HOW MUCH TIME DO TEACHERS SPEND TEACHING?

This indicator focuses on the statutory working time of teachers at different levels of education as well as their statutory teaching time. Although working time and teaching time only partly determine the actual workload of teachers, they do give some valuable insights into differences among countries in what is demanded of teachers. Together with teachers' salaries (see Indicator D3) and average class size (see Indicator D2), this indicator presents some key measures of the work lives of teachers.

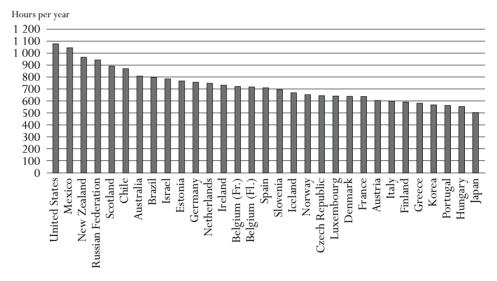
INDICATOR D4

Key results

Chart D4.1. Number of teaching hours per year in lower secondary education (2005)

Net contact time in hours per year in public institutions

The number of teaching hours per year in public lower secondary schools averages 707 hours but ranges from 505 hours per year in Japan to over 1 000 hours in Mexico (1 047 hours) and the United States (1 080 hours).



Countries are ranked in descending order of the number of teaching hours per year in lower secondary education. Source: OECD. Table D4.1. See Annex 3 for notes (www.oecd.org/edu/eag2007). StatLink http://dx.doi.org/10.1787/068521306487

Other highlights of this indicator

- The number of teaching hours per year in public primary schools averages 803 hours (2 less than in 2004), but ranges from less than 650 hours in Denmark, Japan and Turkey to 1 080 hours in the United States.
- The average number of teaching hours in upper secondary general education is 664 hours, but ranges from less than 450 in Japan (429 hours) to more than 1 000 hours in the United States (1 080 hours).
- The composition, in terms of days, weeks and hours per day, of teachers' annual teaching time varies considerably. For instance, while teachers in Denmark teach for 42 weeks in the year (in primary and secondary education) compared with 35-36 weeks per year in Iceland, the total teaching time (in hours) for teachers in Iceland is greater than for teachers in Denmark (or equal for upper secondary education).
- Regulations concerning teachers' working time also vary. In most countries, teachers are formally required to work a specific number of hours; in others, teaching time is only specified as the number of lessons per week and there may be assumptions made on the amount of non-teaching time required per lesson (at school or elsewhere). For example, in Belgium (Fr.), the additional nonteaching hours within the school are set at the school level and the government defines only the minimum and maximum number of teaching periods per week at each level of education.

INDICATOR D4

Policy context

In addition to class size and the ratio of students to teaching staff (see Indicator D2), students' hours of instruction (see Indicator D1) and teachers' salaries (see Indicator D3), the amount of time teachers spend teaching affects the financial resources which countries need to invest in education. Teaching hours and the extent of non-teaching duties are also important elements of teachers' work and may be related to the attractiveness of the teaching profession.

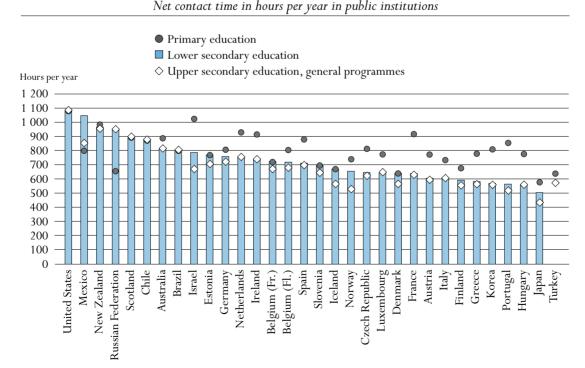
The proportion of working time spent teaching provides information on the amount of time available for other activities such as lesson preparation, correction, in-service training and staff meetings. A high proportion of working time spent teaching may indicate that less time can be devoted to work such as student assessment and lesson preparation. Alternately, these duties may be performed at the same level as teachers with a lower proportion of teaching time but conducted outside of regulatory working time hours.

