

ON WHAT RESOURCES AND SERVICES IS EDUCATION FUNDING SPENT?

This indicator compares OECD countries with respect to the division of spending between current and capital expenditure, and the distribution of current expenditure by resource category. It is largely influenced by teacher salaries (see Indicator D3), pension systems, teacher age distribution, size of the non-teaching staff employed in education (see Indicator D2 in *Education at a Glance 2005*) and the degree to which expansion in enrolments requires the construction of new buildings. It also compares how OECD countries' spending is distributed by different functions of educational institutions.

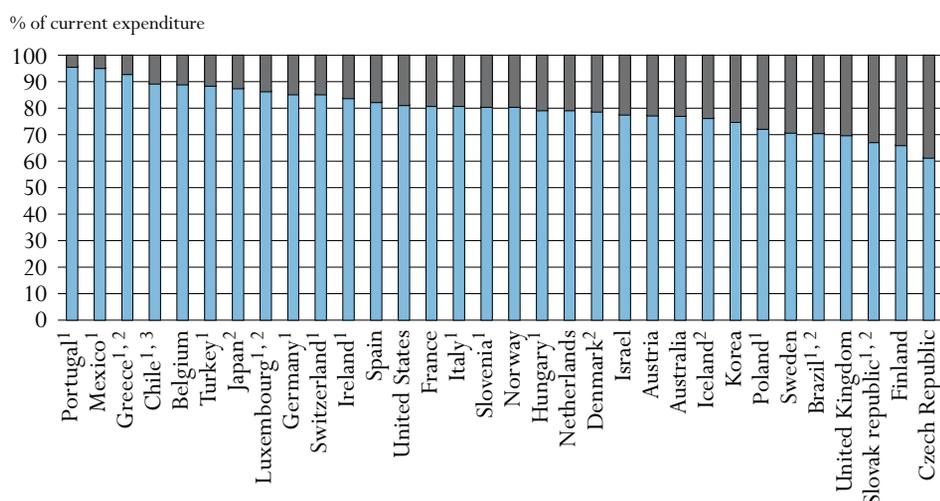
Key results

Chart B6.1. Distribution of current expenditure on educational institutions for primary, secondary and post-secondary non-tertiary education (2004)

The chart shows the distribution of current spending on educational institutions by resource category. Spending on education can be broken down into capital and current expenditure. Within current expenditure, one can distinguish resource categories compared to other items and service categories such as spending on instruction compared to ancillary and R&D services. The biggest item in current spending – teacher compensation – is examined further in Indicator D3.

■ Compensation of all staff ■ Other current expenditure

In primary, secondary and post-secondary non-tertiary education combined, current expenditure accounts for an average of 91% of total spending across OECD countries. In all but four OECD countries and partner economies, 70% or more of primary, secondary and post-secondary non-tertiary current expenditure is spent on staff salaries.



1. Public institutions only.
 2. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.
 3. Year of reference 2005.
 Countries are ranked in descending order of the share of compensation of all staff on primary, secondary and post-secondary non-tertiary education.

Source: OECD, Table B6.2. See Annex 3 for notes (www.oecd.org/edu/eag2007/).
 StatLink <http://dx.doi.org/10.1787/068352246561>

Other highlights of this indicator

- OECD countries spend an average of 34% of current expenditure at the tertiary level on purposes other than the compensation of educational personnel. This is explained by the higher cost of facilities and equipment in higher education.
- On average, OECD countries spend 0.2% of their GDP on subsidies for ancillary services provided by primary, secondary and post-secondary non-tertiary institutions. This represents 6% of total spending. At the high end, Finland, France, the Slovak Republic and Sweden allocate about 10% or more of total spending on educational institutions in percentage of GDP on ancillary services.
- A distinctive feature of tertiary institutions is high spending on R&D, which on average comprises over one-quarter of spending at this level. The fact that some countries spend much more on this item than others helps explain the wide differences in overall tertiary spending. Significant differences among OECD countries in the emphasis on R&D in tertiary institutions also contribute to the observed variation.
- The payment of instructional staff is not as great a share of spending in tertiary institutions as at other levels, because of the higher cost of facilities and equipment as well as the degree to which expansion in enrolments requires the construction of new buildings.

Policy context

How spending is apportioned between different categories of expenditure can affect the quality of services (*e.g.* teachers' salaries), the condition of educational facilities (*e.g.* school maintenance) and the ability of the education system to adjust to changing demographic and enrolment trends (*e.g.* the construction of new schools).

Comparisons of how different OECD countries apportion educational expenditure among the various resource categories can also provide some insight into variation in the organisation and operation of educational institutions. Decisions on the allocation of resources made at the system level – both budgetary and structural – eventually feed through to the classroom and affect the nature of instruction and the conditions under which it is provided.

This indicator also compares how spending is distributed by different functions of educational institutions. Educational institutions offer a range of services in addition to instruction. At the primary, secondary and post-secondary non-tertiary levels, institutions may offer meals and free transport to and from school or boarding facilities. At the tertiary level, institutions may offer housing and often perform a wide range of research activities.

Evidence and explanations

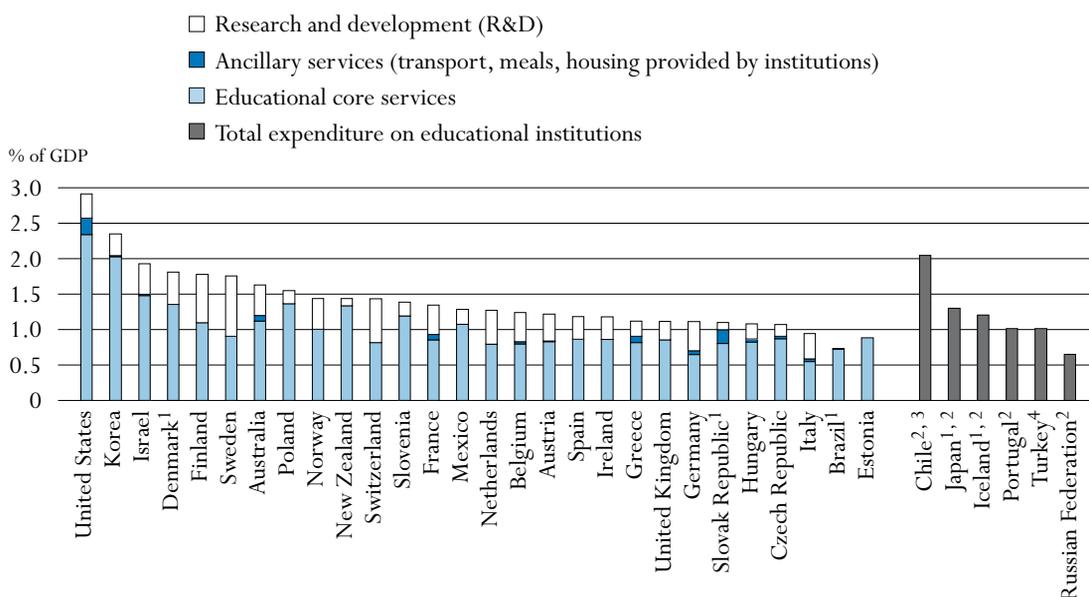
What this indicator does and does not cover

