Chapter

D

The Learning Environment and Organisation of Schools

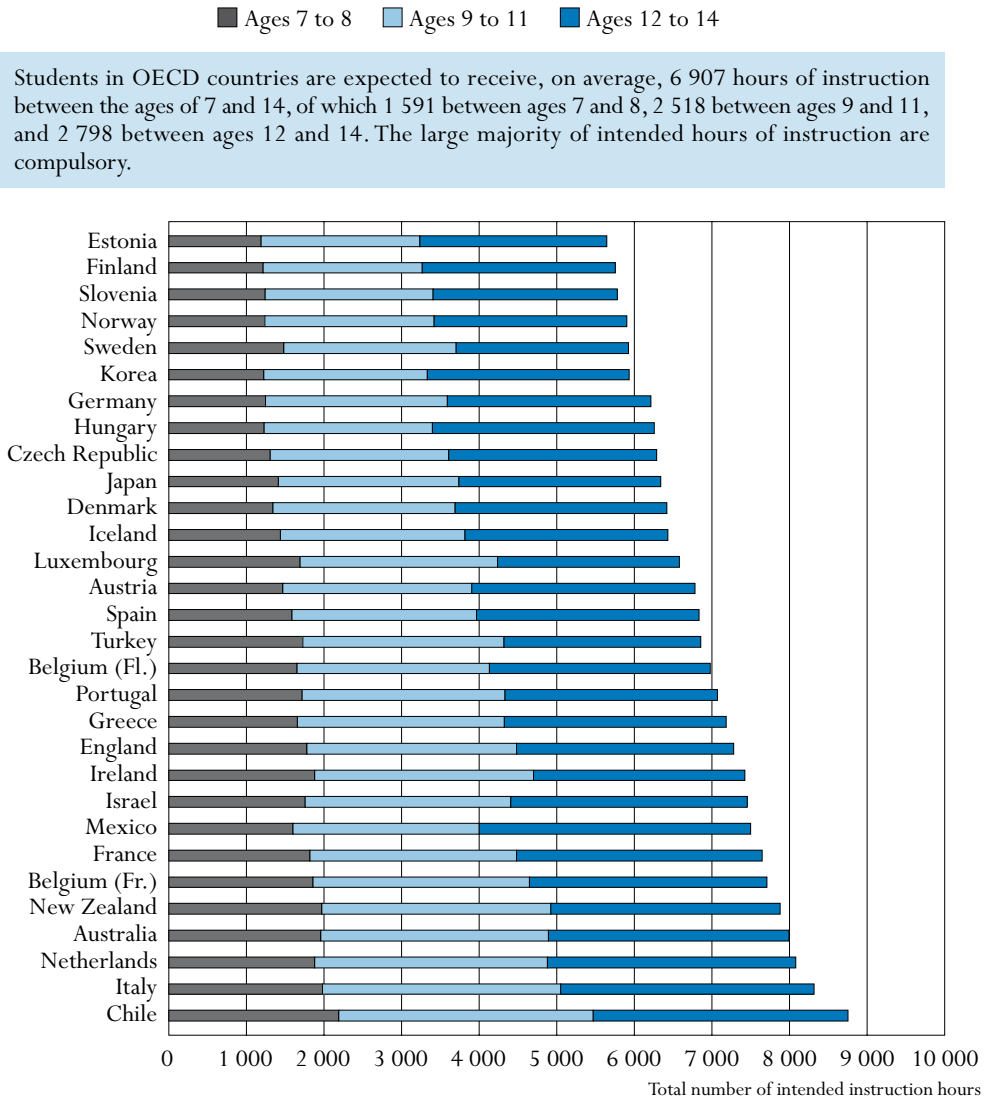
HOW MUCH TIME DO STUDENTS SPEND IN THE CLASSROOM?

This indicator examines the amount of instruction time students are expected to receive between the ages of 7 and 15. It also discusses the relationship between instruction time and student learning outcomes.

INDICATOR D1

Key results

Chart D1.1. Total number of intended instruction hours in public institutions between the ages of 7 and 14 (2006)



Students in OECD countries are expected to receive, on average, 6 907 hours of instruction between the ages of 7 and 14, of which 1 591 between ages 7 and 8, 2 518 between ages 9 and 11, and 2 798 between ages 12 and 14. The large majority of intended hours of instruction are compulsory.

Countries are ranked in ascending order of total number of intended instruction hours.
Source: OECD. Table D1.1. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
StatLink http://dx.doi.org/10.1787/402183135853

Other highlights of this indicator

- In OECD countries, 7-to-8-year-olds receive an average of 770 hours per year of compulsory instruction time and 796 hours per year of intended instruction time in the classroom. Those aged 9 to 11 receive about 40 compulsory hours more per year than 7-to-8-year-olds and those aged 12 to 14 receive just over 86 hours more per year than 9-to-11-year-olds.
- On average across OECD countries, the teaching of reading, writing and literature, mathematics and science represents nearly 50% of the compulsory instruction time for 9-to-11-year-olds and 40% for 12-to-14-year-olds. For 9-to-11-year-olds, the proportion of compulsory curriculum devoted to reading, writing and literature varies widely from 13% in Australia to 30% or more in France, Mexico and the Netherlands.

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Policy context

Instruction time in formal classroom settings comprises a large element of the public investment in student learning and is a central component of effective schooling. The amount of instruction time available to students can determine the amount of classroom teaching they receive and therefore their opportunities for effective learning. Instruction time is the main factor in schools' operations. It is also central to education policy decision making. Matching resources with students' needs and making optimal use of time, from the perspective of both learner and public investment, are major challenges for education policy. The main costs of education are teachers' work, institutional maintenance and other educational resources. The length of time during which these resources are made available to students (as partly shown in this indicator) is thus an important factor in the allocation of funding.

Countries make various choices concerning the overall length of time devoted to instruction and the subjects that are compulsory. These choices reflect national priorities and preferences for the education students receive at different ages and the emphasis placed on different subject areas. Countries usually have statutory or regulatory requirements regarding hours of instruction. These are most often stipulated as the minimum number of hours of instruction that a school must offer. Central to the setting of minimum levels is the view that sufficient teaching time is essential to productive learning outcomes.

Evidence and explanations

What this indicator shows

Intended instruction time is an important indicator of students' opportunity to learn and of the public resources invested in education. This indicator captures intended instruction time as a measure of exposure to learning in formal classroom settings as established in public regulations. It does not show the actual number of hours of instruction received by students and does not cover learning outside of the formal classroom setting. Discrepancies may exist across countries between the regulatory minimum hours of instruction and the actual hours of instruction received by students. There exists research showing that due to factors such as school timetable decisions, lesson cancellations and teacher absenteeism the regulatory minimum instruction time may not be reached on all occasions (see Box D1.1 of *Education at a Glance 2007*).

The indicator also illustrates how minimum instruction times are allocated to different curricular areas. It shows the intended net hours of instruction for the grades in which the majority of students are from 7 to 15 years of age. Although the data are difficult to compare among countries because of different curriculum policies, they nevertheless provide an indication of how much formal instruction time is considered necessary for students to achieve the desired educational goals.

Total intended instruction time: an average of 6 907 hours between the ages of 7 and 14

Total intended instruction time is an estimate of the number of hours during which students are taught both compulsory and non-compulsory parts of the curriculum as per public regulations.

In OECD countries, the total number of instruction hours that students are intended to receive between the ages of 7 and 14 averages 6 907 hours. However, formal requirements range from 5 644 hours in the partner country Estonia to over 8 000 hours in Italy and the Netherlands and

the partner country Chile. These include the compulsory and non-compulsory hours during which schools are obliged to offer instruction to students. The total intended instruction time for this age range is a good indicator of students' theoretical workload, but it cannot be interpreted as the actual instruction students receive during the years they spend in initial education. In some countries with a heavier student workload, the age band of compulsory education is smaller and students drop out of the school system earlier; in other countries a more even distribution of study time over more years ultimately means a larger number of total instruction hours for all. Table D1.1 shows the age range for which over 90% of the population is in education and Chart D1.1 shows the total amount of intended instruction time students should receive between the ages of 7 and 14.

In some countries, intended instruction time varies considerably among regions or types of schools. In many countries, local education authorities or schools can determine the number and allocation of hours of instruction. Additional teaching time is often planned for individual remedial teaching or enhancement of the curriculum. On the other hand, time may be lost owing to a lack of qualified substitutes to replace absent teachers or to student absences.

Annual instruction time should also be examined together with the length of compulsory education, which measures the time during which young people receive full-time educational support from public resources, and during which more than 90% of the population participates in education (see Indicator C2). Intended instruction time does not capture the quality of learning opportunities provided or the level or quality of the human and material resources involved. (For some insight into human resources, see Indicator D2, which shows the number of teachers relative to the student population.)

Compulsory instruction time: an average of 6 657 hours between the ages of 7 and 14

Total compulsory instruction time is an estimate of the number of hours during which students are taught both the compulsory core and compulsory flexible parts of the curriculum.

For 7-to-8-year-olds and 9-to-11-year-olds, total intended instruction time equals the total compulsory instruction time in most countries; this is less often the case for older age groups. However, intended instruction time is fully compulsory for all age groups between 7 and 14 years in Belgium (Fl.), the Czech Republic, Denmark, Germany, Greece, Iceland, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, Spain and Sweden, as well as the partner countries Chile, Estonia and Slovenia. Except for Belgium (Fl.), Greece, Mexico, the Netherlands and the partner country Chile, these countries have a total length of intended instruction time that is below the OECD average. Except for Greece and Mexico (as well as for Japan and the Netherlands: the two countries for which data are missing), intended instruction time is also fully compulsory at age 15 in these countries.

Within the formal education system, OECD countries show an average annual amount of total compulsory instruction time in classroom settings of 770 hours for 7-to-8-year-olds, 810 hours for 9-to-11-year-olds and 896 hours for 12-to-14-year-olds. The average annual number of compulsory instruction hours is 910 for the typical programme in which most 15-year-olds are enrolled (Table D1.1).

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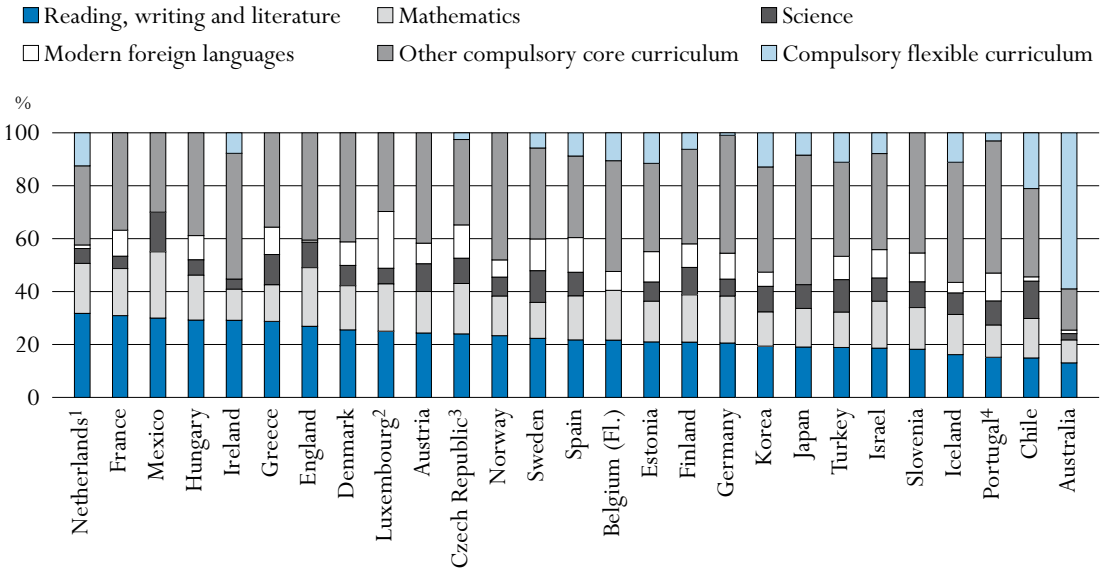
Teaching of reading and writing, mathematics and science: at least 40% of compulsory instruction time, on average, for 12-to-14-year-olds

In OECD countries, for 9-to-11-year-olds study areas are not necessarily organised as separate classes. They spend an average of nearly 50% of the compulsory curriculum on three basic subject areas: reading, writing and literature (23%), mathematics (16%) and science (9%). On average, an additional 7% of the compulsory curriculum is devoted to modern foreign languages. Together with social studies, the arts and physical education, these seven study areas form part of the curriculum in all OECD and partner countries for these age cohorts (Table D1.2a and Chart D1.2a).

On average, reading and writing account for the greatest proportion of the curriculum for 9-to-11-year-olds, but the differences among countries are greater than for other subjects; this subject area accounts for 13% of instruction time in Australia, compared with 30% or more in France, Mexico and the Netherlands. There is also sizeable variation in modern foreign languages, which account for 1% or less of compulsory instruction time in Australia, England, Japan, Mexico and the Netherlands but 21% of total compulsory instruction time in Luxembourg and over 10% in the Czech Republic, Portugal, Spain and Sweden and in the partner countries Estonia, Israel and Slovenia.

Chart D1.2a. Instruction time per subject as a percentage of total compulsory instruction time for 9-to-11-year-olds (2006)

Percentage of intended instruction time devoted to various subject areas within the total compulsory curriculum



1. Includes 11-year-olds only.
2. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.
3. For 9-to-10-year-olds, social studies is included in science.
4. Includes 10-to-11-year-olds only.

Countries are ranked in descending order of number of intended instruction hours devoted to reading, writing and literature.

Source: OECD. Table D1.2a. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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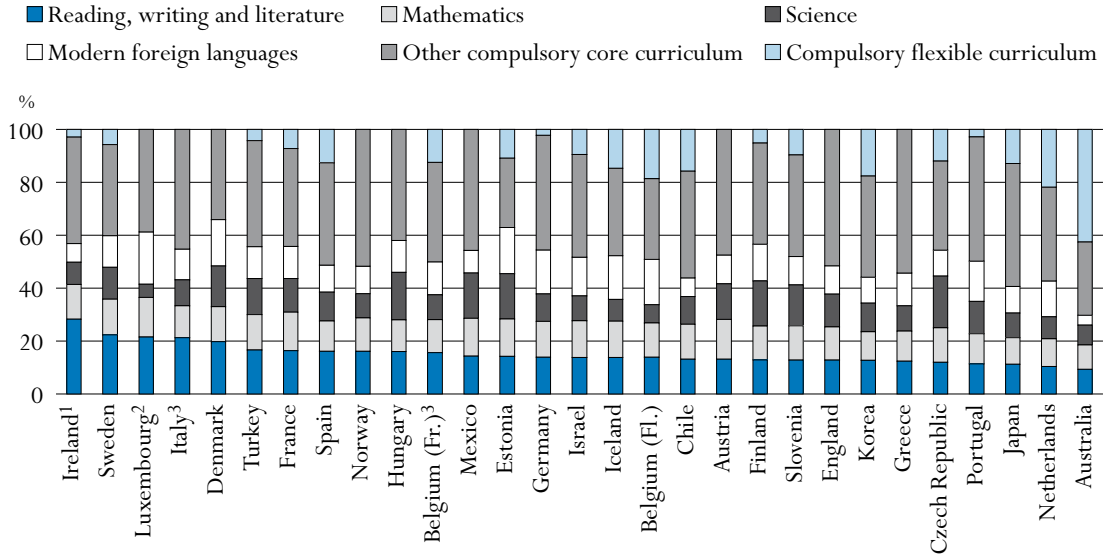
In OECD countries, an average of nearly 40% of the compulsory curriculum for 12-to-14-year-olds is devoted to three subject areas: reading, writing and literature (15%), mathematics (13%) and science (11%). For this age cohort, a relatively larger part of the curriculum is devoted to modern foreign languages (12%) and social studies (12%), and somewhat less time is devoted to the arts (8%). Together with physical education, these seven study areas form part of the compulsory curriculum for lower secondary students in all OECD countries and partner countries (Table D1.2b and Chart D1.2b).