Evidence and explanations

Teaching time in primary education

In both primary and secondary education, countries vary in the number of teaching hours per year required of the average public school teacher. Teaching hours in primary education are usually higher than in secondary education.

Chart D4.2. Number of teaching hours per year, by level of education (2005)



Countries are ranked in descending order of the number of teaching hours per year in lower secondary education. Source: OECD. Table D4.1. See Annex 3 for notes (www.oecd.org/edu/eag2007).

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In OECD countries, a primary school teacher teaches an average of 803 hours per year (2 less than the previous year), but this varies from less than 650 hours in Denmark, Japan and Turkey to 900 hours or more in France, Ireland, the Netherlands and New Zealand and over 1 000 hours in the United States and in the partner economy Israel (Chart D4.2 and Table D4.1) (see Annex 3 for details at www.oecd.org/edu/eag2007).

Teaching time can be distributed quite differently throughout the year. Korea is the only country in which primary teachers may teach for six days per week and yet total annual teaching time is less than the average because the hours taught per day is less than average. Denmark and Iceland provide an interesting contrast in this respect as both countries have similar annual net teaching time in hours (Chart D4.3). However, teachers in Denmark must complete in principle 200 days of instruction in 42 weeks, compared to 180 days in 36 weeks in Iceland. The number of hours taught per day of instruction provides the explanation for this difference.

Primary teachers in Iceland must complete 20 less days of instruction than teachers in Denmark, but these days would each include, on average, 3.7 hours of teaching compared to 3.2 in Denmark. These teachers in Iceland must provide just over half-an-hour more teaching time per day of instruction than teachers in Denmark. A relatively small difference in teaching time per day can lead to a substantial difference in the number of days of instruction per year teachers must complete.

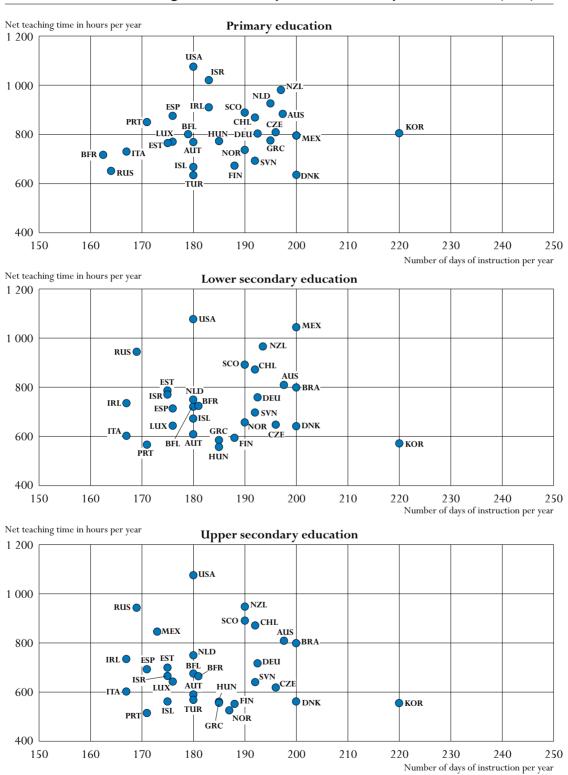
Teaching time in secondary education

In lower secondary education in OECD countries teachers teach an average of 707 hours per year. The teaching load ranges from less than 600 hours in Finland (592 hours), Greece (583 hours), Hungary (555 hours), Japan (505 hours), Korea (570 hours) and Portugal (564) to more than 1 000 hours in Mexico (1 047 hours) and the United States (1 080 hours) (Chart D4.2 and Table D4.1).

The upper secondary general education teaching load is usually lighter than in lower secondary education. A teacher of general subjects has an average statutory teaching load of 664 hours per year among OECD countries. Teaching loads range from less than 450 hours in Japan to more than 800 hours in Australia (810), Mexico (848) and Scotland (893), and the partner economy Chile (873), over 900 hours in New Zealand (950) and partner economy the Russian Federation (946) and over 1 000 hours in the United States (1080) (Chart D4.2 and Table D4.1).