This indicator breaks down educational expenditure by current and capital expenditure and the three main functions typically fulfilled by educational institutions. This includes costs directly attributable to instruction, such as teachers' salaries or school materials, and costs indirectly related to the provision of instruction, such as expenditure on administration, instructional support services, development of teachers, student counselling, or the construction and/or provision of school facilities. It also includes spending on ancillary services such as student welfare services provided by educational institutions. Finally, it includes spending attributable to research and development (R&D) performed at tertiary institutions, either in the form of separately funded R&D activities or in the form of those proportions of salaries and current expenditure in general education budgets that are attributable to the research activities of staff.

The indicator does not include public and private R&D spending outside educational institutions, such as R&D spending in industry. A comparative review of R&D spending in sectors other than education is provided in the *Main OECD Science and Technology Indicators* (OECD 2006). Expenditure on student welfare services at educational institutions only includes public subsidies for those services. Expenditure by students and their families on services that are provided by institutions on a self-funding basis is not included.

Expenditure on instruction, R&D and ancillary services

Below the tertiary level, educational expenditure is dominated by spending on educational core services. At the tertiary level, other services – particularly those related to R&D activities – can account for a significant proportion of educational spending. Variation among OECD countries in expenditure on R&D activities can therefore explain a significant part of the differences in overall educational expenditure per tertiary student (Chart B6.2). For example, high levels of R&D spending (between 0.4 and 0.9% of GDP) in tertiary educational institutions in

Chart B6.2. Expenditure on educational core services, R&D and ancillary services in tertiary educational institutions as a percentage of GDP (2004)

1. Some levels of education are included with others. Refer to “x” code in Table B1.1a for details.

2. Total expenditure at tertiary level including R&D expenditure.

3. Year of reference 2005.

4. Total expenditure at tertiary level excluding R&D expenditure.

Countries are ranked in descending order of total expenditure on educational institutions in tertiary institutions.

Source: OECD, Table B6.1. See Annex 3 for notes (www.oecd.org/edu/eag2007).

StatLink  <http://dx.doi.org/10.1787/068352246561>

Australia, Belgium, Denmark, Finland, France, Germany, the Netherlands, Norway, Sweden and Switzerland, and the partner economy Israel, imply that spending on education per student in these countries would be considerably lower if the R&D component were excluded (see Table B1.1b).

Student welfare services

Student welfare services (as well as services for the general public in some cases) are integral functions of schools and universities in many OECD countries. Countries finance these ancillary services with different combinations of public expenditure, public subsidies and fees paid by students and their families.

On average, OECD countries spend 0.2% of their GDP on subsidies for ancillary services provided by primary, secondary and post-secondary non-tertiary institutions. This represents 6% of total spending on these institutions. At the high end, Finland, France, the Slovak Republic and Sweden spend about 10% or more of total spending on educational institutions in percentage of GDP on ancillary services (Table B6.1).

At the tertiary level, ancillary services are more often provided on a self-financed basis. On average, expenditure on subsidies for ancillary services at the tertiary level amounts to less than 0.1% of GDP and represents up to 0.2% in the United States (Table B6.1).

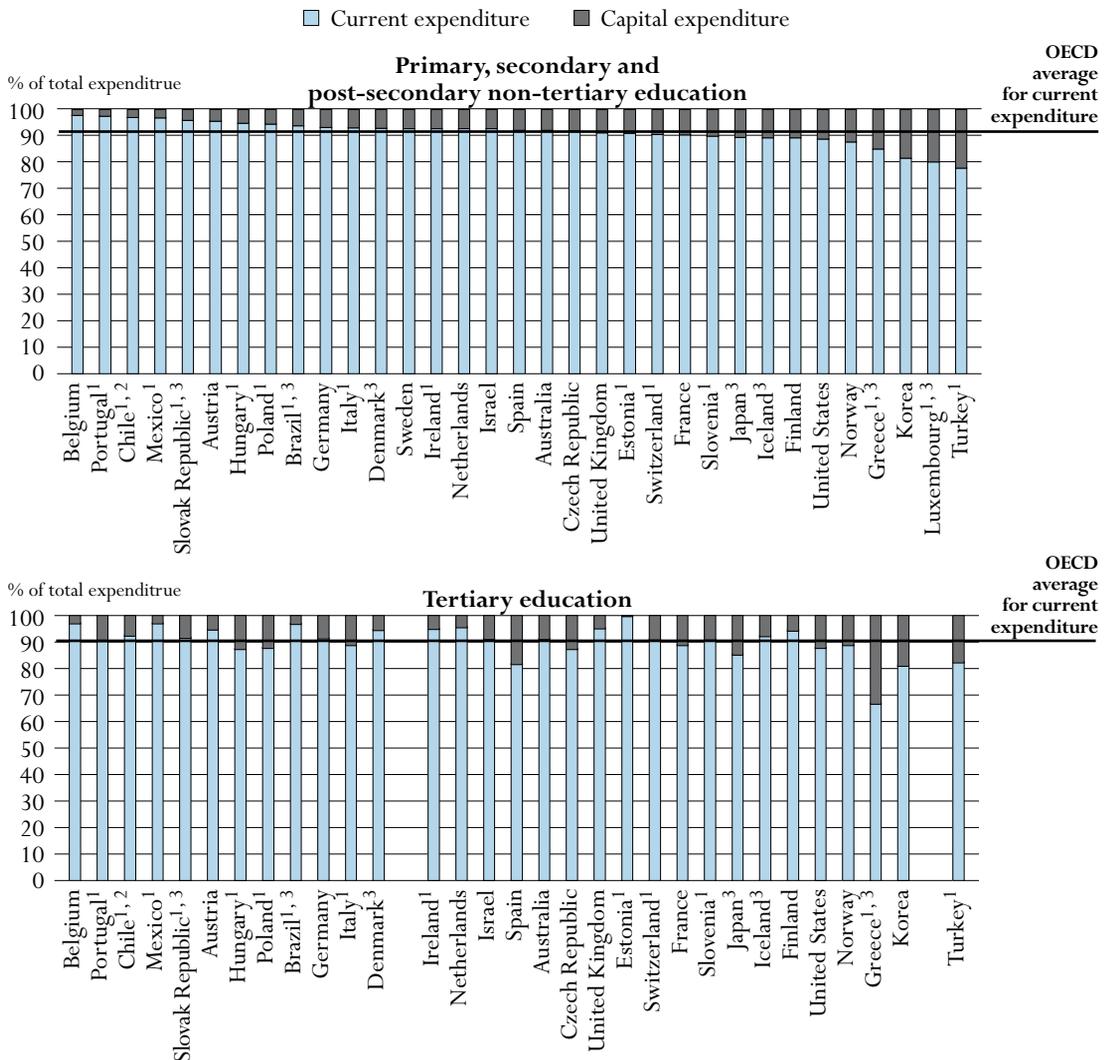
B6

Current and capital expenditures, and the distribution of current expenditure by resource category