Chart D1.2b. Instruction time per subject as a percentage of total compulsory instruction time for 12-to-14-year-olds (2006)

Percentage of intended instruction time devoted to various subject areas within the total compulsory curriculum



1. For 13-to-14-year-olds, arts is included in non-compulsory curriculum.
2. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.
3. Includes 12-to-13-year-olds only.

Countries are ranked in descending order of number of intended instruction hours devoted to reading, writing and literature.

Source: OECD. Table D1.2b. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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Among countries, the percentage share of subjects within the curriculum for 12-to-14-year-olds varies less than for 9-to-11-year-olds. Differences in the amounts of instruction time can reflect different national and curriculum priorities. The greatest variation is again in reading and writing with a range from 10% or less in Australia and the Netherlands to 28% in Ireland (where reading and writing includes work in both English and Irish).

There is also substantial variation in the percentage of compulsory instruction time devoted to particular subjects for 9-to-11-year-olds compared to 12-to-14-year-olds. On average among OECD countries, one-third less time is devoted to reading, writing and literature for 12-to-14-year-olds than for 9-to-11-year-olds. However, the reverse is true for social studies and modern foreign languages.

These differences are larger in some countries than in others. The percentage of compulsory instruction time given to reading, writing and literature for 12-to-14-year-olds is equal to or less than one-half of that for 9-to-11-year-olds in the Czech Republic, England, Greece, Mexico and the Netherlands. Yet in Ireland and Sweden, the difference is less than 5%. Clearly, countries place different emphases both on subjects and on when they should be taught to students.

Among OECD countries, the non-compulsory part of the curriculum comprises on average 4 to 5% of the total intended instruction time for 9-to-11-year-olds as well as for 12-to-14-year-olds. Nevertheless, a considerable amount of additional non-compulsory instruction time is sometimes provided. For 9-to-11-year-olds, all intended instruction time is compulsory in most countries, but additional non-compulsory time is as much as 15% in Italy and 20% in Hungary and Turkey. For 12-to-14-year-olds, non-compulsory instruction time is a feature in Australia, Austria, Belgium (Fr.), England, Finland, France, Hungary, Ireland, Italy, Portugal and Turkey, and ranges from 3% in Portugal to 37% in Hungary (Tables D1.2a and D1.2b).

On average, 4% of compulsory instruction time belongs to the flexible part of the curriculum in the grades where most students are 9 to 11 years of age; the corresponding proportion is 8% for students aged 12 to 14.

Most OECD countries define the number of hours of compulsory instruction. Within the compulsory part of the curriculum, students have varying degrees of freedom to choose the subjects they want to study. Australia has the highest degree of flexibility in the compulsory curriculum with up to 59% for 9-to-11-year-olds and 43% for 12-to-14-year-olds. Several other countries allow 10% or more of flexibility in the compulsory curriculum for 12-to-14-year olds (Belgium, the Czech Republic, Iceland, Japan, Korea, the Netherlands and Spain, and the partner countries Chile, Estonia and Slovenia) (Tables D1.2a and D1.2b).

Definitions and methodologies

Data on instruction time are from the 2007 OECD-INES Survey on Teachers and the Curriculum and refer to the school year 2005/06.

Instruction time for 7-to-15-year-olds refers to the formal number of 60-minute hours per school year organised by the school for class instructional activities for students in the reference school year 2005/06. For countries with no formal policy on instruction time, the number of hours was estimated from survey data. Hours lost when schools are closed for festivities and celebrations, such as national holidays, are excluded. Intended instruction time does not include non-compulsory time outside the school day, homework, individual tutoring, or private study done before or after school.

The compulsory curriculum refers to the amount and allocation of instruction time that almost every public school must provide and almost all public-sector students must attend. The measurement of the time devoted to specific study areas (subjects) focuses on the minimum common core rather than on the average time spent, since the data sources (policy documents) do not allow for more precise measurement. The total compulsory curriculum comprises the compulsory core curriculum as well as the compulsory flexible curriculum.

The non-compulsory part of the curriculum refers to the average time of instruction to which students are entitled beyond the compulsory hours of instruction. These subjects often vary from school to school or from region to region, and may take the form of non-compulsory (elective) subjects.

Intended instruction time refers to the number of hours per year during which students receive instruction in the compulsory and non-compulsory parts of the curriculum.

In Table D1.1, typical instruction time for 15-year-olds refers to the programme in which most 15-year-olds are enrolled. The programme may take place in lower or upper secondary education, and in most countries consists of a general programme. If the system channels students into different programme types at this age, the average instruction time may have been estimated for the most important mainstream programmes and weighted by the proportion of students in the grade in which most 15-year-olds are enrolled. When vocational programmes are also taken into account in typical instruction time, only the school-based part of the programme should be included in the calculations.

Instruction time for the least demanding programme refers to programmes for students who are least likely to continue studying beyond the mandatory school age or beyond lower secondary education. Such programmes may or may not exist in a country depending on streaming and selection policies. In many countries students are offered the same amount of instruction time in all or most programmes, but there is flexibility in the choice of study areas or subjects. Often such choices have to be made quite early if programmes are long and differ substantially.

Further references

Specific notes for each country on definitions and methodologies regarding this indicator are given in Annex 3 at *www.oecd.org/edu/eag2008*. In addition, a more comprehensive analysis of decision making is available in Indicator D6.

Table D1.1.

Compulsory and intended instruction time in public institutions (2006)

Average number of hours per year of total compulsory and non-compulsory instruction time in the curriculum for 7-to-8, 9-to-11, 12-to-14 and 15-year-olds

		Age range at which over 90% of the population is enrolled	Average number of hours per year of total compulsory instruction time					Average number of hours per year of total intended instruction time				
			Ages 7 to 8	Ages 9 to 11	Ages 12 to 14	Age 15 (typical programme)	Age 15 (least demanding programme)	Ages 7 to 8	Ages 9 to 11	Ages 12 to 14	Age 15 (typical programme)	Age 15 (least demanding programme)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD countries	Australia	5 to 16	978	978	989	968	968	978	978	1033	1024	1024
	Austria	5 to 17	690	767	913	1005	960	735	812	958	1050	1005
	Belgium (Fl.)	3 to 18	826	826	949	949	445	826	826	949	949	445
	Belgium (Fr.)[1]	3 to 18	840	840	960	m	m	930	930	1020	m	m
	Czech Republic	5 to 17	655	766	892	960	392	655	766	892	960	392
	Denmark	3 to 16	671	783	910	900	900	671	783	910	900	900
	England	4 to 15	880	900	900	760	a	890	900	933	950	a
	Finland	6 to 18	608	640	777	856	a	608	683	829	913	a
	France	3 to 17	910	887	963	1033	a	910	887	1056	1138	a
	Germany	4 to 17	622	782	875	900	m	622	782	875	900	m
	Greece	6 to 19	828	889	953	1117	958	828	889	953	1330	1170
	Hungary	4 to 17	555	601	694	763	763	614	724	953	1106	1106
	Iceland	3 to 16	720	792	872	888	a	720	792	872	888	a
	Ireland	5 to 16	941	941	848	802	713	941	941	907	891	891
	Italy	3 to 15	891	891	990	1089	m	990	1023	1089	1089	m
	Japan	4 to 17	707	774	868	m	a	707	774	868	m	a
	Korea	6 to 17	612	703	867	1020	a	612	703	867	1020	a
	Luxembourg	4 to 15	847	847	782	750	a	847	847	782	750	a
	Mexico	5 to 13	800	800	1167	1058	a	800	800	1167	1124	a
	Netherlands	5 to 17	940	1000	1067	m	a	940	1000	1067	m	a
	New Zealand	4 to 15	m	m	m	m	m	985	985	985	985	985
	Norway	4 to 17	620	728	827	855	a	620	728	827	855	a
	Poland	6 to 18	m	m	m	m	m	m	m	m	m	m
	Portugal	5 to 15	860	854	887	826	m	860	871	913	980	m
	Scotland	4 to 15	m	m	m	a	a	m	m	m	a	a
	Slovak Republic	6 to 17	m	m	m	m	m	m	m	m	m	m
	Spain	3 to 16	793	794	956	979	978	793	794	956	979	978
	Sweden	6 to 18	741	741	741	741	a	741	741	741	741	a
	Switzerland	5 to 16	m	m	m	m	m	m	m	m	m	m
	Turkey	7 to 12	720	720	750	810	a	864	864	846	810	a
	United States	6 to 16	m	m	m	m	m	m	m	m	m	m
	OECD average		*770*	*810*	*896*	*910*	*786*	*796*	*839*	*933*	*971*	*890*
	EU 19 average		*783*	*819*	*892*	*902*	*763*	*800*	*844*	*932*	*977*	*861*
Partner countries	Brazil	7 to 16	m	m	m	m	m	m	m	m	m	m
	Chile	7 to 16	1094	1094	1094	1210	1210	1094	1094	1094	1210	1210
	Estonia	6 to 17	595	683	802	840	m	595	683	802	840	m
	Israel	5 to 17	878	867	966	1040	1015	878	884	1016	1089	1064
	Russian Federation	7 to 15	m	m	m	m	m	m	m	m	m	m
	Slovenia	6 to 17	621	721	791	908	888	621	721	791	908	888

1. "Ages 12 to 14" covers ages 12 to 13 only.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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Table D1.2a.

Instruction time per subject as a percentage of total compulsory instruction time for 9-to-11-year-olds (2006)

Percentage of intended instruction time devoted to various subject areas within the total compulsory curriculum

		Compulsory core curriculum														
		Reading, writing and literature	Mathematics	Science	Social studies	Modern foreign languages	Technology	Arts	Physical education	Religion	Practical and vocational skills	Other	TOTAL compulsory core curriculum	Compulsory flexible curriculum	TOTAL compulsory curriculum	Non-compulsory curriculum
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD countries	**Australia**[1]	13	9	2	3	1	2	4	4	1	n	1	**41**	59	**100**	n
	Austria	24	16	10	3	8	n	18	10	8	x(12)	3	**100**	x(12)	**100**	6
	Belgium (Fl.)[1]	22	19	x(11)	x(11)	7	n	10	7	7	n	18	**89**	11	**100**	n
	Belgium (Fr.)[1]	x(11)	x(11)	x(11)	x(11)	5	x(11)	x(11)	7	7	x(11)	81	**100**	n	**100**	11
	Czech Republic[2]	24	19	9	11	13	n	14	8	n	n	n	**97**	3	**100**	n
	Denmark	26	17	8	4	9	n	20	10	4	n	3	**100**	n	**100**	n
	England	27	22	10	8	1	9	8	7	5	n	3	**100**	n	**100**	n
	Finland	21	18	10	2	9	n	19	9	5	n	n	**94**	6	**100**	7
	France	31	18	5	10	10	3	11	13	n	n	n	**100**	n	**100**	n
	Germany	20	18	6	7	10	1	15	11	7	n	3	**99**	1	**100**	n
	Greece	29	14	11	11	10	n	8	7	7	n	2	**100**	n	**100**	n
	Hungary	29	17	6	7	9	n	14	12	n	5	2	**100**	n	**100**	20
	Iceland	16	15	8	8	4	6	12	9	3	5	2	**89**	11	**100**	n
	Ireland	29	12	4	8	x(13)	n	12	4	10	n	14	**92**	8	**100**	n
	Italy[3]	a	a	a	a	a	a	a	a	a	a	a	a	a	**100**	15
	Japan	19	15	9	9	n	n	10	9	n	n	21	**92**	8	**100**	m
	Korea	19	13	10	10	5	2	13	10	n	2	3	**87**	13	**100**	n
	Luxembourg[4]	25	18	6	2	21	n	11	10	7	n	n	**100**	n	**100**	n
	Mexico	30	25	15	20	n	n	5	5	n	n	n	**100**	n	**100**	n
	Netherlands[5]	32	19	6	6	1	n	9	7	5	3	n	**88**	13	**100**	n
	New Zealand	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Norway	23	15	7	8	7	n	15	7	9	n	9	**100**	n	**100**	n
	Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Portugal[6]	15	12	9	6	11	x(7)	18	9	n	n	17	**97**	3	**100**	3
	Scotland	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Spain	22	17	9	9	13	n	11	11	x(13)	n	n	**91**	9	**100**	n
	Sweden	22	14	12	13	12	x(3)	7	8	x(4)	7	n	**94**	6	**100**	n
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Turkey	19	13	12	10	9	n	7	4	7	2	6	**89**	11	**100**	20
	United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	OECD average[1]	***23***	***16***	***9***	***8***	***7***	***1***	***12***	***8***	***4***	***1***	***4***	**91**	***4***	**100**	***4***
	EU 19 average[1]	***25***	***17***	***9***	***7***	***9***	***1***	***13***	***9***	***4***	***1***	***3***	**97**	***3***	**100**	***4***
Partner countries	**Brazil**	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	15	15	14	4	2	7	10	7	5	n	1	**79**	21	**100**	n
	Estonia	21	15	7	6	12	6	10	10	n	n	n	**88**	12	**100**	n
	Israel	19	18	9	6	11	n	6	6	6	4	9	**92**	8	**100**	2
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Slovenia	18	16	10	8	11	2	11	11	n	3	10	**100**	n	**100**	n

1. Australia, Belgium (Fl.) and Belgium(Fr.) are not included in the averages.
2. For 9-to-10-year-olds, social studies is included in science.
3. For 9 and 10-year-olds the curriculum is largely flexible, for 11-year-olds it is about the same as for 12 and 13-year-olds.
4. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.
5. Includes 11-year-olds only.
6. Includes 10-to-11-year-olds only.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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Table D1.2b.