As is the case for primary teachers, the number of hours of teaching time and the number of days of instruction vary across countries. As a consequence, the average hours per day that teachers teach vary widely, ranging at the lower secondary level from three or less hours per day in Hungary and Korea to five hours or more per day in Mexico and New Zealand and partner economy the Russian Federation and six hours per day in the United States. Similarly, at the upper secondary general level, teachers in Denmark, Finland, Greece, Hungary, Korea, Norway and Portugal teach for on average three hours or less per day, compared to five hours per day in New Zealand and the partner economy the Russian Federation and six hours per day in the United States. Korea provides an interesting example of the differences in the organisation of teachers' work. In Korea, teachers must complete the highest number of days of instruction (220 days) but have the fourth lowest required number of hours of teaching time for lower secondary teachers and fifth lowest for upper secondary teachers (Chart D4.3). The inclusion of breaks between classes as teaching time by some countries but not others may explain some of these differences.

Chart D4.3. Net teaching time in hours by the number of days of instruction (2005)



Note: Please refer to the Reader's Guide for the list of country codes used in this chart. *Source*: OECD. Table D4.1. See Annex 3 for notes (www.oecd.org/edu/eag2007).

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Teaching time contrasts between levels

In France, Hungary, Korea, Portugal and partner economy Israel, a primary teacher is required to teach over 220 hours more than a lower secondary teacher and, except in Hungary, 250 hours more than an upper secondary teacher (general programmes). By contrast, there is little or no difference in Belgium (Fr.), Denmark, Iceland, New Zealand, Scotland and the United States, and the partner economies Brazil, Chile, Estonia and Slovenia between the number of required instruction hours for primary and secondary teachers, particularly between primary and lower-secondary teachers. Mexico is the only OECD country and the Russian Federation the only partner economy that have secondary teachers who complete a substantially larger number of hours of instruction than primary teachers. In Mexico, required teaching hours for lower secondary teachers is just over 30% greater than for primary teachers. Upper secondary teachers in Mexico have a lower number of hours teaching than lower secondary teachers but their required teaching hours are still 6% higher than for primary teachers (Chart D4.1). This is largely because of larger daily contact time.

In interpreting the differences in teaching hours between countries, it should be noted that net contact time, as used for the purpose of this indicator, does not necessarily correspond to teaching load. Whereas contact time in itself is a substantial component, the preparation for classes and necessary follow-up (including correcting students' work) also need to be included in comparisons of teaching loads. Other elements of teaching load (such as the number of subjects taught, the number of students taught, and the number of years a teacher teaches the same students) should also be taken into account. These factors can often only be assessed at the school level.

Teachers' working time

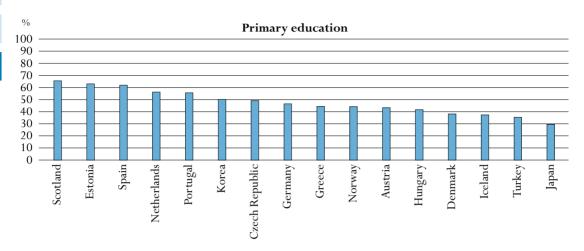
The regulation of teachers' working time varies widely among countries. While some countries formally regulate contact time only, others establish working hours as well. In some countries, time is allocated for teaching and non-teaching activities within the formally established working time.

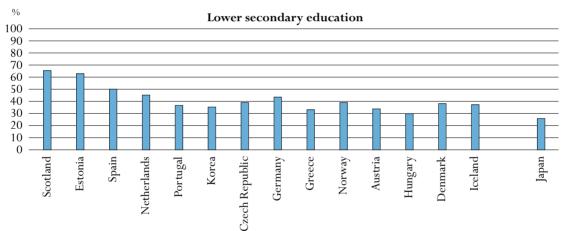
In most countries, teachers are formally required to work a specified number of hours per week to earn their full-time salary; this includes teaching and non-teaching time. Within this framework, however, countries differ in the allocation of time to teaching and non-teaching activities (Chart D4.4). Typically, the number of hours for teaching is specified (except in England and Sweden and in Switzerland where it is specified at district level only), but some countries also regulate at the national level the time that a teacher has to be present in the school.