Educational expenditure can first be divided into current and capital expenditure. Capital expenditure comprises spending on assets that last longer than one year and includes spending on the construction, renovation and major repair of buildings. Current expenditure comprises spending on school resources used each year for the operation of schools.

Chart B6.3. Distribution of current and capital expenditure on educational institutions (2004)

By resource category and level of education



1. Public institutions only.
 2. Year of reference 2005.
 3. Some levels of education are included with others. Refer to “x” code in Table B1.1a for details.
 Countries are ranked in descending order of the share of current expenditure on primary, secondary and post-secondary non-tertiary education.

Source: OECD. Table B6.2. See Annex 3 for notes (www.oecd.org/edu/eag2007).

StatLink <http://dx.doi.org/10.1787/068352246561>

Education takes place mostly in school and university settings. The labour-intensive technology of education explains the large proportion of current spending within total educational expenditure. In primary, secondary, and post-secondary non-tertiary education combined, current expenditure accounts for nearly 91% of total spending on average across all OECD countries.

There is some noticeable variation among OECD countries with respect to the relative proportions of current and capital expenditure: at the primary, secondary and post-secondary non-tertiary levels combined, the proportion of current expenditure ranges from less than 82% in Korea, Luxembourg and Turkey to 97% or more in Belgium, Mexico and Portugal and the partner economy Chile (Chart B6.3).

Proportions of current expenditure allocated to the compensation of teachers and other staff

Current expenditure can be further subdivided into three broad functional categories: compensation of teachers, compensation of other staff, and other current expenditures (*e.g.* teaching materials and supplies, maintenance of school buildings, preparation of student meals and renting of school facilities). The amount allocated to each of these functional categories will depend in part on current and projected changes in enrolment, on the salaries of educational personnel and on costs of maintenance and construction of educational facilities.

The salaries of teachers and other staff employed in education account for the largest proportion of current expenditure in all OECD countries. On average across the OECD countries, expenditure on the compensation of educational personnel accounts for 80% of current expenditure at the primary, secondary and post-secondary non-tertiary levels of education combined. In all except the Czech Republic, Finland, the Slovak Republic and the United Kingdom, 70% or more of current expenditure at the primary, secondary and post-secondary non-tertiary levels is spent on staff salaries. The proportion devoted to the compensation of educational personnel is 90% or more in Greece, Mexico and Portugal (Chart B6.1).

OECD countries with relatively small education budgets (*e.g.* Mexico, Portugal and Turkey) tend to devote a larger proportion of current educational expenditure to the compensation of personnel and a smaller proportion to services that are sub-contracted, such as support services (*e.g.* maintenance of school buildings), ancillary services (*e.g.* preparation of meals for students) and renting of school buildings and other facilities.

In Denmark, France, the United Kingdom and the United States, and the partner economy Slovenia, more than 20% of current expenditure in primary, secondary and post-secondary non-tertiary education combined goes towards compensation of non-teaching staff, while in Austria, Ireland, Korea and the partner economy Chile, this figure is 10% or less. These differences are likely to reflect the degree to which educational personnel such as principals, guidance counsellors, bus drivers, school nurses, janitors and maintenance workers specialise in non-teaching activities (Table B6.2).

OECD countries, on average, spend 34% of current expenditure at the tertiary level on purposes other than the compensation of educational personnel. This is explained by the higher cost of facilities and equipment in higher education (Table B6.2).

Proportions of capital expenditure

At the tertiary level, the proportion of total expenditure spent on capital outlays is larger than at the primary, secondary and post-secondary non-tertiary levels (10.7 versus 9.0%), generally because of more differentiated and advanced teaching facilities. In 13 out of the 31 OECD countries and partner economies for which data are available, the proportion spent on capital expenditure at the tertiary level is 10% or more and in Greece, Korea, Spain and Turkey it is above 17% (Chart B6.3).

Differences are likely to reflect how tertiary education is organised in each OECD country, as well as the degree to which expansion in enrolments requires the construction of new buildings.

Definitions and methodologies

Data refer to the financial year 2004 and are based on the UOE data collection on education statistics administered by the OECD in 2006 (for details see Annex 3 at www.oecd.org/edu/eag2007).

The distinction between current and capital expenditure is taken from the standard definition used in national income accounting. Current expenditure refers to goods and services consumed within the current year, and requiring recurrent production in order to sustain the provision of educational services. Capital expenditure refers to assets which last longer than one year, including spending on construction, renovation or major repair of buildings and new or replacement equipment. The capital expenditure reported here represents the value of educational capital acquired or created during the year in question – that is, the amount of capital formation – regardless of whether the capital expenditure was financed from current revenue or by borrowing. Neither current nor capital expenditure includes debt servicing.

Calculations cover expenditure by public institutions or, where available, that of public and private institutions combined.

Current expenditure other than on the compensation of personnel includes expenditure on services which are sub-contracted, such as support services (*e.g.* maintenance of school buildings), ancillary services (*e.g.* preparation of meals for students) and renting of school buildings and other facilities. These services are obtained from outside providers, unlike the services provided by the education authorities or by the educational institutions themselves using their own personnel.

Expenditure on R&D includes all expenditure on research performed at universities and other tertiary education institutions, regardless of whether the research is financed from general institutional funds or through separate grants or contracts from public or private sponsors. The classification of expenditure is based on data collected from the institutions carrying out R&D rather than on the sources of funds.

Ancillary services are services provided by educational institutions that are peripheral to the main educational mission. The two main components of ancillary services are student welfare services and services for the general public. At primary, secondary, and post-secondary non-tertiary levels, student welfare services include meals, school health services, and transportation to and from school. At the tertiary level, it includes residence halls (dormitories), dining halls, and health care. Services for the general public include museums, radio and television broadcasting, sports and recreational and cultural programmes. Expenditure on ancillary services, including fees from students or households, is excluded.