Instruction time per subject as a percentage of total compulsory instruction time for 12-to-14-year-olds (2006)

Percentage of intended instruction time devoted to various subject areas within the total compulsory curriculum

		Compulsory core curriculum														
		Reading, writing and literature	Mathematics	Science	Social studies	Modern foreign languages	Technology	Arts	Physical education	Religion	Practical and vocational skills	Other	TOTAL compulsory core curriculum	Compulsory flexible curriculum	TOTAL compulsory curriculum	Non-compulsory curriculum
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD countries	**Australia**	9	9	7	7	4	5	6	6	1	n	3	**57**	43	**100**	4
	Austria	13	15	13	12	11	n	16	10	7	2	n	**100**	x(12)	**100**	5
	Belgium (Fl.)	14	13	7	9	17	4	4	6	6	1	n	**81**	19	**100**	n
	Belgium (Fr.)[1]	16	13	9	13	13	3	3	9	6	n	3	**88**	13	**100**	6
	Czech Republic	12	13	20	16	10	3	8	7	n	n	n	**88**	12	**100**	n
	Denmark	20	13	15	9	18	n	11	8	3	n	3	**100**	n	**100**	n
	England	13	12	12	13	11	12	11	8	4	n	4	**100**	n	**100**	4
	Finland	13	13	17	7	14	n	15	7	5	4	n	**95**	5	**100**	7
	France	16	15	13	13	12	6	7	11	n	n	n	**93**	7	**100**	10
	Germany	14	14	10	12	17	3	10	9	5	2	2	**98**	2	**100**	n
	Greece	12	11	10	10	12	5	6	8	6	1	19	**100**	n	**100**	n
	Hungary	16	12	18	11	12	3	11	9	n	3	5	**100**	n	**100**	37
	Iceland	14	14	8	6	17	4	7	8	2	4	3	**85**	15	**100**	n
	Ireland[2]	28	13	8	17	7	x(15)	4	5	9	x(15)	5	**97**	3	**100**	7
	Italy[1]	21	12	10	15	12	7	13	7	4	n	n	**100**	n	**100**	16
	Japan	11	10	9	9	10	3	7	9	n	n	18	**87**	13	**100**	m
	Korea	13	11	11	10	10	4	8	8	n	4	5	**82**	18	**100**	n
	Luxembourg[3]	22	15	5	10	20	n	10	8	6	n	5	**100**	n	**100**	n
	Mexico	14	14	17	26	9	n	6	6	n	9	n	**100**	n	**100**	n
	Netherlands	10	10	8	11	14	5	7	9	n	3	n	**78**	22	**100**	n
	New Zealand	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Norway	16	13	9	11	10	n	8	10	7	n	16	**100**	n	**100**	n
	Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Portugal	11	11	12	13	15	x(7)	11	9	n	n	14	**97**	3	**100**	3
	Scotland	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Spain	16	11	11	10	10	8	11	7	x(13)	x(13)	3	**87**	13	**100**	n
	Sweden	22	14	12	13	12	x(3)	7	8	x(4)	7	n	**94**	6	**100**	n
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Turkey	17	13	14	12	12	n	4	7	5	4	7	**96**	4	**100**	13
	United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	OECD average	***15***	***13***	***11***	***12***	***12***	***3***	***8***	***8***	***3***	***2***	***5***	**92**	***8***	**100**	***5***
	EU 19 average	***16***	***13***	***12***	***12***	***13***	***4***	***9***	***8***	***4***	***1***	***4***	**94**	***6***	**100**	***6***
Partner countries	**Brazil**	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	13	13	11	11	7	5	10	5	5	n	4	**84**	16	**100**	m
	Estonia	14	14	17	7	17	5	7	7	n	n	n	**89**	11	**100**	m
	Israel	14	14	9	7	15	5	5	5	5	5	6	**91**	9	**100**	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Slovenia	13	13	15	15	11	2	6	6	n	n	9	**90**	10	**100**	m

1. Includes 12-to-13-year-olds only.
2. For 13-to-14-year-olds, arts is included in non-compulsory curriculum.
3. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

StatLink http://dx.doi.org/10.1787/402183135853

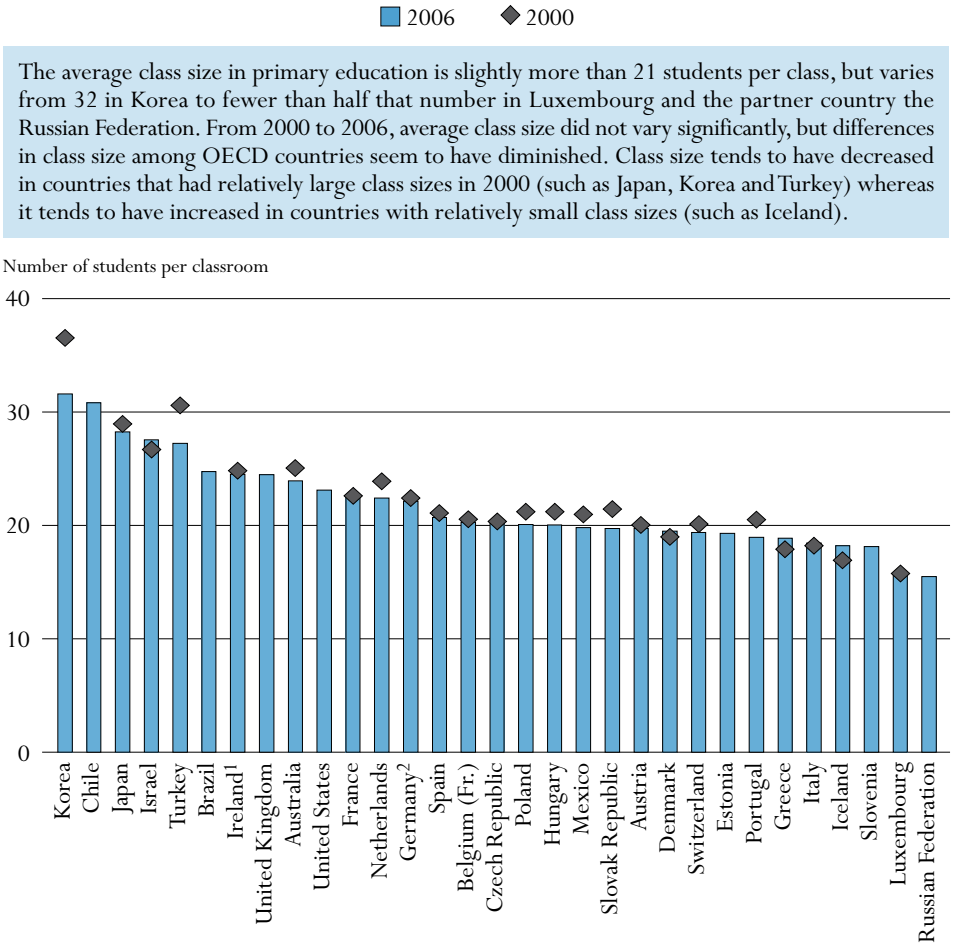
INDICATOR D2

WHAT IS THE STUDENT-TEACHER RATIO AND HOW BIG ARE CLASSES?

This indicator examines the number of students per class at the primary and lower secondary levels and the ratio of students to teaching staff at all levels; it distinguishes between public and private institutions. Class size and student-teacher ratios are much discussed aspects of the education students receive and – along with students' total instruction time (see Indicator D1), teachers' average working time (see Indicator D4) and the division of teachers' time between teaching and other duties – are among the determinants of the size of countries' teaching force.

Key results

Chart D2.1. Average class size in primary education (2000, 2006)



1. Public institutions only.
2. Years of reference 2001 and 2006.

Countries are ranked in descending order of average class size in primary education in 2006.

Source: OECD. 2006 data: Table D2.1. 2000 data: Table D2.4 on line. See Annex 3 for notes (*www.oecd.org/ edu/eag2008*).

StatLink http://dx.doi.org/10.1787/402267680060

Other highlights of this indicator

- The average class size in lower secondary education is 24 students per class, but varies from about 30 or more in Japan, Korea and Mexico and the partner countries Brazil, Chile and Israel, to 20 or fewer in Denmark, Iceland, Ireland (public institutions), Luxembourg and Switzerland and the partner country the Russian Federation.
- The number of students per class increases by an average of nearly three between primary and lower secondary education, but ratios of students to teaching staff tend to decrease with increasing levels of education owing to more annual instruction time, though this pattern is not uniform among countries.
- On average in OECD countries, the availability of teaching resources relative to student numbers in secondary education is more favourable in private than in public institutions. This is most striking in Mexico where, at the secondary level, there are around 14 more students per teacher in public institutions than in private ones. At the lower secondary level, there is one student more per class on average across OECD countries in public than in private institutions.

D2

Policy context

Class size, education quality and education systems

Class size is a hotly debated topic and an important element of education policy in many OECD countries. Smaller classes are often perceived to allow teachers to focus more on the individual needs of students and to reduce the amount of class time they spend dealing with disruptions. Smaller class sizes may also influence parents when they choose schools for their children. In this respect, class size would be viewed as an indicator of the quality of the school system.

Yet evidence on the effects of differences in class size upon student performance is mixed. In what has evolved as a contentious area of research, and one which has produced little in the way of consistent results, there is some evidence that smaller classes may have an impact upon specific groups of students (*e.g.* Krueger, 2002).

A further reason for the mixed evidence on the impact of class size may be that class size does not vary enough to estimate the true effects of this variable on student performance. In addition, policies that group students who perform less satisfactorily into smaller classes in order to devote more attention to them may reduce the observed performance gains that may otherwise be expected from smaller classes. Finally, the fact that the relationship between class size and student performance is often non-linear makes the effects difficult to estimate.

Many factors influence the interaction between teachers and students, and class size is only one of them. Other influences include the number of classes or students for which a teacher is responsible, the subject taught, the division of the teacher's time between teaching and other duties, the grouping of students within classes, the pedagogical approach employed and the practice of team teaching.

The ratio of students to teaching staff is also an important indicator of the resources devoted to education. A smaller ratio of students to teaching staff may have to be weighted against higher salaries for teachers, increased professional development and teacher training, greater investment in teaching technology, or more widespread use of assistant teachers and other paraprofessionals whose salaries are often considerably lower than those of qualified teachers. Moreover, as larger numbers of children with special educational needs are integrated into normal classes, more use of specialised personnel and support services may limit the resources available for reducing the ratio of students to teaching staff.

The ratio of students to teaching staff is obtained by dividing the number of full-time equivalent students at a given level of education by the number of full-time equivalent teachers at that level and in similar types of institutions. However, this ratio does not take into account instruction time compared to the length of a teacher's working day, nor how much time teachers spend teaching and therefore it cannot be interpreted in terms of class size (Box D2.1).

Evidence and explanations

Average class size in primary and lower secondary education

At the primary level, the average class size in OECD countries is slightly more than 21 students per class, but varies widely. It ranges from 32 students per primary class in Korea to fewer than 20 in Austria, Denmark, Greece, Iceland, Italy, Luxembourg, Mexico, Portugal, the Slovak Republic and

Switzerland and the partner countries Estonia, the Russian Federation and Slovenia. At the lower secondary level, the average class size in OECD countries is 24 students per class and varies from 36 students per class in Korea to 20 or fewer in Denmark, Iceland, Ireland (public institutions), Luxembourg and Switzerland and the partner country the Russian Federation (Table D2.1).

Box D2.1. Relationship between class size and ratio of students to teaching staff

The number of students per class results from a number of different elements: the ratio of students to teaching staff, the number of classes or students for which a teacher is responsible, the instruction time of students compared to the length of teachers' working days, the proportion of time teachers spend teaching, the grouping of students within classes and team teaching.

For example, in a school of 48 full-time students and 8 full-time teachers, the ratio of students to teaching staff is 6. If teachers' working week is estimated to be 35 hours including 10 hours teaching, and if instruction time for each student is 40 hours per week, then whatever the grouping of students in this school, average class size can be estimated as follows:

Estimated class size = 6 students per teacher * (40 hours of instruction time per student/ 10 hours of teaching per teacher) = 24 students.

Compared to this estimated figure, the class size presented in Table D2.1 is defined as the division of students who are following a common course of study, based on the highest number of common courses (usually compulsory studies), and excludes teaching in sub-groups. Thus, the estimated class size will be close to the average class size of Table D2.1 where teaching in sub-groups is less frequent (as is the case in primary and lower secondary education).

Because of these definitions, similar student-teacher ratios between countries can result in different class sizes. For example, in lower secondary education, Austria and the United States have similar average class sizes (23.9 students in Austria and 24.3 in the United States – see Table D2.1), but the ratio of students to teaching staff differs substantially with 10.4 students per teaching staff in Austria compared to 14.7 in the United States (Table D2.2). The explanation may lie in the higher number of teaching hours required of teachers in the United States (607 in Austria and 1 080 in the United States – Table D4.1).

The number of students per class tends to increase, on average, by nearly three students between primary and lower secondary education. In Austria, Japan, Korea, Luxembourg, Mexico, Poland and Spain, and the partner countries Brazil and Israel, the increase in average class size exceeds four students, while Switzerland and the United Kingdom show a small drop in the number of students per class between these two levels (Chart D2.2). The indicator on class size is limited to primary and lower secondary education because class sizes are difficult to define and compare at higher levels, where students often attend several different classes, depending on the subject area.

However data collected in the context of PISA 2006 give some insight into class size in a specific area (national language of instruction classes) for the grade attended by most of the students aged 15 in the country (Box D2.2).

Box D2.2. National language of instruction class size in the grade attended by most 15-year-olds

The 2006 PISA survey analysed the performance of 15-year-old students, with a focus on science. As part of the contextual information collected, principals of institutions were asked to give the actual number of students in classes in the national language of instruction, for the grade attended by most of the country's students aged 15. As the survey is representative of 15-year-old students, the size of classes is representative of class sizes in each country for this group of students.

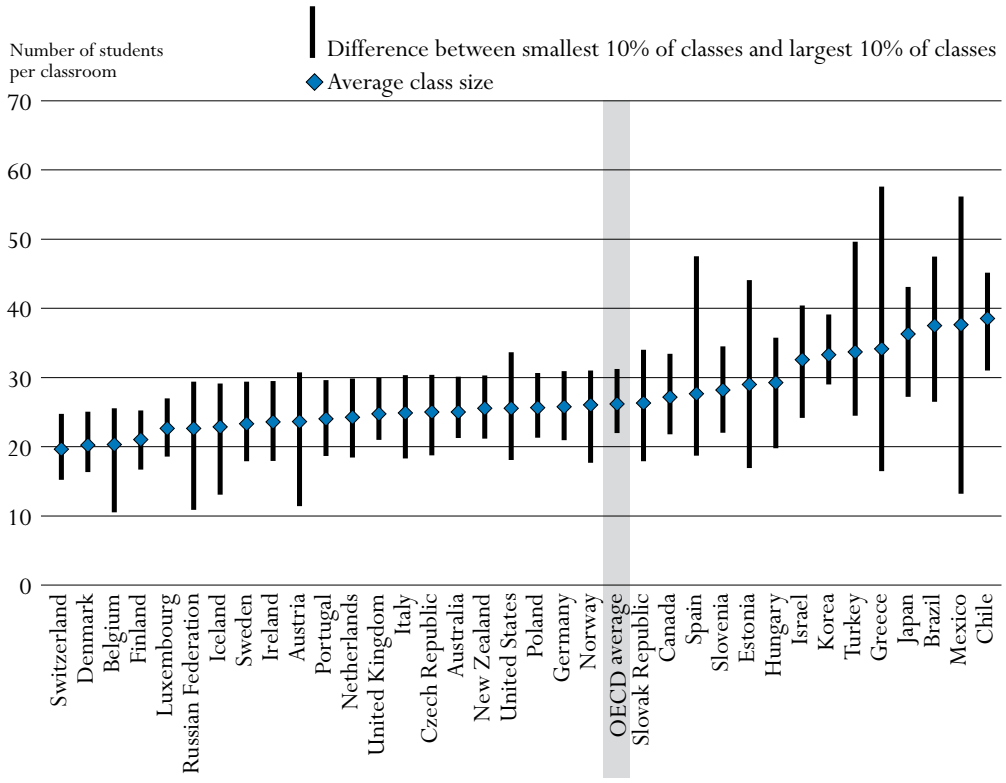
Principals were asked to specify the size of classes according to the 9 following categories: 15 students or fewer, from 16 to 20, from 21 to 25, from 26 to 30, from 31 to 35, from 36 to 40, from 41 to 45, from 46 to 50, and more than 50. From these categories, average class size was computed using the middle class size value for each category and the values 15 and 51 for the two extremes. Average class sizes, as well as the difference in class size between the smallest 10% of classes and largest 10% of classes are shown on the chart below.