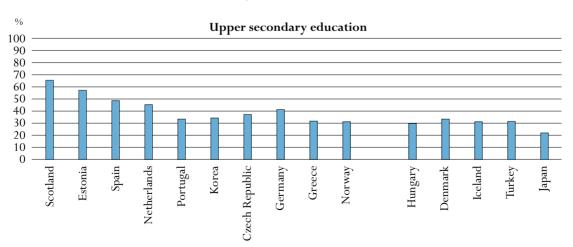
Australia, Belgium (Fl. for primary education), Denmark (primary and lower secondary education), England, Greece, Iceland, Ireland, Luxembourg, Mexico, New Zealand, Portugal, Spain, Sweden, Turkey and the United States, and the partner economy Israel, specify the working time during which teachers are required to be available at school, for both teaching time and non-teaching time. In Greece, legislation requires a reduction of teaching hours in line with years of service. Earlycareer teachers undertake a teaching time of 21 teaching hours per week. After six years, this is reduced to 19 teaching hours per week and after 12 years, teaching time is reduced to 18 teaching hours per week. Finally, after 20 years of service, teaching time is 16 teaching hours per week, nearly three-quarters that of early career teachers. However, the remaining hours of teachers' working time must be spent within school.

Chart D4.4. Percentage of teachers' working time spent teaching, by level of education (2005)

Net teaching time as a percentage of total statutory working time







Countries are ranked in descending order of the percentage of teachers' working time spent teaching in primary education.

Source: OECD. Table D4.1. See Annex 3 for notes (www.oecd.org/edu/eag2007).

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In Austria (primary and lower secondary education), the Czech Republic, Germany, Hungary, Japan, Korea, the Netherlands, Norway and Scotland and in the partner economy Estonia the total working time that teachers have to work per year at school or elsewhere is specified (but the split between time spent at school and time spent elsewhere is not specified). In addition, in some countries the number of hours to be spent on non-teaching activities is also (partly) specified. However, it is not specified whether the teachers have to spend the non-teaching hours at school or outside school.

D_4

Non-teaching time

In Belgium (Fr.), Finland, France, Italy and New Zealand there are no formal requirements for how much time should be spent on non-teaching duties. However, this does not mean that teachers are totally free in carrying out other tasks. In Austria, provisions concerning teaching time are based on the assumption that the duties of the teacher (including preparing lessons and tests, marking and correcting papers, examinations, and administrative tasks) amount to a total working time of 40 hours per week. In Belgium (Fr.), the additional non-teaching hours within the school are set at the school level. There are no regulations regarding lesson preparation, correction of tests and marking students' papers, etc. The government defines only the minimum and maximum number of teaching periods (of 50 minutes each) per week at each level of education (Table D4.1).

Definitions and methodologies

Data are from the 2006 OECD-INES Survey on Teachers and the Curriculum and refer to the school year 2004-2005.

Teaching time

Teaching time is defined as the number of hours per year that a full-time teacher teaches a group or class of students according to policy. It is normally calculated as the number of teaching days per annum multiplied by the number of hours a teacher teaches per day (excluding periods of time formally allowed for breaks between lessons or groups of lessons). Some countries, however, provide estimates of teaching time based on survey data.

At the primary level, short breaks between lessons are included if the classroom teacher is responsible for the class during these breaks.

Working time

Working time refers to the normal working hours of a full-time teacher. According to formal policy in a given country, working time can refer to:

- The time directly associated with teaching (and other curricular activities for students such as assignments and tests, but excluding annual examinations); or
- The time directly associated with teaching and also hours devoted to other activities related to teaching, such as lesson preparation, counselling students, correcting assignments and tests, professional development, meetings with parents, staff meetings and general school tasks.