Educational core services are estimated as the residual of all expenditure, *i.e.* total expenditure on educational institutions net of expenditure on R&D and ancillary services.

Note that data appearing in earlier editions of this publication may not always be comparable to data shown in the 2007 edition due to changes in definitions and coverage that were made as a result of the OECD expenditure comparability study (see Annex 3 at www.oecd.org/edu/eag2007 for details on changes).

Table B6.1.

Expenditure on institutions by service category as a percentage of GDP (2004)
 Expenditure on instruction, R&D and ancillary services in educational institutions and private expenditure on educational goods purchased outside educational institutions

	Primary, secondary and post-secondary non-tertiary education				Tertiary education					
	Expenditure on educational institutions			Private payments on instructional services/goods outside educational institutions	Expenditure on educational institutions				Private payments on instructional services/goods outside educational institutions	
	Core educational services	Ancillary services (transport, meals, housing provided by institutions)	Total		Core educational services	Ancillary services (transport, meals, housing provided by institutions)	R&D at tertiary institutions	Total		
										(1)
OECD countries										
Australia	3.99	0.17	4.16	0.13	1.12	0.08	0.43	1.63	0.15	
Austria	3.57	0.18	3.75	m	0.83	0.01	0.38	1.22	m	
Belgium	3.97	0.16	4.13	0.13	0.80	0.03	0.41	1.24	0.17	
Canada	m	m	m	m	m	m	m	m	m	
Czech Republic	3.02	0.16	3.19	0.12	0.87	0.04	0.16	1.07	0.11	
Denmark ¹	x(3)	x(3)	4.33	0.64	1.35	a	0.46	1.81	0.76	
Finland	3.51	0.41	3.92	m	1.10	n	0.68	1.78	m	
France	3.58	0.51	4.09	0.20	0.86	0.07	0.42	1.35	0.08	
Germany	3.38	0.08	3.45	0.19	0.65	0.05	0.41	1.11	0.04	
Greece ¹	2.19	0.03	2.22	0.85	0.82	0.09	0.21	1.12	0.05	
Hungary ²	3.13	0.32	3.45	m	0.82	0.04	0.22	1.08	m	
Iceland ¹	x(3)	x(3)	5.41	m	x(8)	x(8)	x(8)	1.21	m	
Ireland	3.34	0.07	3.42	m	0.86	x(8)	0.32	1.18	m	
Italy ²	3.30	0.13	3.44	0.41	0.55	0.04	0.36	0.94	0.14	
Japan ¹	x(3)	x(3)	2.93	0.79	x(8)	x(8)	x(8)	1.30	0.04	
Korea	4.04	0.37	4.41	m	2.03	0.02	0.30	2.35	m	
Luxembourg ^{1,2}	x(3)	x(3)	3.85	m	m	m	m	m	m	
Mexico	4.27	m	4.27	0.23	1.07	m	0.21	1.28	0.06	
Netherlands	3.39	0.04	3.42	0.19	0.79	n	0.48	1.27	0.07	
New Zealand	x(3)	x(3)	5.01	0.00	1.34	x(8)	0.10	1.44	n	
Norway	x(3)	x(3)	4.22	m	1.00	n	0.44	1.44	m	
Poland ²	3.68	0.11	3.79	0.20	1.37	n	0.18	1.55	0.06	
Portugal ²	3.80	0.03	3.82	0.06	x(8)	x(8)	x(8)	1.01	m	
Slovak Republic ¹	2.50	0.52	3.02	0.73	0.80	0.20	0.10	1.10	0.27	
Spain	2.88	0.10	2.98	m	0.86	m	0.32	1.18	m	
Sweden	4.03	0.43	4.46	m	0.90	n	0.85	1.76	m	
Switzerland ²	x(3)	x(3)	4.51	m	0.93	x(8)	0.70	1.63	m	
Turkey ²	2.89	0.19	3.09	0.01	x(8)	x(8)	x(8)	1.01	n	
United Kingdom	4.21	0.22	4.44	m	0.85	m	0.26	1.12	0.17	
United States	3.77	0.31	4.08	a	2.34	0.23	0.34	2.91	a	
OECD average	3.48	0.22	3.84	0.29	1.04	0.05	0.36	1.40	0.13	
Partner economies										
Brazil ^{1,2}	x(3)	x(3)	2.85	m	0.66	x(5)	0.01	0.67	m	
Chile ³	3.69	0.16	3.85	0.03	x(8)	x(8)	x(8)	2.05	0.01	
Estonia ²	x(3)	x(3)	3.66	m	x(8)	x(8)	n	0.88	m	
Israel	4.68	0.02	4.70	0.29	1.48	0.02	0.43	1.93	n	
Russian Federation ²	x(3)	x(3)	2.01	m	x(8)	x(8)	x(8)	0.65	m	
Slovenia ²	4.12	0.18	4.30	m	1.19	n	0.20	1.39	m	

1. Some levels of education are included with others. Refer to "x" code in Table B1.1b for details.

2. Public institutions only.

3. Year of reference 2005.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2007).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink  <http://dx.doi.org/10.1787/068352246561>

Table B6.2.
Expenditure on educational institutions by resource category and level of education (2004)
Distribution of total and current expenditure on educational institutions from public and private sources