In OECD countries, the average class size corresponding to the grade attended by most of the country's 15-year-olds is 26 students. The average size of these classes is two more than that reported in this indicator for lower secondary level of education, but the difference should be interpreted with caution owing to differences in methodology. There are large differences in class sizes for 15-year-olds as there are at the lower secondary level. For the grade attended by most 15-year-olds, average class sizes vary from fewer than 20 students in Switzerland to nearly twice this number in the partner country Chile (38.6). From the six countries with the smallest class sizes for 15-year-olds (Belgium, Denmark, Finland, Luxembourg and Switzerland and the partner country the Russian Federation), four are among those reported here with the smallest class sizes at the lower secondary level. Similarly, among the 8 countries with more than 30 students in the grade attended by most of the country's 15-year-olds (Greece, Japan, Korea, Mexico, Turkey and the partner countries Brazil, Chile and Israel), 6 are among those with the largest class sizes at lower secondary level.

Average class size in the grade attended by most 15-year-olds varies widely among countries, but the distribution of class sizes within each country also varies. In some countries such as Finland and Luxembourg, the average class size is below the OECD average and the difference between the smallest 10% of classes and the largest 10% is about 8.5 students. However the difference between the smallest 10% and largest 10% of classes reaches at least twice this number in Austria, Turkey and in the partner countries Brazil and the Russian Federation, and about three times this number or more in Spain and in the partner country Estonia. In Greece and Mexico, the difference can even be about five times or more the difference shown in Finland and Luxembourg. However, the variation between the smallest and largest class sizes in each country is not necessarily linked to average class size. In Korea, the average class size is among the largest in OECD countries, but the difference between the smallest 10% and the

largest 10% of class sizes is about 10 students, only slightly more than the average across OECD countries. In Austria, instead, the average class size is, at nearly 24 students, below the OECD average, but there are more variations in class sizes than on average in OECD countries (19 and 9 students, respectively).

Average class size in national language of instruction classes for 15-year-olds

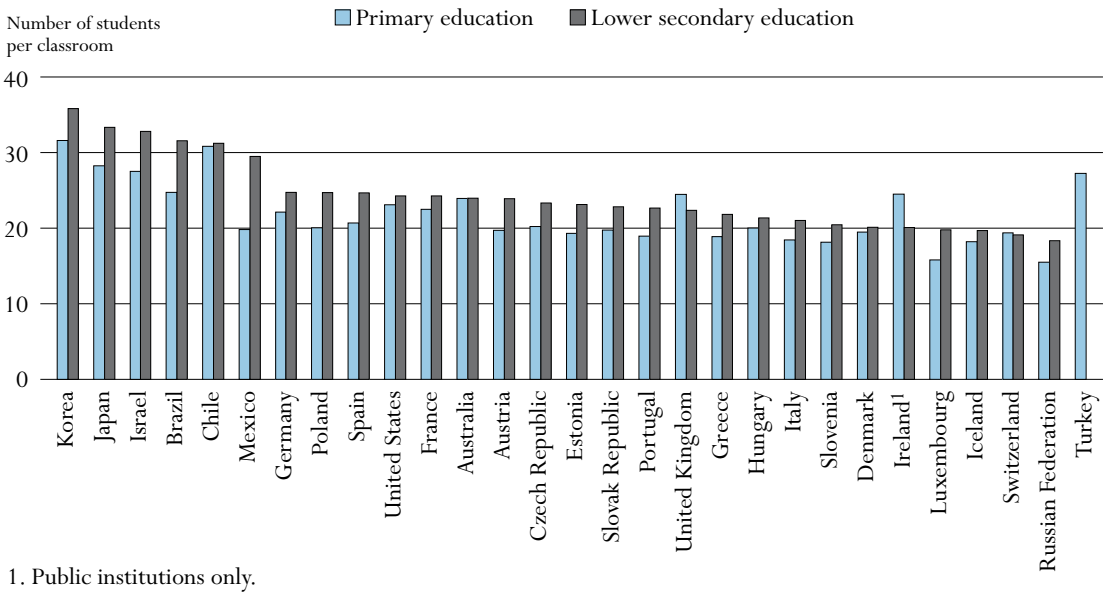


Countries are ranked in ascending order of average class size in national language of instruction classes.
Source: OECD PISA 2006 database. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
StatLink http://dx.doi.org/10.1787/402267680060

Although the data on class size do not refer to science classes, it is interesting to look at the relationship between PISA performance in science and average class size. The class size in the language of instruction does not seem to have a direct impact on PISA performance in science. For example a country like Finland has both a small average class size in the language of instruction and holds the top ranking for performance in science. However, countries like Japan and the partner country Estonia, which are also among the top five OECD and partner countries for PISA performance in science, have average class sizes that are larger than the OECD average. Estonia's average class size exceeds the OECD average by only three students while Japan's exceeds it by ten. Large average class sizes in Korea and in the partner country Slovenia do not prevent these countries from having above average PISA performance in science. Japan has also large average class size and above average PISA performance, but on the other hand, attempts small-group teaching to improve achievement of students.

Between 2000 and 2006, average class size in primary education did not vary significantly (21.5 in 2006 against 22.0 in 2000). However, among countries with comparable data, class size decreased in countries that had larger class sizes in 2000 (Korea, Japan and Turkey), whereas class size increased (or stayed constant) in countries that had the smallest class sizes in 2000 (Iceland, Italy, Greece and Luxembourg). At the secondary level of education, variations in class sizes between 2000 and 2006 follow a similar trend, leading to a narrowing of the range of class sizes (Table D2.1 and Table D2.4 available on line).

Chart D2.2. Average class size in educational institutions, by level of education (2006)



1. Public institutions only.

Countries are ranked in descending order of average class size in lower secondary education.

Source: OECD. Table D2.1. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

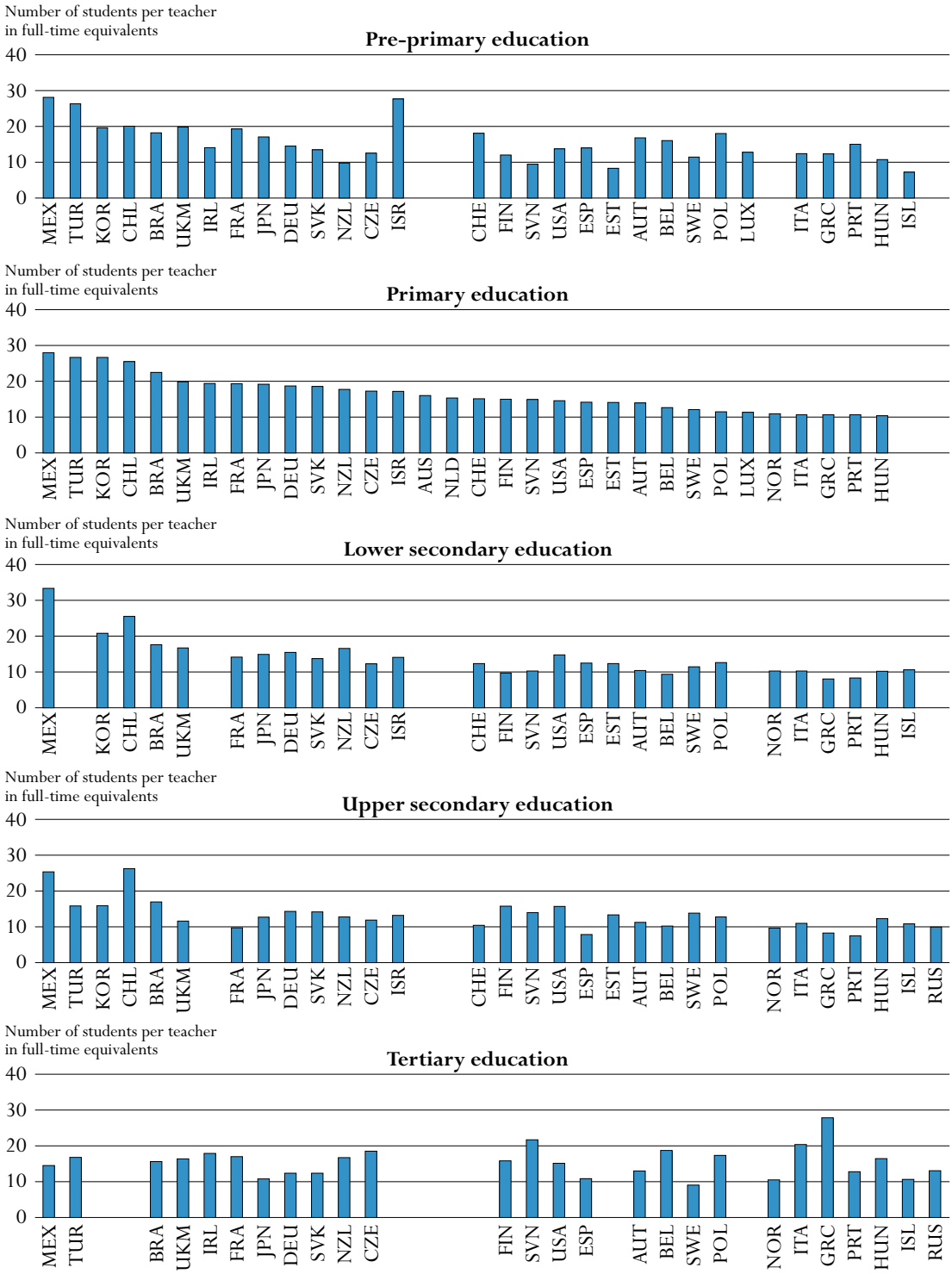
StatLink http://dx.doi.org/10.1787/402267680060

Ratio of students to teaching staff

In primary education, the ratio of students to teaching staff, expressed in full-time equivalents, ranges from 26 students or more per teacher in Korea, Mexico and Turkey to fewer than 11 in Greece, Hungary, Italy, Norway and Portugal. The OECD average in primary education is 16 students per teacher (Chart D2.3).

There is similar variation among countries in the ratio of students to teaching staff at the secondary level, ranging from 30 students per full-time equivalent teacher in Mexico to fewer than 11 in Austria, Belgium, Greece, Iceland, Italy, Luxembourg, Norway, Portugal and Spain and in partner country the Russian Federation. On average among OECD countries, the ratio of students to teaching staff at the secondary level is 13, which is close to the ratios in Australia (12), the Czech Republic (12), Finland (13), France (12), Japan (14), Poland (13), the Slovak Republic (14), Sweden (13), Switzerland (12) and the United Kingdom (14), and the partner countries Estonia (13), Israel (13) and Slovenia (13) (Table D2.2).

Chart D2.3. Ratio of students to teaching staff in educational institutions, by level of education (2006)



Note: Please refer to the Reader's Guide for the list of country codes for country names used in this chart.
Countries are ranked in descending order of average class size in primary education.
Source: OECD. Table D2.2. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

StatLink http://dx.doi.org/10.1787/402267680060

As the difference in the mean ratios of students to teaching staff between primary and secondary education indicates, there are fewer full-time equivalent students per full-time equivalent teacher at higher levels of education. The ratio of students to teaching staff decreases between primary and secondary levels of education, despite a tendency for class sizes to increase. This was found to be true in all but seven OECD countries (Hungary, Italy, Mexico, the Netherlands, Poland, Sweden and the United States), and the partner country Chile.

The decrease in the ratio of students to teaching staff from the primary to the secondary level reflects differences in annual instruction time, which tends to increase with the level of education. It may also result from delays in matching the teaching force to demographic changes, or from differences in teaching hours for teachers at different levels. The general trend is consistent among countries, but it is not obvious from an educational perspective why a smaller ratio of students to teaching staff should be more desirable at higher levels of education (Table D2.2).

The ratios of students to teaching staff in pre-primary education are shown in Table D2.2. For the pre-primary level, information is also presented on the ratio of students to contact staff (teachers and teachers' aides). Some countries make extensive use of teachers' aides at the pre-primary level. Ten OECD countries and three partner countries reported smaller ratios of students to contact staff (column 1 of Table D2.2) than of students to teaching staff. For countries such as the Czech Republic, the Slovak Republic, Sweden and the United Kingdom, this difference is not substantial. However, in Austria, France, Germany, Ireland and the United States, as well as in the partner countries Chile, Estonia and Israel, there are larger numbers of teachers' aides. As a result, the ratios of students to contact staff are substantially lower than ratios of students to teaching staff, particularly in France and Ireland and in partner country Israel.

At the tertiary level, the ratio of students to teaching staff ranges from 28 students per teacher in Greece to 11 or fewer in Iceland, Japan, Norway, Spain and Sweden (Table D2.2). Such comparisons in tertiary education should be made with caution, however, since it is still difficult to calculate full-time equivalent students and teachers on a comparable basis at this level.

In 14 out of the 15 OECD and partner countries with comparable data, the ratio of students to teaching staff is lower in the more occupationally specific tertiary-type B programmes than in tertiary-type A and advanced research programmes (Table D2.2). Turkey is the only country with a higher ratio in tertiary-type B programmes.

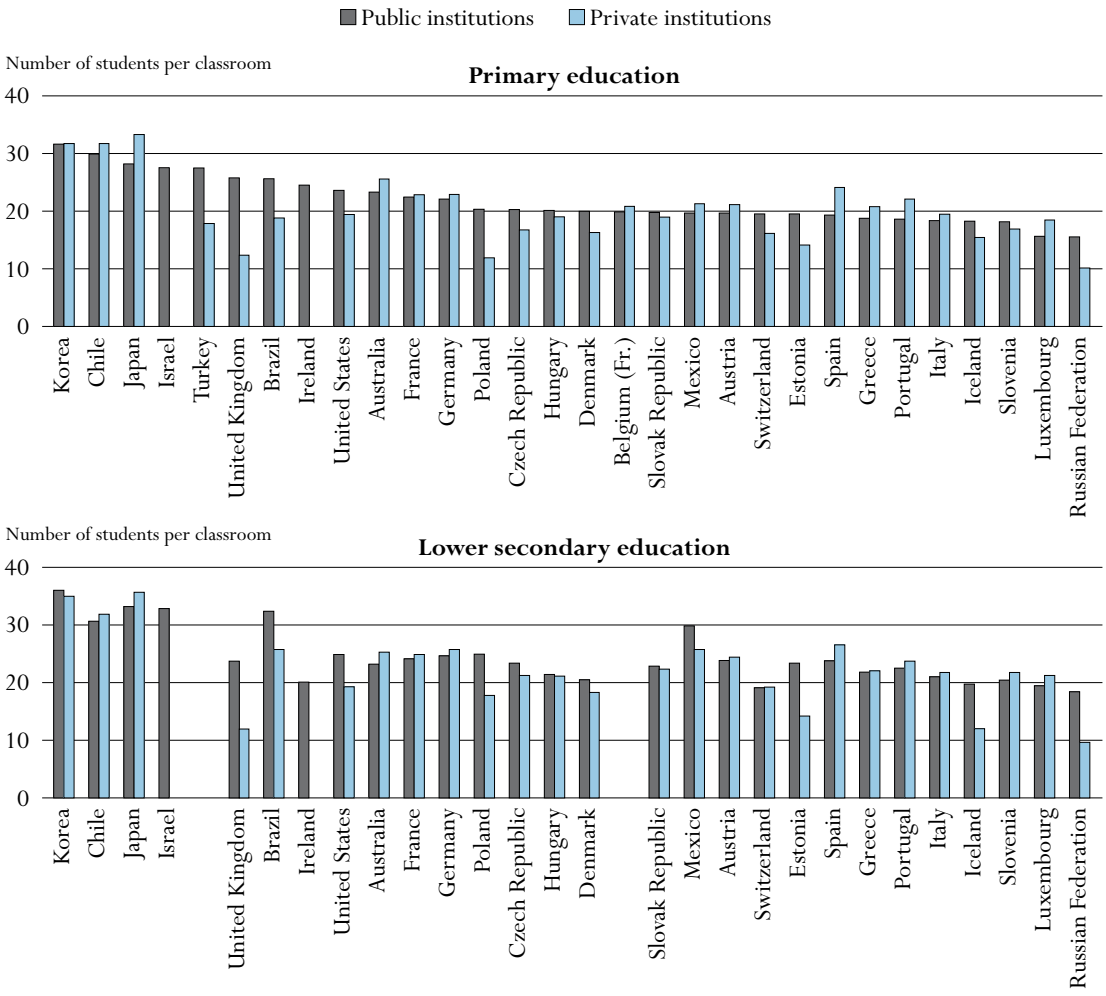
Teaching resources in public and private institutions

Table D2.3 focuses on the secondary level and illustrates comparative teaching resources between public and private institutions by comparing the ratio of students to teaching staff for the two types of providers. On average among OECD countries and partner countries for which data are available, the ratios of students to teaching staff are smaller in private institutions at both lower secondary and upper secondary levels, with slightly more than two more students per teacher in public institutions than in private institutions at total secondary level. The most striking examples are Mexico and the United Kingdom where, at the lower secondary level, there are at least 12 more students per teacher in public than in private institutions. The difference in Mexico at the upper secondary level is similarly large. However, this is not true in all countries.