Working time does not include paid overtime.

Working time in school

Working time in school refers to the time teachers are supposed to spend at work, including teaching and non-teaching time.

Number of teaching weeks and days

The number of teaching weeks refers to the number of weeks of instruction excluding holiday weeks. The number of teaching days is the number of teaching weeks multiplied by the number of days a teacher teaches per week, less the number of days that the school is closed for holidays.

Further references

The following additional material relevant to this indicator is available on line at: StatLink ■ http://dx.doi.org/10.1787/068521306487

• Table D4.2. Number of teaching hours per year (1996, 2005)

Specific notes on definitions and methodologies regarding this indicator for each country are given in Annex 3 (www.oecd.org/edu/eag2007).

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Table D4.1.

Organisation of teachers' working time (2005)

Number of teaching weeks, teaching days, net teaching hours, and teacher working time over the school year

| - | | Number of weeks of instruction | | | | | of days iction | Net teaching time in hours | | | Working time required at school in hours | | | Total statutory working time in hours | | |
|----------------------|-----------------|--------------------------------|---------------------------|---|-------------------|---------------------------|---|----------------------------|---------------------------|---|--|---------------------------|---|---------------------------------------|---------------------------|---|
| | | Primary education | Lower secondary education | Upper secondary education, general programmes | Primary education | Lower secondary education | Upper secondary education, general programmes | Primary education | Lower secondary education | Upper secondary education, general programmes | Primary education | Lower secondary education | Upper secondary education, general programmes | Primary education | Lower secondary education | Upper secondary education, general programmes |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) |
| ries | Australia | 40 | 40 | 40 | 197 | 198 | 198 | 888 | 810 | 810 | 1 209 | 1 233 | 1 233 | a | a | a |
| m | Austria | 38 | 38 | 38 | 180 | 180 | 180 | 774 | 607 | 589 | a | a | a | 1 792 | 1 792 | a |
| OECD countries | Belgium (Fl.) | 37 | 37 | 37 | 179 | 180 | 180 | 806 | 720 | 675 | 931 | a | a | a | a | a |
| Œ | Belgium (Fr.) | 37 | 37 | 37 | 163 | 181 | 181 | 722 | 724 | 664 | a | a | a | a | a | a |
| _ | Czech Republic | 40 | 40 | 40 | 196 | 196 | 196 | 813 | 647 | 617 | a | a | a | 1659 | 1 659 | 1659 |
| | Denmark | 42 | 42 | 42 | 200 | 200 | 200 | 640 | 640 | 560 | 1 306 | 1 306 | m | 1 680 | 1 680 | 1 680 |
| | England | 38 | 38 | 38 | 190 | 190 | 190 | a | a | a | 1 265 | 1 265 | 1 265 | a | a | a |
| | Finland | 38 | 38 | 38 | 188 | 188 | 188 | 677 | 592 | 550 | a | a | a | a | a | a |
| | France | 35 | 35 | 35 | m | m | m | 918 | 639 | 625 | a | a | a | a | a | a |
| | Germany | 40 | 40 | 40 | 193 | 193 | 193 | 808 | 758 | 717 | a | a | a | 1742 | 1 742 | 1742 |
| | Greece | 40 | 38 | 38 | 195 | 185 | 185 | 780 | 583 | 559 | 1 500 | 1 425 | 1 425 | 1762 | 1 762 | 1762 |