	Primary, secondary and post-secondary non-tertiary education						Tertiary education					
	Percentage of total expenditure		Percentage of current expenditure				Percentage of total expenditure		Percentage of current expenditure			
	Current	Capital	Compensation of teachers	Compensation of other staff	Compensation of all staff	Other current	Current	Capital	Compensation of teachers	Compensation of other staff	Compensation of all staff	Other current
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD countries												
Australia	92.1	7.9	60.2	16.8	77.0	23.0	90.9	9.1	31.8	27.8	59.7	40.3
Austria	95.6	4.4	67.0	10.2	77.2	22.8	94.5	5.5	43.3	13.9	57.2	42.8
Belgium	97.8	2.2	70.3	18.5	88.9	11.1	96.9	3.1	54.0	24.1	78.1	21.9
Canada	m	m	m	m	m	m	m	m	m	m	m	m
Czech Republic	91.9	8.1	47.0	14.3	61.3	38.7	87.3	12.7	30.1	20.9	51.0	49.1
Denmark ¹	92.9	7.1	52.3	26.3	78.6	21.4	94.4	5.6	52.1	25.2	77.3	22.7
Finland	89.4	10.6	54.4	11.6	66.0	34.0	94.2	5.8	35.0	28.1	63.1	36.9
France	90.4	9.6	57.6	23.1	80.7	19.3	88.7	11.3	52.7	26.5	79.2	20.8
Germany ²	93.2	6.8	x(5)	x(5)	85.1	14.9	91.2	8.8	x(11)	x(11)	71.0	29.0
Greece ^{1,2}	85.0	15.0	x(5)	x(5)	92.7	7.3	66.7	33.3	x(11)	x(11)	40.6	59.4
Hungary ²	94.9	5.1	x(5)	x(5)	79.1	20.9	87.3	12.7	x(11)	x(11)	69.7	30.3
Iceland	89.4	10.6	x(5)	x(5)	76.2	23.8	92.0	8.0	x(11)	x(11)	79.4	20.6
Ireland ²	92.7	7.3	75.4	8.1	83.6	16.4	94.7	5.3	49.3	25.1	74.4	25.6
Italy ²	93.0	7.0	62.5	18.2	80.7	19.3	88.8	11.2	45.4	21.4	66.8	33.2
Japan ¹	89.5	10.5	x(5)	x(5)	87.4	12.6	85.0	15.0	x(11)	x(11)	61.0	39.0
Korea	81.5	18.5	66.8	7.9	74.7	25.3	80.9	19.1	38.2	14.1	52.3	47.7
Luxembourg ^{1,2}	80.1	19.9	74.9	11.2	86.2	13.8	m	m	m	m	m	m
Mexico ²	96.9	3.1	84.4	10.7	95.0	5.0	96.9	3.1	60.2	14.8	75.0	25.0
Netherlands	92.7	7.3	x(5)	x(5)	79.1	20.9	95.3	4.7	x(11)	x(11)	74.5	25.5
New Zealand	m	m	m	m	m	m	m	m	m	m	m	m
Norway	87.8	12.2	x(5)	x(5)	80.3	19.7	88.8	11.2	x(11)	x(11)	63.7	36.3
Poland ²	94.4	5.6	x(5)	x(5)	72.2	27.8	87.6	12.4	x(11)	x(11)	62.1	37.9
Portugal ²	97.6	2.4	84.2	11.3	95.5	4.5	90.2	9.8	x(11)	x(11)	73.2	26.8
Slovak Republic ^{1,2}	96.0	4.0	50.8	16.3	67.1	32.9	91.4	8.6	29.0	15.9	44.9	55.1
Spain	92.2	7.8	70.7	11.4	82.2	17.8	81.6	18.4	59.1	19.9	79.0	21.0
Sweden	92.8	7.2	52.1	18.5	70.6	29.4	m	m	x(11)	x(11)	60.1	39.9
Switzerland ²	90.6	9.4	72.1	13.0	85.1	14.9	90.7	9.3	40.8	36.6	77.5	22.5
Turkey ²	77.8	22.2	x(5)	x(5)	88.3	11.7	82.3	17.7	x(11)	x(11)	71.5	28.5
United Kingdom	91.1	8.9	49.0	20.7	69.7	30.3	95.0	5.0	32.3	25.7	58.0	42.0
United States	88.9	11.1	55.3	25.7	81.0	19.0	87.6	12.4	29.7	36.9	66.6	33.4
OECD average	91.0	9.0	63.5	15.5	80.1	19.9	89.3	10.7	42.7	23.6	66.2	33.8
Partner economies												
Brazil ^{1,2}	93.9	6.1	x(5)	x(5)	70.5	29.5	96.7	3.3	x(11)	x(11)	74.6	25.4
Chile ^{2,3}	97.1	2.9	84.2	4.9	89.1	10.9	92.1	7.9	x(11)	x(11)	64.1	35.9
Estonia ²	91.0	9.0	m	m	m	m	99.5	0.5	m	m	m	m
Israel	92.7	7.3	x(5)	x(5)	77.5	22.5	91.0	9.0	x(11)	x(11)	75.3	24.7
Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m
Slovenia ²	90.0	10.0	49.6	30.9	80.4	19.6	90.8	9.2	36.6	34.0	70.5	29.5

1. Some levels of education are included with others. Refer to "x" code in Table B1.1b for details.

2. Public institutions only.

3. Year of reference 2005.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2007).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink  <http://dx.doi.org/10.1787/068352246561>

READER'S GUIDE

Coverage of the statistics

Although a lack of data still limits the scope of the indicators in many countries, the coverage extends, in principle, to the entire national education system (within the national territory) regardless of the ownership or sponsorship of the institutions concerned and regardless of education delivery mechanisms. With one exception described below, all types of students and all age groups are meant to be included: children (including students with special needs), adults, nationals, foreigners, as well as students in open distance learning, in special education programmes or in educational programmes organised by ministries other than the Ministry of Education, provided the main aim of the programme is the educational development of the individual. However, vocational and technical training in the workplace, with the exception of combined school and work-based programmes that are explicitly deemed to be parts of the education system, is not included in the basic education expenditure and enrolment data.

Educational activities classified as “adult” or “non-regular” are covered, provided that the activities involve studies or have a subject matter content similar to “regular” education studies or that the underlying programmes lead to potential qualifications similar to corresponding regular educational programmes. Courses for adults that are primarily for general interest, personal enrichment, leisure or recreation are excluded.

Calculation of international means

For many indicators an OECD average is presented and for some an OECD total.

The OECD average is calculated as the unweighted mean of the data values of all OECD countries for which data are available or can be estimated. The OECD average therefore refers to an average of data values at the level of the national systems and can be used to answer the question of how an indicator value for a given country compares with the value for a typical or average country. It does not take into account the absolute size of the education system in each country.

The OECD total is calculated as a weighted mean of the data values of all OECD countries for which data are available or can be estimated. It reflects the value for a given indicator when the OECD area is considered as a whole. This approach is taken for the purpose of comparing, for example, expenditure charts for individual countries with those of the entire OECD area for which valid data are available, with this area considered as a single entity.

Note that both the OECD average and the OECD total can be significantly affected by missing data. Given the relatively small number of countries, no statistical methods are used to compensate for this. In cases where a category is not applicable (code “a”) in a country or where the data value is negligible (code “n”) for the corresponding calculation, the value zero is imputed for the purpose of calculating OECD averages. In cases where both the numerator and the denominator of a ratio are not applicable (code “a”) for a certain country, this country is not included in the OECD average.

For financial tables using 1995 data, both the OECD average and OECD total are calculated for countries providing both 1995 and 2004 data. This allows comparison of the OECD average and OECD total over time with no distortion due to the exclusion of certain countries in the different years.

For many indicators an EU19 average is also presented. It is calculated as the unweighted mean of the data values of the 19 OECD countries that are members of the European Union for which data are available or can be estimated. These 19 countries are Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Spain, Sweden and the United Kingdom.