In some countries, ratios of students to teaching staff are smaller in the public sector than in the private sector. This is most pronounced at the lower secondary level in Spain where there are some 16 students per teacher in private institutions compared with only 11 in public institutions.

In terms of class size (Chart D2.4 and Table D2.1), on average among OECD countries for which data are available, average class sizes do not differ between public and private institutions by more than one or two students per class for both primary and lower secondary education. However, this disguises marked differences among countries. At the primary level, in Poland, Turkey, the United Kingdom and the United States, and in the partner countries Brazil, Estonia and the Russian Federation, for example, average class sizes in public institutions are higher by four students or more per class. However, in all these countries except the partner country Brazil, the private sector is relatively small (at most 5% of students at the primary level). In contrast, class sizes in private institutions exceed those in public institutions to at least a similar degree in Japan and Spain.

Chart D2.4. Average class size in public and private institutions, by level of education (2006)



Countries are ranked in descending order of average class size in public institutions in primary education.
Source: OECD. Table D2.1. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
StatLink http://dx.doi.org/10.1787/402267680060

The comparison of class size between public and private institutions shows a mixed picture at the lower secondary level, where private education is more prevalent. Lower secondary average class sizes are larger in private institutions than in public institutions in 11 OECD and 2 partner countries, although differences tend to be smaller than in primary education.

Countries encourage and provide resources for public and private schools for various reasons. In many countries, one reason is to broaden the choice of schooling available to students and their families. Considering the importance of class size in discussions of schooling in many countries, differences in class sizes between public and private schools and institutions may be a driver of differences in enrolment. It is interesting that in Australia, Belgium (Fr.), Denmark, Korea, and Luxembourg and the partner country Chile, countries with a substantial private sector in primary and lower secondary education (Table C2.4), there are, on average, only marginal differences in class size between public and private institutions. Where large differences do exist, they tend to show that private institutions have more students per class than public ones. This indicates that in countries where a substantial proportion of students and families have decided to choose private education institutions, class size is not a major determinant of their decisions.

Definitions and methodologies

Data refer to the academic year 2005/06 and are based on the UOE data collection on education statistics administered by the OECD in 2007 (for details see Annex 3 at *www.oecd.org/edu/eag2008*).

Class sizes have been calculated by dividing the number of students enrolled by the number of classes. In order to ensure comparability among countries, special needs programmes have been excluded. Data include only regular programmes at primary and lower secondary levels of education and exclude teaching in sub-groups outside the regular classroom setting.

The ratio of students to teaching staff has been calculated by dividing the number of full-time equivalent students at a given level of education by the number of full-time equivalent teachers at that level and in the specified type of institution.

The breakdown of the ratio of students to teaching staff by type of institution distinguishes between students and teachers in public institutions and in private institutions (government-dependent private institutions and independent private institutions). In some countries the proportion of students in private institutions is small (Table C2.4).

Instructional personnel:

- Teaching staff refers to professional personnel directly involved in teaching students. The classification includes classroom teachers, special education teachers and other teachers who work with a whole class of students in a classroom, in small groups in a resource room, or in one-to-one teaching situations inside or outside a regular class. Teaching staff also includes department chairpersons whose duties include some teaching, but excludes non-professional personnel who support teachers in providing instruction to students, such as teachers' aides and other paraprofessional personnel.
- Teachers' aides and teaching/research assistants include non-professional personnel or students who support teachers in providing instruction to students.

Further references

The following additional material relevant to this indicator is available on line at:

StatLink http://dx.doi.org/10.1787/402267680060

- ***Table D2.4. Average class size, by type of institution and level of education (2000)***

Specific notes on definitions and methodologies regarding this indicator for each country are given in Annex 3 at *www.oecd.org/edu/eag2008*.

D2

Table D2.1.

Average class size, by type of institution and level of education (2006)

Calculations based on number of students and number of classes

		Primary education					Lower secondary education (general programmes)				
			Private institutions					Private institutions			
		Public institutions	Total private institutions	Government-dependent private institutions	Independent private institutions	Total: Public and private institutions	Public institutions	Total private institutions	Government-dependent private institutions	Independent private institutions	Total: Public and private institutions
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD countries	Australia	23.3	25.6	25.6	a	**23.9**	23.2	25.3	25.3	a	**24.0**
	Austria	19.6	21.1	x(2)	x(2)	**19.7**	23.9	24.4	x(7)	x(7)	**23.9**
	Belgium	m	m	m	m	**m**	m	m	m	m	**m**
	Belgium (Fr.)	19.9	20.9	20.9	a	**20.3**	m	m	m	a	**m**
	Canada	m	m	m	m	**m**	m	m	m	m	**m**
	Czech Republic	20.3	16.8	16.8	a	**20.2**	23.4	21.2	21.2	a	**23.3**
	Denmark	20.0	16.3	16.3	a	**19.5**	20.5	18.3	18.3	a	**20.1**
	Finland	m	m	m	a	**m**	m	m	m	a	**m**
	France	22.4	22.8	x(2)	x(2)	**22.5**	24.1	24.9	25.1	13.4	**24.3**
	Germany	22.1	22.9	22.9	x(3)	**22.1**	24.7	25.7	25.7	x(8)	**24.7**
	Greece	18.7	20.8	a	20.8	**18.9**	21.8	22.1	a	22.1	**21.8**
	Hungary	20.1	19.0	19.0	a	**20.0**	21.4	21.1	21.1	a	**21.4**
	Iceland	18.3	15.5	15.5	n	**18.2**	19.8	12.0	12.0	n	**19.7**
	Ireland	24.5	m	a	m	**m**	20.1	m	a	m	**m**
	Italy	18.4	19.5	a	19.5	**18.4**	21.0	21.8	a	21.8	**21.0**
	Japan	28.2	33.3	a	33.3	**28.3**	33.2	35.7	a	35.7	**33.3**
	Korea	31.6	31.7	a	31.7	**31.6**	36.0	35.0	35.0	a	**35.8**
	Luxembourg	15.6	18.5	18.1	18.5	**15.8**	19.5	21.2	20.5	22.4	**19.8**
	Mexico	19.7	21.3	a	21.3	**19.8**	29.8	25.8	a	25.8	**29.5**
	Netherlands	x(5)	x(5)	x(5)	a	**22.4**	m	m	m	m	**m**
	New Zealand	m	m	m	m	**m**	m	m	m	m	**m**
	Norway	a	a	a	a	**a**	a	a	a	a	**a**
	Poland	20.3	11.9	11.9	11.9	**20.1**	25.0	17.8	26.3	15.8	**24.7**
	Portugal	18.6	22.1	24.6	21.4	**19.0**	22.5	23.7	23.8	23.5	**22.7**
	Slovak Republic	19.8	19.0	19.0	n	**19.7**	22.9	22.3	22.3	n	**22.8**
	Spain	19.3	24.1	24.1	24.0	**20.7**	23.8	26.6	26.9	24.1	**24.7**
	Sweden	m	m	m	m	**m**	m	m	m	m	**m**
	Switzerland	19.5	16.1	16.0	16.1	**19.4**	19.1	19.2	21.3	18.7	**19.1**
	Turkey	27.5	17.9	a	17.9	**27.2**	a	a	a	a	**a**
	United Kingdom	25.8	12.3	a	12.3	**24.5**	23.7	12.0	17.8	11.4	**22.4**
	United States	23.6	19.4	a	19.4	**23.1**	24.9	19.3	a	19.3	**24.3**
	OECD average	***21.5***	***20.4***	***19.3***	***20.6***	***21.5***	***23.8***	***22.6***	***22.8***	***21.2***	***24.0***
	EU19 average	***20.3***	***19.2***	***19.4***	***18.3***	***20.2***	***22.5***	***21.6***	***22.6***	***19.3***	***22.7***
Partner countries	Brazil	25.6	18.8	a	18.8	**24.7**	32.4	25.8	a	25.8	**31.6**
	Chile	29.9	31.7	33.4	23.6	**30.8**	30.7	31.9	33.3	24.7	**31.2**
	Estonia	19.5	14.1	a	14.1	**19.3**	23.4	14.2	a	14.2	**23.1**
	Israel	27.5	a	a	a	**27.5**	32.8	a	a	a	**32.8**
	Russian Federation	15.5	10.1	a	10.1	**15.5**	18.4	9.7	a	9.7	**18.3**
	Slovenia	18.2	16.9	16.9	n	**18.1**	20.5	21.8	21.8	n	**20.5**

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

StatLink http://dx.doi.org/10.1787/402267680060

Table D2.2.

Ratio of students to teaching staff in educational institutions (2006)

By level of education, calculations based on full-time equivalents

		Pre-primary education			Secondary education				Tertiary education		
		Students to contact staff (teachers and teachers aides)	Students to teaching staff	Primary education	Lower secondary education	Upper secondary education	All secondary education	Post-secondary non-tertiary education	Tertiary-type B	Tertiary-type A and advanced research programmes	All tertiary education
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD countries	Australia[1, 2]	m	m	16.0	x(6)	x(6)	12.2	m	m	14.9	m
	Austria	14.2	16.8	13.9	10.4	11.3	10.7	10.7	7.3	13.5	13.0
	Belgium	16.0	16.0	12.6	9.4	10.2	9.9	x(5)	x(10)	x(10)	18.7
	Canada[2]	m	x(6)	x(6)	x(6)	x(6)	15.9	m	m	m	m
	Czech Republic	12.3	12.5	17.3	12.3	11.9	12.1	17.5	13.4	19.3	18.5
	Denmark	m	6.3	x(4)	11.4	m	m	m	m	m	m
	Finland	m	12.0	15.0	9.7	15.8	12.9	x(5)	x(5)	15.8	15.8
	France[3]	13.7	19.3	19.3	14.1	9.7	11.9	m	16.8	17.1	17.0
	Germany	11.2	14.5	18.7	15.5	14.3	15.1	15.1	11.9	12.5	12.4
	Greece	12.4	12.4	10.6	8.0	8.3	8.2	5.9	26.9	28.4	27.8
	Hungary	m	10.7	10.4	10.2	12.3	11.2	11.9	15.7	16.5	16.5
	Iceland	7.2	7.2	x(4)	10.6	10.8	10.7	x(5, 10)	x(10)	x(10)	10.7
	Ireland[2]	7.1	14.1	19.4	x(6)	x(6)	14.6	x(6)	x(10)	x(10)	17.9
	Italy	12.4	12.4	10.7	10.3	11.0	10.7	m	8.4	20.6	20.4
	Japan	16.4	17.0	19.2	14.9	12.7	13.7	x(5, 10)	8.3	11.9	10.8
	Korea	19.6	19.6	26.7	20.8	15.9	18.2	a	m	m	m
	Luxembourg[2]	m	12.8	11.3	x(6)	x(6)	9.0	m	m	m	m
	Mexico	28.1	28.1	28.0	33.4	25.4	30.2	a	13.0	14.6	14.5
	Netherlands	m	x(3)	15.3	x(6)	x(6)	15.8	x(6)	m	14.9	m
	New Zealand	9.8	9.8	17.7	16.6	12.7	14.6	15.8	15.3	17.1	16.7
	Norway[2]	m	m	10.9	10.2	9.7	9.9	x(5)	x(10)	x(10)	10.5
	Poland	m	18.0	11.5	12.6	12.8	12.7	11.1	12.5	17.4	17.3
	Portugal	m	15.0	10.6	8.3	7.5	7.9	x(5)	x(10)	x(10)	12.7
	Slovak Republic	13.4	13.5	18.6	13.7	14.2	13.9	10.6	9.7	12.4	12.4
	Spain	m	14.0	14.2	12.5	7.8	10.5	a	6.9	12.2	10.8
	Sweden	11.2	11.4	12.1	11.4	13.8	12.6	11.9	x(10)	x(10)	9.0
	Switzerland[1, 2]	m	18.1	15.1	12.3	10.5	11.9	m	m	m	m
	Turkey	m	26.3	26.7	a	15.8	15.8	a	57.1	12.5	16.8
	United Kingdom[1]	19.4	19.8	19.8	16.7	11.6	13.7	x(5)	x(10)	x(10)	16.4
	United States	11.3	13.8	14.6	14.7	15.7	15.2	21.9	x(10)	x(10)	15.1
	OECD average	***13.9***	***15.1***	***16.2***	***13.3***	***12.6***	***13.2***	***13.2***	***16.0***	***16.0***	***15.3***
	EU19 average	***13.0***	***14.0***	***14.5***	***11.7***	***11.5***	***11.9***	***11.8***	***13.0***	***16.7***	***16.0***
Partner countries	Brazil	m	18.2	22.5	17.6	17.0	17.3	a	x(10)	x(10)	15.6
	Chile	18.8	20.1	25.5	25.5	26.3	26.0	a	m	m	m
	Estonia	5.7	8.3	14.1	12.3	13.3	12.7	m	m	m	m
	Israel	13.8	27.7	17.2	14.1	13.2	13.5	m	m	m	m
	Russian Federation[4]	m	m	m	x(6)	x(6)	9.9	x(6)	10.9	13.9	13.1
	Slovenia	9.4	9.4	14.9	10.2	14.0	12.9	x(5)	x(10)	x(10)	21.7

1. Includes only general programmes in upper secondary education.
2. Public institutions only (for Australia, at tertiary-type A and advanced research programmes only; for Ireland, at secondary level only).
3. Excludes independent private institutions.
4. Excludes general programmes in upper secondary education.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

StatLink http://dx.doi.org/10.1787/402267680060

D2

Table D2.3.

