.1	24.2	89.4	55.9	7.2	20.8	..	19
Turkey	10.7	..	14.3	..	45.5	..	..	..	..	..
Turkmenistan	..	..	..	..	..	..	..	..	..	..
Uganda	..	..	..	..	..	..	..	..	84.8	49
Ukraine	..	15.8	11.2	24.3	36.5	25.5	5.4	20.2	99.8	16
United Arab Emirates	..	4.4	11.5	6.2	41.5	..	1.4	28.3	100.0	17
United Kingdom	15.0	18.9	24.3	20.3	26.2	32.3	5.5	12.5	..	18
United States	..	22.2	22.5	24.6	27.0	25.4	5.7	13.7	..	14
Uruguay	7.8	8.8	11.3	10.8	19.1	18.8	2.9	11.6	..	20
Uzbekistan	..	..	..	..	..	..	..	..	100.0	18
Venezuela, RB	..	9.1	..	8.1	..	24.4	3.7	..	84.0	19
Vietnam	..	..	..	..	..	..	..	..	95.6	21
West Bank and Gaza	..	..	..	..	..	..	..	..	100.0	30
Yemen, Rep.	..	..	..	..	..	..	..	..	..	..
Zambia	..	2.3	19.4	8.1	164.3	..	1.5	..	..	49
Zimbabwe	20.7	..	19.6	..	196.1	..	..	..	..	38
World	.. m	15.3 m	.. m	.. m	.. m	.. m	4.5 m	14.2 m	..	25 w
Low income	..	..	..	..	..	..	..	..	..	41
Middle income	..	..	..	..	..	..	4.5	14.2	..	24
Lower middle income	..	..	..	..	..	..	3.2	..	..	26
Upper middle income	..	14.5	18.1	19.7	38.6	24.2	4.5	13.0	..	20
Low & middle income	..	..	..	..	..	..	..	..	..	28
East Asia & Pacific	..	..	8.1	..	37.8	..	..	..	..	20
Europe & Central Asia	..	..	..	..	..	..	4.1	13.1	..	18
Latin America & Carib.	..	12.0	13.1	13.2	37.1	..	3.5	13.1	..	23
Middle East & N. Africa	..	..	..	..	..	..	..	..	..	24
South Asia	..	..	13.4	..	90.8	..	..	..	..	..
Sub-Saharan Africa	..	11.8	..	..	..	..	4.1	..	..	45
High income	15.8	18.9	22.4	23.1	32.6	25.4	5.1	12.5	..	15
Euro area	14.9	18.0	24.4	26.3	29.1	26.0	5.2	11.2	..	14

a. Provisional data. b. Data are for 2008.

About the data

Data on education are compiled by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics from official responses to surveys and from reports provided by education authorities in each country. The data are used for monitoring, policymaking, and resource allocation. However, coverage and data collection methods vary across countries and over time within countries, so comparisons should be made with caution.

For most countries the data on education spending in the table refer to public spending—government spending on public education plus subsidies for private education—and generally exclude foreign aid for education. They may also exclude spending by religious schools, which play a significant role in many developing countries. Data for some countries and some years refer to ministry of education spending only and exclude education expenditures by other ministries and local authorities.

Many developing countries seek to supplement public funds for education, some with tuition fees to recover part of the cost of providing education services or to encourage development of private schools. Fees raise difficult questions of equity, efficiency, access, and taxation, however, and some governments have used scholarships, vouchers, and other public finance methods to counter criticism. For greater detail, consult the country- and indicator-specific notes in the original source.

The share of public expenditure devoted to education allows an assessment of the priority a government assigns to education relative to other public investments, as well as a government's commitment to investing in human capital development. It also reflects the development status of a country's education system relative to that of others. However, returns on investment to education, especially primary and lower secondary education, cannot be understood simply by comparing current education indicators with national income. It takes a long time before currently enrolled children can productively contribute to the national economy (Hanushek 2002).

Data on education finance are generally of poor quality. This is partly because ministries of education, from which the UNESCO Institute for Statistics collects data, may not be the best source for education finance data. Other agencies, particularly ministries of finance, need to be consulted, but coordination is not easy. It is also difficult to track actual spending from the central government to local institutions. And

private spending adds to the complexity of collecting accurate data on public spending.

The share of trained teachers in primary education measures the quality of the teaching staff. It does not take account of competencies acquired by teachers through their professional experience or self-instruction or of such factors as work experience, teaching methods and materials, or classroom conditions, which may affect the quality of teaching. Since the training teachers receive varies greatly (pre-service or in-service), care should be taken in making comparisons across countries.

The primary school pupil-teacher ratio reflects the average number of pupils per teacher. It differs from the average class size because of the different practices countries employ, such as part-time teachers, school shifts, and multigrade classes. The comparability of pupil-teacher ratios across countries is affected by the definition of teachers and by differences in class size by grade and in the number of hours taught, as well as the different practices mentioned above. Moreover, the underlying enrollment levels are subject to a variety of reporting errors (for further discussion of enrollment data, see *About the data* for table 2.12). While the pupil-teacher ratio is often used to compare the quality of schooling across countries, it is often weakly related to the value added of schooling systems.

In 1998 UNESCO introduced the new International Standard Classification of Education 1997 (ISCED 1997). Consistent historical time series with reclassification of the pre-ISCED 1997 series were produced for a selection of indicators in 2008. The full set of the historical series is forthcoming.

In 2006 the UNESCO Institute for Statistics also changed its convention for citing the reference year of education data and indicators to the calendar year in which the academic or financial year ends. Data that used to be listed for 2006, for example, are now listed for 2007. This change was implemented to present the most recent data available and to align the data reporting with that of other international organizations (in particular the Organisation for Economic Co-operation and Development and Eurostat).

Definitions

- **Public expenditure per student** is public current and capital spending on education divided by the number of students by level as a percentage of gross domestic product (GDP) per capita.
- **Public expenditure on education** is current and capital public expenditure on education as a percentage of GDP and as a percentage of total government expenditure.
- **Trained teachers in primary education** are the percentage of primary school teachers who have received the minimum organized teacher training (pre-service or in-service) required for teaching in their country.
- **Primary school pupil-teacher ratio** is the number of pupils enrolled in primary school divided by the number of primary school teachers (regardless of their teaching assignment).

Data sources

Data on education inputs are from the UNESCO Institute for Statistics, which compiles international data on education in cooperation with national commissions and national statistical services.