■ **Classification of levels of education**

The classification of the levels of education is based on the revised International Standard Classification of Education (ISCED-97). The biggest change between the revised ISCED and the former ISCED (ISCED-76) is the introduction of a multi-dimensional classification framework, allowing for the alignment of the educational content of programmes using multiple classification criteria. ISCED is an instrument for compiling statistics on education internationally and distinguishes among six levels of education. The glossary available at www.oecd.org/edu/eag2007 describes in detail the ISCED levels of education, and Annex 1 shows corresponding typical graduation ages of the main educational programmes by ISCED level.

■ **Symbols for missing data**

Six symbols are employed in the tables and charts to denote missing data:

- a* Data is not applicable because the category does not apply.
- c* There are too few observations to provide reliable estimates (*i.e.* there are fewer than 3% of students for this cell or too few schools for valid inferences). However, these statistics were included in the calculation of cross-country averages.
- m* Data is not available.
- n* Magnitude is either negligible or zero.
- w* Data has been withdrawn at the request of the country concerned.
- x* Data included in another category or column of the table (*e.g.* *x*(2) means that data are included in column 2 of the table).
- ~ Average is not comparable with other levels of education.

■ **Further resources**

The website www.oecd.org/edu/eag2007 provides a rich source of information on the methods employed for the calculation of the indicators, the interpretation of the indicators in the respective national contexts and the data sources involved. The website also provides access to the data underlying the indicators as well as to a comprehensive glossary for technical terms used in this publication.

Any post-production changes to this publication are listed at www.oecd.org/edu/eag2007.

The website www.pisa.oecd.org provides information on the OECD Programme for International Student Assessment (PISA), on which many of the indicators in this publication draw.

Education at a Glance uses the OECD's StatLinks service. Below each table and chart in *Education at a Glance 2007* is a url which leads to a corresponding Excel workbook containing the underlying data for the indicator. These urls are stable and will remain unchanged over time. In addition, readers of the *Education at a Glance* e-book will be able to click directly on these links and the workbook will open in a separate window.

Codes used for territorial entities

These codes are used in certain charts. Country or territorial entity names are used in the text. Note that in the text the Flemish Community of Belgium is referred to as "Belgium (Fl.," and the French Community of Belgium as "Belgium (Fr.)."

AUS Australia	ITA Italy
AUT Austria	JPN Japan
BEL Belgium	KOR Korea
BFL Belgium (Flemish Community)	LUX Luxembourg
BFR Belgium (French Community)	MEX Mexico
BRA Brazil	NLD Netherlands
CAN Canada	NZL New Zealand
CHL Chile	NOR Norway
CZE Czech Republic	POL Poland
DNK Denmark	PRT Portugal
ENG England	RUS Russian Federation
EST Estonia	SCO Scotland
FIN Finland	SVK Slovak Republic
FRA France	SVN Slovenia
DEU Germany	ESP Spain
GRC Greece	SWE Sweden
HUN Hungary	CHE Switzerland
ISL Iceland	TUR Turkey
IRL Ireland	UKM United Kingdom
ISR Israel	USA United States

REFERENCES

- Bowles, S. and H. Gintis** (2000), “Does Schooling Raise Earnings by Making People Smarter?”, K. Arrow, S. Bowles and S. Durlauf (eds.), *Meritocracy and Economic Inequality*, Princeton University Press, Princeton.
- Eccles, J.S.** (1994), “Understanding women’s educational and occupational choices: Applying the Eccles *et al.* model of achievement-related choices”, *Psychology of Women Quarterly*, Vol. 18, Blackwell Publishing, Oxford.
- Kelo, M., U. Teichler and B. Wächter** (eds.) (2005), “EURODATA: Student Mobility in European Higher Education”, Verlags and Mediengesellschaft, Bonn, 2005.
- OECD** (2002), *Education at a Glance: OECD Indicators – 2002 Edition*, OECD, Paris.
- OECD** (2004a), *Learning for Tomorrow’s World – First Results from PISA 2003*, OECD, Paris.
- OECD** (2004b), *Problem Solving for Tomorrow’s World – First Measures of Cross-Curricular Competencies from PISA 2003*, OECD, Paris.
- OECD** (2004c), *Internationalisation and Trade in Higher Education: Opportunities and Challenges*, OECD, Paris.
- OECD** (2004d), *Education at a Glance: OECD Indicators – 2004 Edition*, OECD, Paris.
- OECD** (2005a), *Trends in International Migration – 2004 Edition*, OECD, Paris.
- OECD** (2005b), *PISA 2003 Technical Report*, OECD, Paris.
- OECD** (2005c), *Education at a Glance: OECD Indicators – 2005 Edition*, OECD, Paris.
- OECD** (2006a), *Education at a Glance: OECD Indicators – 2006 Edition*, OECD, Paris.
- OECD** (2006b), *Where Immigrant Students Succeed: A Comparative Review of Performance and Engagement in PISA 2003*, OECD, Paris.
- OECD** (2006c), *OECD Revenue Statistics 1965–2005*, OECD, Paris.
- Tremblay, K.** (2005) “Academic Mobility and Immigration”, *Journal of Studies in International Education*, Vol. 9, No. 3, Association for Studies in International Education, Thousands Oaks, pp. 1–34.

TABLE OF CONTENTS

	Name of the indicator in the 2006 edition
Foreword	3
Editorial	11
Introduction	15
Reader's Guide	19
CHAPTER A THE OUTPUT OF EDUCATIONAL INSTITUTIONS AND THE IMPACT OF LEARNING	23
Indicator A1 To what level have adults studied?	24
Table A1.1.a. Educational attainment: adult population (2005)	36
Table A1.2.a. Population that has attained at least upper secondary education (2005)	37
Table A1.3.a. Population that has attained tertiary education (2005)	38
Table A1.4. Fields of education (2004)	39
Table A1.5. Ratio of 25-to-34-year-olds with ISCED 5A and 30-to-39-year-olds with ISCED 6 levels of education to 55-to-64-year-olds with ISCED 5A and 6 levels of education, by fields of education (2004)	40
Indicator A2 How many students finish secondary education?	42
Table A2.1. Upper secondary graduation rates (2005)	50
Table A2.2. Trends in graduation rates at upper secondary level (1995-2005)	51
Table A2.3. Post-secondary non-tertiary graduation rates (2005)	52
Indicator A3 How many students finish tertiary education?	54
Table A3.1. Graduation rates in tertiary education (2005)	67
Table A3.2. Trends in tertiary graduation rates (1995-2005)	68
Table A3.3. Percentage of tertiary graduates, by field of education (2005)	69
Table A3.4. Science graduates, by gender (2005)	70
Table A3.5. Relationship between motivation in mathematics at 15 years old (PISA 2003) and tertiary-type A graduation rates, by gender	71
Table A3.6. Survival rates in tertiary education (2004)	72
Indicator A4 What are students' expectations for education?	74
Table A4.1.a. Percentage of students expecting to complete different levels of education (2003)	84
Table A4.2.a. Percentage of students expecting to complete ISCED levels 5A or 6, by mathematics performance level (2003)	85
Table A4.3.a. Percentage of students expecting to complete ISCED levels 5A or 6, by gender (2003)	86
Table A4.4. Odds ratios that students expect to complete ISCED levels 5A or 6, by socio-economic status (2003)	87
Table A4.5. Odds ratios that students expect to complete ISCED levels 5A or 6, by immigrant status (2003)	88