Ratio of students to teaching staff by type of institution (2006)

By level of education, calculations based on full-time equivalents

		Lower secondary education				Upper secondary education				All secondary education			
			Private				Private				Private		
		Public	Total private institutions	Government-dependent private institutions	Independent private institutions	Public	Total private institutions	Government-dependent private institutions	Independent private institutions	Public	Total private institutions	Government-dependent private institutions	Independent private institutions
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD countries	Australia[1]	x(9)	x(10)	x(11)	a	x(9)	x(10)	x(11)	a	12.4	11.8	11.8	a
	Austria	10.3	11.4	x(2)	x(2)	11.3	11.5	x(6)	x(6)	10.7	11.4	x(10)	x(10)
	Belgium[2]	9.2	m	9.5	m	10.5	m	10.0	m	10.0	m	9.8	m
	Canada	m	m	m	m	m	m	m	m	m	m	m	m
	Czech Republic	12.4	9.3	9.3	a	11.7	12.9	12.9	a	12.1	12.2	12.2	a
	Denmark[3]	11.5	10.8	10.8	a	m	m	m	a	m	m	m	a
	Finland[4, 5]	9.7	10.3	10.3	a	15.2	20.9	20.9	a	12.5	18.3	18.3	a
	France	14.1	m	14.2	m	9.5	m	10.9	m	11.8	m	12.7	m
	Germany	15.5	15.1	15.1	x(3)	14.4	13.8	13.8	x(7)	15.2	14.6	14.6	x(11)
	Greece	8.1	7.6	a	7.6	8.4	6.9	a	6.9	8.2	7.2	a	7.2
	Hungary	10.2	9.7	9.7	a	12.4	11.5	11.5	a	11.2	10.8	10.8	a
	Iceland[3, 4]	10.7	9.7	9.7	n	10.8	11.3	11.3	n	10.7	10.8	10.8	n
	Ireland[2]	x(9)	m	a	m	x(9)	m	a	m	14.6	m	a	m
	Italy	10.4	7.5	a	7.5	11.9	4.3	a	4.3	11.3	5.1	a	5.1
	Japan[4]	15.1	13.2	a	13.2	12.0	14.6	a	14.6	13.5	14.3	a	14.3
	Korea	20.8	20.9	20.9	a	15.3	16.6	16.6	a	18.5	17.7	17.7	a
	Luxembourg	x(9)	m	m	m	x(9)	m	m	m	9.0	m	m	m
	Mexico	36.0	22.1	a	22.1	29.8	16.0	a	16.0	33.7	18.8	a	18.8
	Netherlands	m	m	m	a	m	m	m	a	m	m	m	a
	New Zealand	16.8	15.7	16.6	14.0	12.9	12.2	13.5	9.4	14.9	13.6	14.6	11.3
	Norway	10.2	m	m	m	9.7	m	m	m	9.9	m	m	m
	Poland	12.7	10.0	12.7	9.2	13.0	9.9	15.9	9.3	12.8	9.9	14.3	9.3
	Portugal	8.1	10.6	11.3	9.8	7.8	6.3	9.5	5.6	8.0	7.6	10.5	6.4
	Slovak Republic	13.8	13.0	13.0	n	14.4	12.7	12.7	n	14.0	12.8	12.8	n
	Spain	11.2	16.1	16.2	15.1	7.1	10.8	10.9	10.8	9.4	14.3	15.0	12.0
	Sweden	11.4	11.3	11.3	n	13.8	14.4	14.4	n	12.6	13.0	13.0	n
	Switzerland[6]	12.3	m	m	m	10.5	m	m	m	11.9	m	m	m
	Turkey	a	a	a	a	16.7	5.3	a	5.3	16.7	5.3	a	5.3
	United Kingdom[1]	18.5	6.6	18.1	6.0	12.2	8.0	4.7	8.2	14.9	7.0	2.7	7.2
	United States	15.6	9.4	a	9.4	16.4	10.6	a	10.6	15.9	9.9	a	9.9
	OECD average	***13.5***	***12.0***	***13.0***	***8.8***	***12.8***	***11.5***	***12.6***	***7.2***	***13.2***	***11.7***	***12.6***	***7.6***
	EU19 average	***11.7***	***10.7***	***12.4***	***9.2***	***11.6***	***11.1***	***12.3***	***7.5***	***11.7***	***11.1***	***12.2***	***7.9***
Partner countries	Brazil	18.7	11.1	a	11.1	19.4	10.0	a	10.0	19.0	10.5	a	10.5
	Chile	26.0	25.0	26.7	17.4	26.7	25.9	29.5	14.0	26.4	25.6	28.6	15.0
	Estonia	12.4	8.6	a	8.6	13.4	13.1	a	13.1	12.8	10.8	a	10.8
	Israel	14.1	a	a	a	13.2	a	a	a	13.5	a	a	a
	Russian Federation	m	m	a	m	m	m	a	m	m	m	a	m
	Slovenia[2]	10.2	8.7	8.7	n	13.2	14.9	14.6	27.0	12.2	14.6	14.3	27.0

1. Includes only general programmes in lower and upper secondary education.
2. Upper secondary includes post-secondary non-tertiary education.
3. Lower secondary includes primary education.
4. Upper secondary education includes programmes from post-secondary education.
5. Upper secondary education includes tertiary-type B education.
6. Includes only general programmes in upper secondary education.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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INDICATOR D3

HOW MUCH ARE TEACHERS PAID?

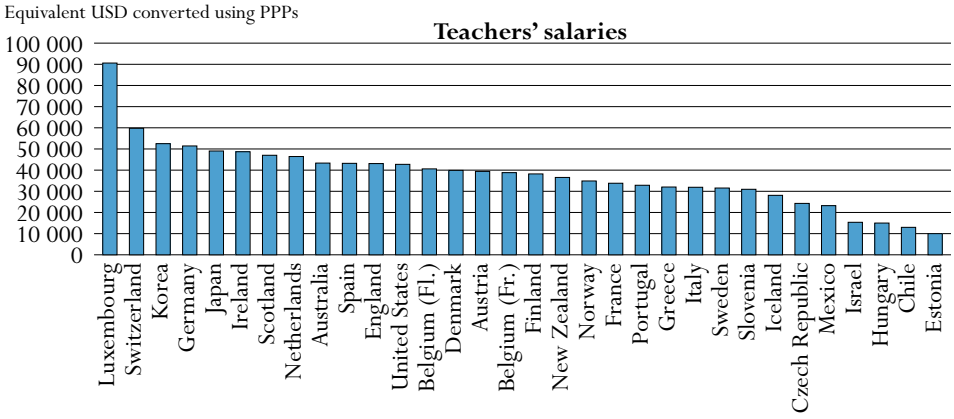
This indicator shows the starting, mid-career and maximum statutory salaries of teachers in public primary and secondary education, and various additional payments and incentive schemes used to reward teachers. Together with teachers' working and teaching time (see Indicator D4), this indicator presents some key measures of teachers' working lives. Differences in teachers' salaries, along with other factors such as student-to-staff ratios (see Indicator D2), provide some explanation of the differences in expenditure per student (see Indicators B1 and B7).

Key results

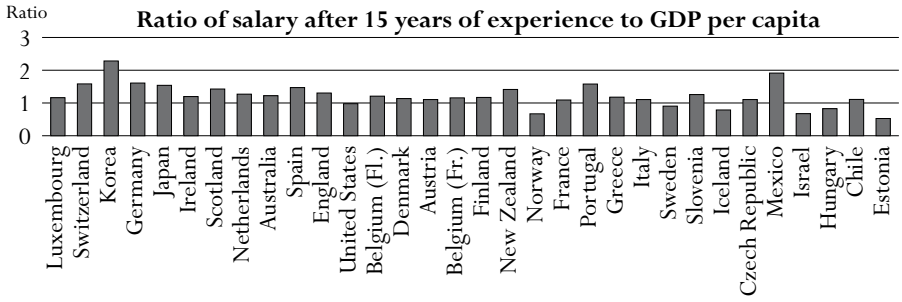
Chart D3.1. Teachers' salaries in lower secondary education (2006)

Annual statutory teachers' salaries in public institutions in lower secondary education, in equivalent USD converted using PPPs, and the ratio of salary after 15 years of experience to GDP per capita

Salaries of teachers with at least 15 years' experience at the lower secondary level range from less than USD 15 000 in Hungary and in partner countries Chile and Estonia, to USD 51 000 or more in Germany, Korea and Switzerland, and exceed USD 90 000 in Luxembourg.



Salaries for teachers with at least 15 years' experience in lower secondary education are over twice the GDP per capita in Korea, whereas in Norway, and in partner countries Estonia and Israel, salaries are 75% or less than GDP per capita.



Countries are ranked in descending order of teachers' salaries in lower secondary education after 15 years of experience and minimum training.

Source: OECD. Table D3.1. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

StatLink http://dx.doi.org/10.1787/402280862627

Other highlights of this indicator

- Teachers' salaries have risen in real terms between 1996 and 2006 in virtually all countries, with the largest increases in Finland, Hungary and Mexico (and in starting salaries in Australia) and in partner country Estonia. Salaries at the primary and upper secondary levels in Spain fell in real terms over the period, although they remain above the OECD average.

- On average in OECD countries, upper secondary teachers' salaries per teaching hour exceed those of primary teachers by 44%; the difference is 5% or less in New Zealand, Scotland and the partner country Chile and is equal to or greater than 75% in Denmark and the Netherlands.

- Salaries at the top of the scale are on average around 70% higher than starting salaries for both primary and secondary education, although this differential largely varies among countries in line with the number of years it takes to progress through the scale. Top-of-the-scale salaries in Korea are almost three times the starting salaries, but it takes 37 years to reach the top of the scale. In Portugal, while the ratio is similar to Korea's, teachers reach the top of the salary scale after 26 years of service. However, not all teachers reach the top of the salary scale. For example, in the Netherlands there are three different salary levels for teachers in secondary education. In 2006 only 14.8% of the teachers in secondary education were at the maximum salary level.

Policy context

Teachers' salaries are the largest single cost in school education. Compensation is therefore a critical consideration for policy makers seeking to maintain both the quality of teaching and a balanced education budget (see Indicator B6). The size of education budgets naturally reflects trade-offs among many related factors: teachers' salaries, ratio of students to teaching staff, instruction time planned for students and designated number of teaching hours.

Ensuring a sufficient number of skilled teachers is a key issue in all OECD countries. In a competitive labour market, the equilibrium rate of salaries paid to different types of teachers would reflect the supply of and demand for those teachers. This is often not the case in OECD countries, as salaries and other conditions are often set centrally for all teachers. Teachers' salaries and conditions are therefore policy malleable factors that can affect both the demand for and supply of teachers. In addition, salaries and working conditions can be important in attracting, developing and retaining skilled and effective teachers.

Comparing salary levels at different career points allows for some analysis of the structure of careers and the salary associated with advancement in the teaching profession. Theoretically, the salary structure can provide salary incentives and rewards so as to attract high-quality teachers and increase their job satisfaction and performance. Other important aspects of the career structure are probationary periods at the beginning of teachers' careers and the issue of tenure (see Indicator D3 in *Education at Glance 2007*). Salary increases can be concentrated at different points in the salary structure, for example, early in the career or for more experienced employees, or can have a more linear structure, with gradual salary increases throughout a career.

Evidence and explanations

Comparing teachers' salaries

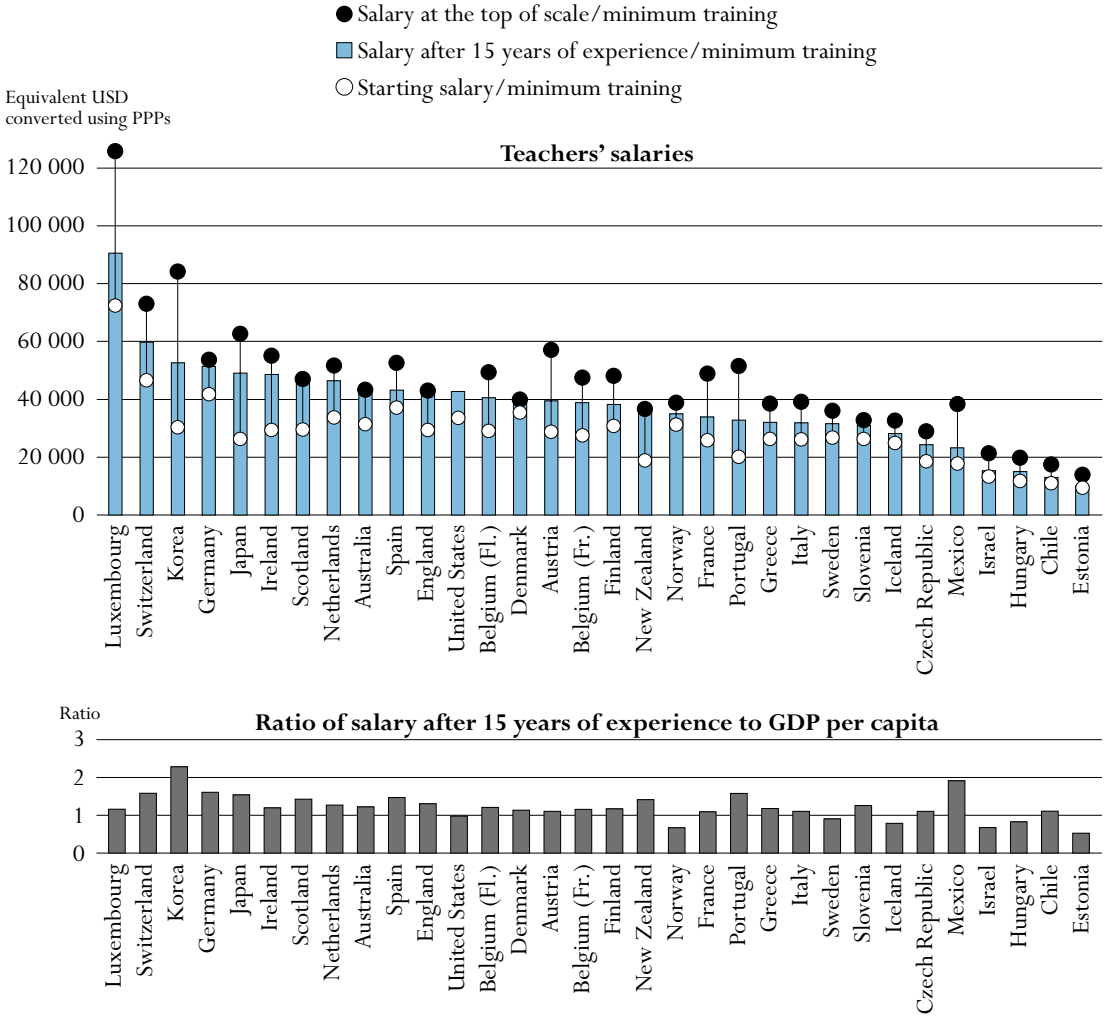
This indicator compares the starting, mid-career and maximum statutory salaries of teachers with the minimum level of qualifications required for certification in public primary and secondary education. First, teachers' salaries are examined in absolute terms at three career points: starting, mid-career and top-of-the-scale. Next, levels of salaries are compared in relative terms. At last, changes in these salaries between 1996 and 2006 are presented.

International comparisons of salaries provide simplified illustrations of the compensation received by teachers for their work. They provide a snapshot of the systems of compensation and the welfare inferences that can be made. Large differences in taxation and social benefit systems in OECD countries as well as the use of financial incentives (including regional allowances for teaching in remote regions, family allowances, reduced rates on public transport, tax allowances on purchases of cultural goods, and other quasi-pecuniary entitlements that contribute to a teacher's basic income) make it important to exercise caution in interpreting comparisons of teachers' salaries.

Statutory salaries as reported here must be distinguished from actual expenditures on wages by governments and from teachers' average salaries, which are also influenced by factors such as the age structure of the teaching force and the prevalence of part-time work. Indicator B6 shows the total amounts paid in compensation to teachers. Furthermore, since teaching time, teachers' workloads and the proportion of teachers in part-time employment vary considerably among countries, these factors should be taken into account when using comparisons of statutory salaries to judge teachers' overall benefits in different countries (see Indicator D4).