| | Hungary | 37 | 37 | 37 | 185 | 185 | 185 | 777 | 555 | 555 | a | a | a | 1864 | 1 864 | 1 864 |
| | Iceland | 36 | 36 | 35 | 180 | 180 | 175 | 671 | 671 | 560 | 1 650 | 1 650 | 1 720 | 1 800 | 1 800 | 1 800 |
| | Ireland | 37 | 33 | 33 | 183 | 167 | 167 | 915 | 735 | 735 | 1036 | 735 | 735 | a | a | a |
| | Italy | 40 | 38 | 38 | 167 | 167 | 167 | 735 | 601 | 601 | m | m | m | a | a | a |
| | Japan | 35 | 35 | 35 | m | m | m | 578 | 505 | 429 | a | a | a | 1960 | 1 960 | 1 960 |
| | Korea | 37 | 37 | 37 | 220 | 220 | 220 | 810 | 570 | 553 | a | a | a | 1613 | 1613 | 1613 |
| | Luxembourg | 36 | 36 | 36 | 176 | 176 | 176 | 774 | 642 | 642 | 1022 | 890 | 890 | a | a | a |
| | Mexico | 41 | 41 | 36 | 200 | 200 | 173 | 800 | 1 047 | 848 | 800 | 1 167 | 971 | a | a | a |
| | Netherlands | 40 | 37 | 37 | 195 | 180 | 180 | 930 | 750 | 750 | a | a | a | 1659 | 1 659 | 1 659 |
| | New Zealand | 39 | 39 | 38 | 197 | 194 | 190 | 985 | 968 | 950 | 985 | 968 | 950 | a | a | a |
| | Norway | 38 | 38 | 37 | 190 | 190 | 187 | 741 | 656 | 524 | m | m | m | 1 680 | 1 680 | 1 680 |
| | Poland | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m |
| | Portugal | 36 | 36 | 36 | 171 | 171 | 171 | 855 | 564 | 513 | 855 | 616 | 564 | 1 540 | 1 540 | 1 540 |
| | Scotland | 38 | 38 | 38 | 190 | 190 | 190 | 893 | 893 | 893 | a | a | a | 1 365 | 1 365 | 1 365 |
| | Slovak Republic | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m |
| | Spain | 37 | 37 | 36 | 176 | 176 | 171 | 880 | 713 | 693 | 1 140 | 1 140 | 1 140 | 1 425 | 1 425 | 1 425 |
| | Sweden | a | a | a | a | a | a | a | a | a | 1 360 | 1 360 | 1 360 | 1767 | 1 767 | 1 767 |
| | Switzerland | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m |
| | Turkey | 37 | a | 37 | 180 | a | 180 | 639 | a | 567 | 870 | a | 756 | 1 808 | a | 1 808 |
| | United States | 36 | 36 | 36 | 180 | 180 | 180 | 1 080 | 1 080 | 1 080 | 1 332 | 1 368 | 1 368 | a | a | a |
| | OECD average | 38 | 38 | 37 | 187 | 186 | 184 | 803 | 707 | 664 | 1151 | 1 163 | 1 106 | 1 695 | 1 687 | 1688 |
| | EU19 average | 38 | 38 | 37 | 184 | 183 | 182 | 806 | 668 | 643 | 1157 | 1 092 | 1 054 | 1 660 | 1 660 | 1 646 |
| | | | | | | | | | | | | | | | | |
| ies | Brazil | 40 | 40 | 40 | 200 | 200 | 200 | 800 | 800 | 800 | m | m | m | m | m | m |
| Partner economies | Chile | 40 | 40 | 40 | 192 | 192 | 192 | 873 | 873 | 873 | m | m | m | m | m | m |
| Fecor | Estonia | 35 | 35 | 35 | 175 | 175 | 175 | 770 | 770 | 700 | a | a | a | 1 225 | 1 225 | 1 225 |
| • | Israel | 43 | 42 | 42 | 183 | 175 | 175 | 1 025 | 788 | 665 | 1 221 | 945 | 945 | a | a | a |
| | Russian Fed. | 34 | 35 | 35 | 164 | 169 | 169 | 656 | 946 | 946 | m | m | m | m | m | m |
| | Slovenia | 39 | 39 | 39 | 192 | 192 | 192 | 697 | 697 | 639 | a | a | a | a | a | a |
| - | | | | | | | | | | | | | | | | |

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.

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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

ISR Israel

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.)".

USA United States

| 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 |
| | | | |

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.

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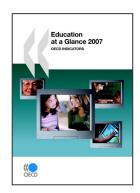
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