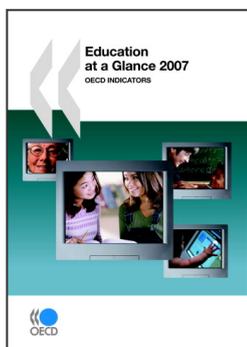
Indicator A5	What are students' attitudes towards mathematics?	90	
Table A5.1.	Means on students' attitudes towards mathematics, approaches to learning, and school-related indices (2003).....	99	
Table A5.2a.	Relationship between students' attitudes towards mathematics and mathematics performance (2003).....	100	
Table A5.2b.	Relationship between students' approaches to learning and mathematics performance (2003).....	101	
Table A5.2c.	Relationship between school-related indices and mathematics performance (2003).....	102	
Indicator A6	What is the impact of immigrant background on student performance?	104	
Table A6.1a.	Differences in mathematics performance, by immigrant status (2003)....	113	
Table A6.2a.	Percentage of native students at each level of proficiency on the mathematics scale (2003).....	113	
Table A6.2b.	Percentage of second-generation students at each level of proficiency on the mathematics scale (2003).....	114	
Table A6.2c.	Percentage of first-generation students at each level of proficiency on the mathematics scale (2003).....	114	
Table A6.3.	Index of instrumental motivation in mathematics and student performance on the mathematics scale (2003).....	115	
Indicator A7	Does the socio-economic status of their parents affect students' participation in higher education?	116	
Indicator A8	How does participation in education affect participation in the labour market?	124	A8
Table A8.1a.	Employment rates and educational attainment, by gender (2005).....	132	
Table A8.2a.	Unemployment rates and educational attainment, by gender (2005)....	134	
Table A8.3a.	Trends in employment rates, by educational attainment (1991-2005)...	136	
Table A8.4a.	Trends in unemployment rates by educational attainment (1991-2005).....	138	
Indicator A9	What are the economic benefits of education?	140	A9
Table A9.1a.	Relative earnings of the population with income from employment (2005 or latest available year).....	156	
Table A9.1b.	Differences in earnings between females and males (2005 or latest available year).....	158	
Table A9.2a.	Trends in relative earnings: adult population (1997-2005).....	159	
Table A9.3.	Trends in differences in earnings between females and males (1997-2005).....	160	
Table A9.4a.	Distribution of the 25-to-64-year-old population by level of earnings and educational attainment (2005 or latest available year).....	162	
Table A9.5.	Private internal rates of return for an individual obtaining an upper secondary or post-secondary non-tertiary education, ISCED 3/4 (2003).....	165	
Table A9.6.	Private internal rates of return for an individual obtaining a university-level degree, ISCED 5/6 (2003).....	165	

		Name of the indicator in the 2006 edition
Table A9.7.	Public internal rates of return for an individual obtaining an upper secondary or post-secondary non-tertiary education, ISCED 3/4 (2003).....	166
Table A9.8.	Public internal rates of return for an individual obtaining a university-level degree, ISCED 5/6 (2003).....	166
CHAPTER B FINANCIAL AND HUMAN RESOURCES INVESTED IN EDUCATION.....		
Indicator B1 How much is spent per student?.....		B1
Table B1.1a.	Annual expenditure on educational institutions per student for all services (2004).....	186
Table B1.1b.	Annual expenditure per student on core services, ancillary services and R&D (2004).....	187
Table B1.2.	Distribution of expenditure (as a percentage) on educational institutions compared to number of students enrolled at each level of education (2004).....	188
Table B1.3a.	Cumulative expenditure on educational institutions per student for all services over the theoretical duration of primary and secondary studies (2004).....	189
Table B1.3b.	Cumulative expenditure on educational institutions per student for all services over the average duration of tertiary studies (2004).....	190
Table B1.4.	Annual expenditure on educational institutions per student for all services relative to GDP per capita (2004).....	191
Table B1.5.	Change in expenditure on educational institutions for all services per student relative to different factors, by level of education (1995, 2004).....	192
Indicator B2 What proportion of national wealth is spent on education?.....		B2
Table B2.1.	Expenditure on educational institutions as a percentage of GDP, by levels of education (1995, 2000, 2004).....	205
Table B2.2.	Expenditure on educational institutions as a percentage of GDP, by level of education (2004).....	206
Table B2.3.	Change in expenditure on educational institutions (1995, 2000, 2001, 2002, 2003, 2004).....	207
Table B2.4.	Expenditure on educational institutions as a percentage of GDP, by source of fund and level of education (2004).....	208
Indicator B3 How much public and private investment is there in education?.....		B3
Table B3.1.	Relative proportions of public and private expenditure on educational institutions for all levels of education (1995, 2004).....	219
Table B3.2a.	Relative proportions of public and private expenditure on educational institutions, as a percentage, by level of education (1995, 2004).....	220
Table B3.2b.	Relative proportions of public and private expenditure on educational institutions, as a percentage, for tertiary education (1995, 2004).....	221
Table B3.3.	Trends in relative proportions of public expenditure on educational institutions and index of change between 1995 and 2004 (1995=100, constant prices), for tertiary education (1995, 2000, 2001, 2002, 2003, 2004).....	222