Chart D3.2. Teachers' salaries (minimum, after 15 years of experience, and maximum) in lower secondary education (2006)

Annual statutory teachers' salaries in public institutions in lower secondary education, in equivalent USD converted using PPPs, and the ratio of salary after 15 years of experience to GDP per capita



Countries are ranked in descending order of teachers' salaries in lower secondary education after 15 years of experience and minimum training.

Source: OECD. Table D3.1. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

StatLink http://dx.doi.org/10.1787/402280862627

When considering the salary structure of teachers it is also important to recall that not all teachers reach the top of the salary scale. For example, in the Netherlands there are three different salary levels for teachers in secondary education. In 2006 only 14.8% of the teachers in secondary education were at the maximum salary level.

The annual statutory salaries of lower secondary teachers with 15 years of experience range from less than USD 15 000 in Hungary and in the partner countries Chile and Estonia to over USD 51 000 in Germany, Korea and Switzerland and exceed USD 90 000 in Luxembourg (Table D3.1).

In most OECD countries, teachers' salaries increase with the level of education at which they teach. For example, in Belgium (Fl.), Belgium (Fr.), Luxembourg, the Netherlands and Switzerland, the salary of an upper secondary teacher with at least 15 years experience is at least 25% higher than that of a primary school teacher with the same experience. In contrast, in Australia, the Czech Republic, England, Greece, Ireland, Japan, Korea, New Zealand, Portugal, Scotland, Turkey and the United States, and in the partner countries Chile, Estonia, Israel and Slovenia, upper secondary and primary teachers' salaries are more comparable (a difference of less than 5%, see Table D3.1). The extent of the variation is influenced by the structure of teachers' salaries up to the mid-career point. In countries such as the United States, teachers' salaries are also influenced by the teachers' educational attainment. As this is not constant at all levels of teachers' careers, care should be taken in interpreting the differences in teachers' salaries at different levels of school education.

Comparatively large differences in teachers' salaries at different levels may influence how schools and school systems attract and retain teachers of different levels. It may also influence the extent to which teachers move among different educational levels and with that, the degree of segmentation in the labour market for teachers.

Statutory salaries relative to GDP per capita

Countries invest in teaching resources relative to their ability to fund educational expenditure, among other things. Comparing statutory salaries to GDP per capita is thus a way of assessing the relative value of teachers' salaries. Comparative data on salaries for comparable professions would provide a better benchmark, but since such data are not yet available, comparisons with GDP per capita provide some basis for standardised comparisons.

Relative to GDP per capita, salaries for teachers with at least 15 years of experience (in primary and lower secondary education) are relatively low in Hungary (0.82), Iceland (0.79), Norway (0.67), Sweden (0.88 in primary, 0.91 in lower secondary) and in the partner countries Estonia (0.52) and Israel (0.68). They are highest in Korea (2.29 in primary, 2.28 in lower secondary) and Mexico (1.91 in lower secondary). In upper secondary general education, the lowest ratios are found in Norway (0.72) and in the partner countries Estonia (0.52) and Israel (0.68). Relative to GDP per capita, mid-career salaries are highest in Korea (2.28) (Table D3.1).

Countries such as the Czech Republic, Hungary, Mexico and Turkey, as well as the partner countries Chile, Estonia and Israel, have both comparatively low GDP per capita and low teachers' salaries compared to OECD averages. Others, such as Korea, New Zealand, Portugal and Spain, have GDP per capita lower than the average but teachers' salaries that are comparable to those in countries with much higher GDP per capita. Germany, Luxembourg and Switzerland have a higher GDP per capita than the OECD average and high teachers' salaries (Chart D3.2 and Table D3.1), whereas Norway has higher GDP per capita than the OECD average but average mid-career salaries.

Statutory salaries per hour of net teaching time

An alternative measure of salaries that better illustrates the overall cost of classroom teaching time is the statutory salary for a full-time classroom teacher relative to the number of hours per year that a teacher is required to spend teaching students (see Indicator D4). Although this

measure does not adjust salaries for the amount of time that teachers spend in other various teaching-related activities, it nonetheless provides an approximate estimate of the cost of the actual time teachers spend in the classroom.

The average statutory salary per teaching hour after 15 years of experience is USD 46 in primary, USD 58 in lower secondary, and USD 68 in upper secondary general education. In primary education, the Czech Republic, Hungary, Mexico and Turkey, and the partner countries Chile, Estonia and Israel, have the lowest salary costs per teaching hour (USD 30 or less). By contrast, salaries are relatively high in Denmark, Germany, Korea and Luxembourg (USD 60 or more). There is even more variation in salaries per teaching hour in general upper secondary education, ranging from about USD 25 or less in Turkey, and in the partner countries Chile, Estonia and Israel, to USD 80 or more in Belgium (Fl.), Belgium (Fr.), Denmark, Korea, Luxembourg and the Netherlands (Table D3.1).

As secondary teachers are required to teach fewer hours than primary teachers, their salaries per teaching hour are usually higher than those of teachers at lower levels, even in countries where statutory salaries are similar (see Indicator D4). On average among OECD countries, upper secondary teachers' salaries per teaching hour exceed those of primary teachers by around 44%. In New Zealand and Scotland and in the partner country Chile, this difference is 5% or less, but it is 60% or more in France and Hungary, over 80% in the Netherlands and more than 100% in Denmark (Table D3.1). However, the large difference between primary and upper secondary teachers' salaries per teaching hour does not necessarily exist when comparing salaries per hour of working time. In Portugal, for example, where there is a large difference in salaries per teaching hour between primary and upper secondary teachers, the difference between teaching time at the primary and upper secondary level is among the greatest in OECD countries, even though their statutory salaries and working time at school are the same (Table D4.1).

Teaching experience and qualifications influence teachers' salary scales

Salary structures illustrate the salary incentives available to teachers at different points in their careers. There is some evidence that a sizeable proportion of teachers and school administrators do not want to move to higher positions in the hierarchy in schools (*e.g.* to school principal) (OECD, 2005b). Presumably, this is because the negative aspects of a promotion outweigh positive aspects such as increased salaries, prestige and other rewards. If this is the case, then changes can make the promotion more attractive either through changing the duties and requirements of the position or by changing the salary amount and other rewards offered.

As Table D3.1 shows, OECD data on teachers' salaries are limited to information on statutory salaries at three points of the salary scale: starting salaries, salaries after 15 years of service and salaries at the top of the scale. These salaries are those of teachers with the minimum required training. They must be interpreted with caution as further qualifications can lead to additional wage increases in some OECD countries. Some inferences can be drawn from the data on the degree that salary structures for teachers provide salary increases with different levels of promotion and tenure.

Deferred compensation is a key incentive for workers in many industries. Organisations can design complex deferred compensation schemes to attract high-quality workers and then provide

them with appropriate incentives throughout their careers. Deferred compensation rewards employees for staying in organisations or professions and for meeting established performance criteria. Pensions are an important form of deferred compensation. In most OECD countries, teachers receive some pension that accrues with their experience in the teaching profession. However, pension schemes are not considered here.

Deferred compensation exists in teachers' salary structure. In OECD countries, statutory salaries for primary, lower and upper secondary general teachers with 15 years of experience are, on average, 37, 37 and 41% higher, respectively, than starting salaries. The increases from starting salary to the top of the salary scale are, on average, 71, 71 and 72%. For lower secondary teachers, the average starting salary is USD 30 047. With minimum training, it rises to USD 40 682 after 15 years and to USD 49 778 at the top of the salary scale, which is reached, on average, after 24 years of experience. A similar increase is therefore evident between first, the starting salary and that at 15 years of experience and second, the salary at 15 years of experience and at the top of the salary scale (reached, on average, after 24 years of experience).

Salary structures differ widely. A number of countries have relatively flat structures with small increases. For example, teachers at the top of the salary scale in Denmark (except at the upper secondary level), Germany, Norway and Turkey, and in the partner country Slovenia, only earn up to 30% more than teachers at the bottom of the salary scale.

Salary increases between the points on a salary structure should be seen in terms of the number of years it takes for a teacher to advance through the salary scale, a factor which varies substantially across countries. In lower secondary education, teachers in Australia, Denmark, New Zealand and Scotland reach the highest step on the salary scale within five to nine years. Monetary incentives therefore disappear relatively quickly compared to other countries. If job satisfaction and performance are determined, at least in part, by prospects of salary increases difficulties may arise as teachers approach the peak in their age-earnings profiles.

In Austria, the Czech Republic, France, Greece, Hungary, Italy, Japan, Korea, Luxembourg and Spain, and in the partner country Israel, teachers in lower secondary education reach the top of the salary scale after 30 or more years of service (Table D3.1). It is difficult to categorise countries simply by steep or flat salary structures. A number of countries have both steep and flat portions that vary across teachers' tenure. For example, teachers in Germany and Luxembourg have the opportunity for similar salary increases in the first 15 years but then face very different growth rates: in Luxembourg salaries rise faster, while in Germany increases are relatively small. Policy makers in these countries face different issues for these more experienced teachers.

While the salary opportunities available to teachers are emphasised here, there may also be benefits to compression in pay scales. It is often argued that organisations in which employees have smaller salary differences have greater levels of trust and information flows and a higher degree of collegiality. These benefits need to be weighed against the benefits of salary incentives.

Teachers' salaries between 1996 and 2006

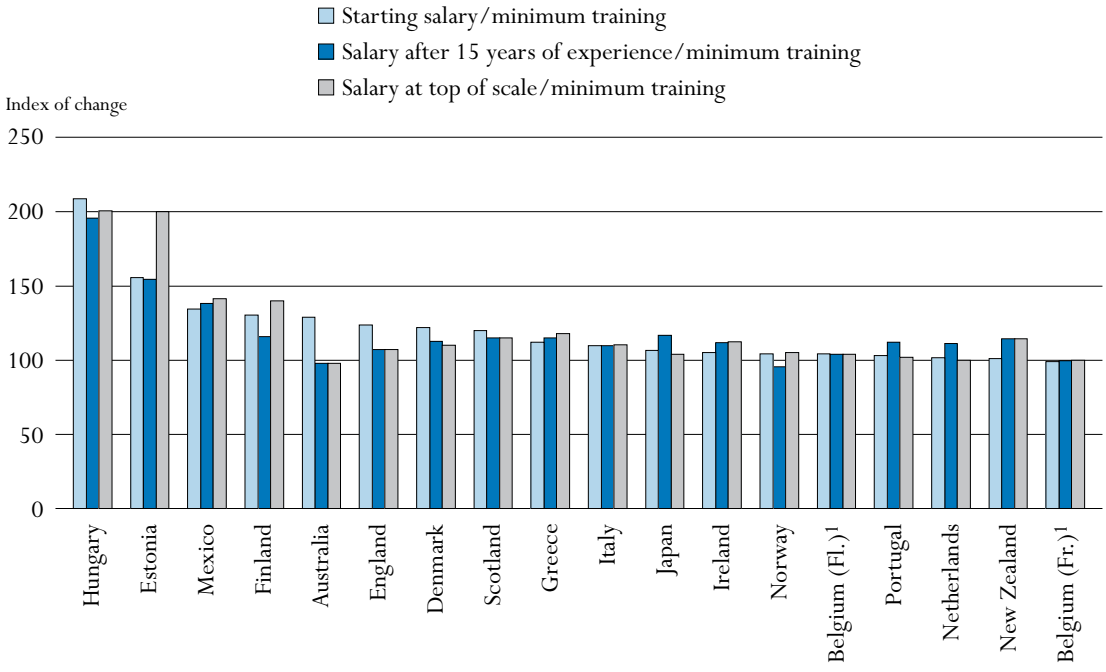
In comparing the index of change between 1996 and 2006 in teachers' salaries, it is evident that salaries have grown in real terms at both primary and secondary levels in virtually all countries. The biggest increases at all levels have taken place in Hungary, although salaries remain below

the OECD average. In some countries, salaries fell in real terms between 1996 and 2006, most notably at the primary and upper secondary levels in Spain (Table D3.2 and Chart D3.3), although they remain above the OECD average.

Salary trends have also varied at different points on the salary scale. For instance, starting salaries have risen faster than mid-career or top-of-the-scale salaries for all education levels in Australia, Denmark, England and Scotland. By contrast, salaries of teachers with at least 15 years of experience have risen relatively more quickly than both starting and top-of-the-scale salaries in Japan, the Netherlands and Portugal. In Finland and Greece and in partner country Estonia, top-of-the-scale salaries have risen faster than starting and mid-career salaries. In New Zealand, the top-of-the-scale salary has risen faster than the starting salary and in the same proportion as the salary of teachers with at least 15 years of experience. However, with a relatively short salary scale (eight years to reach the top), recruitment is a key issue in New Zealand. This may be an issue in Australia as well, as starting salaries have risen considerably. A potential problem is the fact that if teachers are attracted by higher salaries in the early stages of their careers, they may expect salary increases to continue throughout their careers. Using resources to attract more early-career teachers to the profession needs to be weighed against potential implications in terms of retention and reduced satisfaction and motivation. Moreover, comparing changes in salaries at three points of the salary structure may not account for changes in other aspects of the structure of teachers' salaries.

Chart D3.3. Changes in teachers' salaries in lower secondary education, by point in the salary scale (1996, 2006)

Index of change between 1996 and 2006 (1996=100, 2006 price levels using GDP deflators)



1. The 1996 data for Belgium are based on Belgium as a whole.

Countries are ranked in descending order of index of change between 1996 and 2006 in teachers' starting salaries.

Source: OECD. Table D3.2. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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Additional payments: incentives and allowances

In addition to basic pay scales, many school systems have schemes that offer additional payments for teachers, which may take the form of financial remuneration and/or reduction in the number of teaching hours. Greece and Iceland, for example, use a reduction in required teaching hours to reward experience or long service, and in Portugal, teachers may receive a reduction of their teaching hours for carrying out special tasks or activities (*e.g.* leading a drama club, acting as a supervisor of student teachers, etc.). Together with the starting salary, such payments may affect a person's decision to enter or stay in the teaching profession. Early-career additional payments may include family allowances and bonuses for working in certain locations, and higher initial salaries for higher-than-minimum teaching certification or qualifications, such as qualifications in multiple subjects or certification to teach students with special educational needs.

Adjustments to the base salary may be awarded to teachers yearly or on an incidental basis in public schools either by the head teacher or school principal, or by the local, regional or national government. A distinction is made between an addition to teachers' base salary, a yearly payment and an incidental or "one-off" payment. As may be expected, additional payments based on years of experience are made in virtually all OECD countries through changes to teachers' base salary. Additional payments made for specific teaching conditions or responsibilities are more commonly made through yearly or incidental payments. The key exception is for teachers who assume management responsibilities with additional payments offered more frequently through changes to base salaries as well as yearly and incidental payments.

Types of additional payments

Data on additional payments fall into three broad areas:

- Those based on responsibilities assumed by teachers and on particular conditions (*e.g.* additional management responsibilities or teaching in high-need regions, disadvantaged schools).
- Those based on the demographic characteristics of teachers (*e.g.* age and/or family status).
- Those based on teachers' qualifications, training and performance (*e.g.* higher than the minimum qualifications and/or completing professional development activities).

Data have not been collected on payment amounts but on whether they are available and on the level at which the decision to award such payments is taken (see Table D3.3a and Tables D3.3b, D3.3c and D3.3d available on line, as well as Annex 3 at *www.oecd.org/edu/eag2008*).