Indicator B4	What is the total public spending on education?	224	B4
Table B4.1.	Total public expenditure on education (1995, 2004).....	230	
Table B4.2.	Distribution of total public expenditure on education (2004).....	231	
Indicator B5	How much do tertiary students pay and what public subsidies do they receive?	232	B5
Table B5.1a.	Estimated annual average tuition fees charged by tertiary-type A educational institutions for national students (academic year 2004-2005).....	244	
Table B5.1b.	Distribution of financial aid to students in tertiary-type A education (academic year 2004-2005).....	246	
Table B5.1c.	Financial support to students through public loans in tertiary-type A education (academic year 2004-2005).....	248	
Table B5.2.	Public subsidies for households and other private entities as a percentage of total public expenditure on education and GDP, for tertiary education (2004).....	250	
Indicator B6	On what resources and services is education funding spent? ...	252	B6
Table B6.1.	Expenditure on institutions by service category as a percentage of GDP (2004).....	260	
Table B6.2.	Expenditure on educational institutions by resource category and level of education (2004).....	261	
Indicator B7	How efficiently are resources used in education?	262	
Table B7.1.	Estimates of technical efficiency for primary and lower secondary public sector education	268	
CHAPTER C	ACCESS TO EDUCATION, PARTICIPATION AND PROGRESSION	269	
Indicator C1	How prevalent are vocational programmes?	270	
Table C1.1.	Upper secondary enrolment patterns (2005).....	277	
Table C1.2.	Annual expenditure on educational institutions per student for all services, by type of programme (2004).....	278	
Table C1.3.	Performance of 15-year-old students on the PISA mathematics scale by programme orientation (2003).....	279	
Indicator C2	Who participates in education?	280	C1, C2
Table C2.1.	Enrolment rates, by age (2005).....	291	
Table C2.2.	Trends in enrolment rates (1995-2005).....	292	
Table C2.3.	Transition characteristics from age 15 to 20, by level of education (2005).....	293	
Table C2.4.	Entry rates to tertiary education and age distribution of new entrants (2005).....	294	
Table C2.5.	Trends in entry rates at the tertiary level (1995-2005).....	295	
Table C2.6.	Students in tertiary education by type of institution or mode of study (2005).....	296	
Indicator C3	Who studies abroad and where?	298	C3
Table C3.1.	Student mobility and foreign students in tertiary education (2000, 2005).....	317	

		Name of the indicator in the 2006 edition
Table C3.2.	Distribution of international and foreign students in tertiary education, by country of origin (2005).....	318
Table C3.3.	Citizens studying abroad in tertiary education, by country of destination (2005).....	320
Table C3.4.	Distribution of international and foreign students in tertiary education, by level and type of tertiary education (2005).....	322
Table C3.5.	Distribution of international and foreign students in tertiary education, by field of education (2005).....	323
Table C3.6.	Trends in the number of foreign students enrolled outside their country of origin (2000 to 2005).....	324
Table C3.7.	Percentage of tertiary qualifications awarded to international and foreign students, by type of tertiary education (2005).....	325
Indicator C4	How successful are students in moving from education to work?	C4
Table C4.1a.	Expected years in education and not in education for 15-to-29-year-olds (2005).....	335
Table C4.2a.	Percentage of the youth population in education and not in education (2005).....	337
Table C4.3.	Percentage of the cohort population not in education and unemployed (2005).....	339
Table C4.4a.	Trends in the percentage of the youth population in education and not in education (1995-2005).....	341
Indicator C5	Do adults participate in training and education at work?	C5
Table C5.1a.	Participation rate and expected number of hours in non-formal job-related education and training, by level of educational attainment (2003).....	353
Table C5.1b.	Expected number of hours in non-formal job-related education and training by age group and labour force status (2003).....	355
Table C5.1c.	Expected number of hours in non-formal job-related education and training, by level of educational attainment (2003).....	357
 CHAPTER D THE LEARNING ENVIRONMENT AND ORGANISATION OF SCHOOLS		
Indicator D1	How much time do students spend in the classroom?	D1
Table D1.1.	Compulsory and intended instruction time in public institutions (2005).....	369
Table D1.2a.	Instruction time per subject as a percentage of total compulsory instruction time for 9-to-11-year-olds (2005).....	370
Table D1.2b.	Instruction time per subject as a percentage of total compulsory instruction time for 12-to-14-year-olds (2005).....	371
Indicator D2	What is the student-teacher ratio and how big are classes?	D2
Table D2.1.	Average class size, by type of institution and level of education (2005).....	381
Table D2.2.	Ratio of students to teaching staff in educational institutions (2005).....	382
Table D2.3.	Ratio of students to teaching staff, by type of institution (2005).....	383

Indicator D3	How much are teachers paid?	384	D3
Table D3.1.	Teachers' salaries (2005).....	396	
Table D3.2.	Change in teachers' salaries (1996 and 2005).....	398	
Table D3.3a.	Adjustments to base salary for teachers in public institutions (2005).....	399	
Table D3.4.	Contractual arrangements of teachers (2005).....	401	
Indicator D4	How much time do teachers spend teaching?	402	D4
Table D4.1.	Organisation of teachers' working time (2005).....	411	
Indicator D5	How do education systems monitor school performance?	412	
Table D5.1.	Evaluation of public schools at lower secondary education (2005).....	418	
Table D5.2.	Use of information from school evaluation and accountability of public schools (lower secondary education, 2005).....	419	
ANNEX 1	Characteristics of Educational Systems	421	
Table X1.1a.	Typical graduation ages in upper secondary education.....	422	
Table X1.1b.	Typical graduation ages in post-secondary non-tertiary education.....	423	
Table X1.1c.	Typical graduation ages in tertiary education.....	424	
Table X1.2a.	School year and financial year used for the calculation of indicators, OECD countries.....	425	
Table X1.2b.	School year and financial year used for the calculation of indicators, partner economies.....	426	
Table X1.3.	Summary of completion requirements for upper secondary (ISCED 3) programmes.....	427	
ANNEX 2	Reference Statistics	429	
Table X2.1.	Overview of the economic context using basic variables (reference period: calendar year 2004, 2004 current prices).....	430	
Table X2.2.	Basic reference statistics (reference period: calendar year 2004, 2004 current prices).....	431	
Table X2.3.	Basic reference statistics (reference period: calendar year 1995, 1995 current prices).....	432	
Table X2.4.	Annual expenditure on educational institutions per student for all services (2004, USD).....	433	
Table X2.5.	Annual expenditure on educational institutions per student for all services (2004, EUR).....	434	
Table X2.6a.	Reference statistics used in the calculation of teachers' salaries, by level of education (1996, 2005).....	435	
Table X2.6b.	Reference statistics used in the calculation of teachers' salaries (1996, 2005).....	437	
Table X2.6c.	Teachers' salaries (2005).....	438	
Table X2.7.	Tax revenue of main headings as percentage of GDP (2004).....	439	
ANNEX 3	Sources, Methods and Technical Notes	441	
References		443	
Contributors to this Publication		445	
Related OECD Publications		449	



From:
Education at a Glance 2007
OECD Indicators

Access the complete publication at:
<https://doi.org/10.1787/eag-2007-en>

Please cite this chapter as:

OECD (2007), "Indicator B6 On what resources and services is education funding spent?", in *Education at a Glance 2007: OECD Indicators*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/eag-2007-18-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.