Additional payments are most often awarded for particular responsibilities or working conditions, such as teaching in more disadvantaged schools, particularly those located in very poor neighbourhoods or with a large proportion of students whose language is not the language of instruction. Such teachers face demands that teachers elsewhere may not encounter. These schools often have difficulty attracting teachers and are often more likely to have less experienced teachers (OECD, 2005b). These additional payments are provided yearly in about two-thirds of OECD and partner countries. Ten countries also offer additional payments for teachers who teach in certain fields in which there are shortages of teachers and are made yearly in almost all of these countries.

Over half of OECD countries offer additional payments based on teachers' demographic characteristics and in most cases these are yearly payments. Additional payments based on teachers' qualifications, training and performance are also very common in OECD countries and partner countries. The most common types of payments based on teachers' initial education and qualifications are for an initial education qualification higher than the minimum requirement and/or a level of teacher certification and training higher than the minimum requirements. These are available in nearly half of OECD countries and partner countries with one-third offering both types; they are used in nearly all countries as criteria for base salary. Fifteen OECD countries and partner countries offer additional payments for the successful completion of professional development activities. In two-thirds of these, they are used as criteria for the base salary, but in Korea and Turkey they are only offered on an incidental basis.

Fifteen OECD countries and three partner countries offer an additional payment for outstanding performance in teaching. This is the only additional payment that may be classified as a performance incentive. In half of these countries they are incidental payments, and in the other half, they are mostly yearly additions to teachers' salaries. In 12 of the 18 countries that offer this incentive (Austria, the Czech Republic, Denmark, England, Finland, Hungary, Mexico, the Netherlands, New Zealand, Sweden and Turkey and the partner country Slovenia), the decision to award the additional payments can be made at the school level.

The method for identifying outstanding performance and the form of incentive varies. In Mexico, outstanding performance is calculated on the basis of students' achievements and criteria relating to teachers' experience, performance and qualification. In Portugal, it is based on the assessment of the head teacher and in Turkey on assessments by the provincial directorate of education and the Ministry of Education.

As may be expected, additional payments made due to the years of experience are, in virtually all OECD countries, made through changes to teachers' base salary. Additional payments made for specific teaching conditions or responsibilities are more commonly made through yearly or incidental payments. The key exception is when a teacher assumes management responsibilities with additional payments offered more frequently through changes to base salaries as well as yearly and incidental payments.

A mixture of all three types of additional payment are offered in relation to teachers' qualifications, training and performance. Given that an initial teacher qualification higher than the minimum requirement is often identified at the beginning of a teacher's career, it is not surprising that it is more often provided through changes to teachers' base salaries. Additional payments due to teacher demographics are mainly made through additional yearly payments in 11 of the 15 countries offering a form of additional payment in this category.

Definitions and methodologies

Data on statutory teachers' salaries and bonuses are derived from the 2007 OECD-INES Survey on Teachers and the Curriculum. Data refer to the school year 2005/06, and are reported in accordance with formal policies for public institutions.

Statutory salaries (Table D3.1) refer to scheduled salaries according to official pay scales. The salaries reported are gross (total sum paid by the employer) less the employer's contribution to social security and pension (according to existing salary scales). Salaries are "before tax" (*i.e.* before deductions for income taxes). In Table D3.1, salary per hour of net contact divides a teacher's annual statutory salary (Table D3.1) by the annual net teaching time in hours (Table D4.1).

Gross teachers' salaries were converted using GDP and purchasing power parities (PPPs) and exchange rate data from the OECD National Accounts database. The reference date for GDP per capita is the calendar year 2006, while the period of reference for teachers' salaries is 30 June 2005 to 30 June 2006. The reference date for PPPs is 2005/06. Data are adjusted for inflation with reference to January 2006. For countries with different financial years (*i.e.* Australia and New Zealand) and countries with slightly different salary periods (*e.g.* Hungary, Iceland, Norway and Spain) from the general OECD norm, a correction to the deflator is made only if this results in an adjustment of over 1%. Small adjustments have been discounted because even for salaries for 2004/05, the exact period to which they apply, is only slightly different. Reference statistics and reference years for teachers' salaries are provided in Annex 2.

For the calculation of changes in teachers' salaries (Table D3.2), the GDP deflator is used to convert 1996 salaries to 2006 prices.

Starting salaries refer to the average scheduled gross salary per year for a full-time teacher with the minimum training necessary to be fully qualified at the beginning of the teaching career.

Salaries after 15 years of experience refer to the scheduled annual salary of a full-time classroom teacher with the minimum training necessary to be fully qualified plus 15 years of experience. The maximum salaries reported refer to the scheduled maximum annual salary (top of the salary scale) of a full-time classroom teacher with the minimum training to be fully qualified for the job.

An adjustment to base salary is defined as any difference in salary between what a particular teacher actually receives for work performed at a school and the amount that he or she would expect to receive on the basis of experience (*i.e.* number of years in the teaching profession). Adjustments may be temporary or permanent, and they can effectively move a teacher off the scale and to a different salary scale or to a higher step on the same salary scale.

Further references

The following additional material relevant to this indicator is available on line at:

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- ***Table D3.3b. Adjustments to base salary for teachers in public schools made by head teacher/school principal (2006)***
- ***Table D3.3c. Adjustments to base salary for teachers in public schools made by local or regional authority (2006)***
- ***Table D3.3d. Adjustments to base salary for teachers in public schools made by national authority (2006)***

See also: OECD (2005b), *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*, OECD, Paris.

Specific notes on definitions and methodologies regarding this indicator for each country are given in Annex 3 at *www.oecd.org/edu/eag2008*.

In addition, a more comprehensive analysis of decision making is available in Indicator D6.

As a complement to Table D3.1, which presents teachers' salaries in equivalent USD converted using PPPs, a table with teachers' salaries in equivalent EUR converted using PPPs is included in Annex 2.

Table D3.1.

Teachers' salaries (2006)

Annual statutory teachers' salaries in public institutions at starting salary, after 15 years of experience and at the top of the scale, by level of education, in equivalent USD converted using PPPs

		Primary education				Lower secondary education				Upper secondary education			
		Starting salary / minimum training	Salary after 15 years of experience / minimum training	Salary at top of scale / minimum training	Ratio of salary after 15 years of experience to GDP per capita	Starting salary / minimum training	Salary after 15 years of experience / minimum training	Salary at top of scale / minimum training	Ratio of salary after 15 years of experience to GDP per capita	Starting salary / minimum training	Salary after 15 years of experience / minimum training	Salary at top of scale / minimum training	Ratio of salary after 15 years of experience to GDP per capita
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD countries	Australia	31 171	42 688	42 688	1.20	31 346	43 289	43 289	1.22	31 346	43 289	43 289	1.22
	Austria	27 649	36 580	54 914	1.02	28 860	39 424	57 141	1.10	29 186	40 404	59 958	1.13
	Belgium (Fl.)	29 029	40 557	49 392	1.21	29 029	40 557	49 392	1.21	35 960	51 799	62 214	1.54
	Belgium (Fr.)	27 551	38 813	47 506	1.16	27 551	38 813	47 506	1.16	34 290	49 874	60 122	1.49
	Czech Republic	18 591	24 340	28 974	1.11	18 591	24 340	28 974	1.11	18 824	24 685	29 428	1.12
	Denmark	35 368	39 898	39 898	1.13	35 368	39 898	39 898	1.13	35 287	49 634	49 634	1.41
	England	29 460	43 058	43 058	1.31	29 460	43 058	43 058	1.31	29 460	43 058	43 058	1.31
	Finland	27 708	35 798	45 164	1.09	30 793	38 269	48 192	1.17	30 962	42 440	53 867	1.30
	France	23 317	31 366	46 280	1.01	25 798	33 846	48 882	1.09	26 045	34 095	49 155	1.10
	Germany	40 277	50 119	52 259	1.57	41 787	51 435	53 696	1.61	45 193	55 404	57 890	1.73
	Greece	26 262	32 030	38 525	1.18	26 262	32 030	38 525	1.18	26 262	32 030	38 525	1.18
	Hungary	11 788	14 976	19 839	0.82	11 788	14 976	19 839	0.82	13 114	17 921	24 240	0.99
	Iceland	24 951	28 097	32 705	0.79	24 951	28 097	32 705	0.79	27 863	34 127	36 264	0.95
	Ireland	29 370	48 653	55 132	1.19	29 370	48 653	55 132	1.19	29 370	48 653	55 132	1.19
	Italy	24 211	29 287	35 686	1.01	26 084	31 890	39 162	1.10	26 084	32 781	40 934	1.14
	Japan	26 256	49 097	62 645	1.54	26 256	49 097	62 645	1.54	26 256	49 097	64 499	1.54
	Korea	30 528	52 666	84 263	2.29	30 405	52 543	84 139	2.28	30 405	52 543	84 139	2.28
	Luxembourg	50 301	69 269	102 519	0.89	72 466	90 582	125 895	1.16	72 466	90 582	125 895	1.16
	Mexico	13 834	18 200	30 193	1.50	17 736	23 161	38 325	1.91	m	m	m	m
	Netherlands	32 494	42 199	47 125	1.15	33 685	46 417	51 705	1.27	34 017	62 073	68 446	1.70
	New Zealand	18 920	36 602	36 602	1.41	18 920	36 602	36 602	1.41	18 920	36 602	36 602	1.41
	Norway	31 256	34 917	38 887	0.67	31 256	34 917	38 887	0.67	33 453	37 626	40 785	0.72
	Poland	m	m	m	m	m	m	m	m	m	m	m	m
	Portugal	20 072	32 866	51 552	1.58	20 072	32 866	51 552	1.58	20 072	32 866	51 552	1.58
	Scotland	29 498	47 050	47 050	1.43	29 498	47 050	47 050	1.43	29 498	47 050	47 050	1.43
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m
	Spain	33 024	38 483	47 695	1.31	37 153	43 171	52 691	1.47	37 957	44 146	53 782	1.50
	Sweden	26 217	30 782	35 728	0.88	26 739	31 565	36 130	0.91	28 369	34 086	38 760	0.98
	Switzerland	40 338	52 191	64 057	1.38	46 550	59 781	72 993	1.58	54 042	70 346	82 954	1.86
	Turkey	12 670	14 138	15 780	1.61	a	a	a	a	12 670	14 138	15 780	1.61
	United States	34 895	42 404	m	0.97	33 546	42 775	m	0.98	33 695	42 727	m	0.98
	OECD average	*27 828*	*37 832*	*46 290*	*1.22*	*30 047*	*40 682*	*49 778*	*1.26*	*31 110*	*43 360*	*52 369*	*1.34*
	EU19 average	*28 536*	*38 217*	*46 752*	*1.16*	*30 545*	*40 465*	*49 180*	*1.21*	*31 706*	*43 873*	*53 139*	*1.31*
Partner countries	Brazil	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	10 922	12 976	17 500	1.11	10 922	12 976	17 500	1.11	10 922	13 579	18 321	1.16
	Estonia	9 473	10 047	13 922	0.52	9 473	10 047	13 922	0.52	9 473	10 047	13 922	0.52
	Israel	13 257	15 311	21 389	0.68	13 257	15 311	21 389	0.68	13 257	15 311	21 389	0.68
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m
	Slovenia	26 309	30 924	32 819	1.26	26 309	30 924	32 819	1.26	26 309	30 924	32 819	1.26

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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Table D3.1. *(continued)*

Teachers' salaries (2006)

Annual statutory teachers' salaries in public institutions at starting salary, after 15 years of experience and at the top of the scale, by level of education, in equivalent USD converted using PPPs

		Ratio of salary at top of scale to starting salary				Salary per hour of net contact (teaching) time after 15 years of experience			
		Primary education	Lower secondary education	Upper secondary education	Years from starting to top salary (lower secondary education)	Primary education	Lower secondary education	Upper secondary education	Ratio of salary per teaching hour of upper secondary to primary teachers (after 15 years of experience)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD countries	**Australia**	1.37	1.38	1.38	9	48	53	53	1.10
	Austria	1.99	1.98	2.05	34	47	65	69	1.45
	Belgium (Fl.)	1.70	1.70	1.73	27	51	59	81	1.59
	Belgium (Fr.)	1.72	1.72	1.75	27	54	59	83	1.54
	Czech Republic	1.56	1.56	1.56	32	29	38	40	1.42
	Denmark	1.13	1.13	1.41	8	62	62	136	2.21
	England	1.46	1.46	1.46	10	m	m	m	m
	Finland	1.63	1.57	1.74	16	53	65	78	1.46
	France	1.98	1.89	1.89	34	34	53	55	1.61
	Germany	1.30	1.28	1.28	28	62	68	78	1.25
	Greece	1.47	1.47	1.47	33	43	64	67	1.57
	Hungary	1.68	1.68	1.85	40	19	27	32	1.68
	Iceland	1.31	1.31	1.30	18	42	42	61	1.46
	Ireland	1.88	1.88	1.88	22	53	66	66	1.25
	Italy	1.47	1.50	1.57	35	40	53	55	1.37
	Japan	2.39	2.39	2.46	31	m	m	m	m
	Korea	2.76	2.77	2.77	37	66	96	95	1.45
	Luxembourg	2.04	1.74	1.74	30	89	141	141	1.58
	Mexico	2.18	2.16	m	14	23	22	m	m
	Netherlands	1.45	1.53	2.01	17	45	62	83	1.82
	New Zealand	1.93	1.93	1.93	8	37	38	39	1.04
	Norway	1.24	1.24	1.22	16	47	53	72	1.53
	Poland	m	m	m	m	m	m	m	m
	Portugal	2.57	2.57	2.57	26	38	43	48	1.25
	Scotland	1.60	1.60	1.60	6	53	53	53	1.00
	Slovak Republic	m	m	m	m	m	m	m	m
	Spain	1.44	1.42	1.42	38	44	61	64	1.46
	Sweden	m	m	m	a	m	m	m	m
	Switzerland	1.59	1.57	1.54	26	m	m	m	m
	Turkey	1.25	a	1.25	a	22	a	25	1.13
	United States	m	m	m	m	w	w	w	w
	OECD average	***1.71***	***1.71***	***1.72***	***24***	***46***	***58***	***68***	***1.44***
	EU19 average	***1.67***	***1.65***	***1.72***	***26***	***48***	***61***	***72***	***1.50***
Partner countries	**Brazil**	m	m	m	m	m	m	m	m
	Chile	1.60	1.60	1.68	m	15	15	16	1.05
	Estonia	1.47	1.47	1.47	m	16	16	17	1.09
	Israel	1.61	1.61	1.61	36	15	19	23	1.54
	Russian Federation	m	m	m	m	m	m	m	m
	Slovenia	1.25	1.25	1.25	13	44	44	48	1.09

Note: Ratio of salary at the top of the scale to starting salary has not been calculated for Sweden because the underlying salaries are estimates derived from actual rather than statutory salaries.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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Table D3.2.

Change in teachers' salaries (1996 and 2006)

Index of change[1] between 1996 and 2006 in teachers' salaries at starting salary, after 15 years of experience and at the top of the salary scale, by level of education, converted to 2006 price levels using GDP deflators (1996=100)

		Primary education			Lower secondary education			Upper secondary education, general programmes		
		Starting salary / minimum training	Salary after 15 years of experience / minimum training	Salary at top of scale / minimum training	Starting salary / minimum training	Salary after 15 years of experience / minimum training	Salary at top of scale / minimum training	Starting salary / minimum training	Salary after 15 years of experience / minimum training	Salary at top of scale / minimum training
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD countries	Australia	128	97	97	129	98	98	129	98	98
	Austria	m	m	m	m	m	m	m	m	m
	Belgium (Fl.)[2]	107	111	114	104	104	104	104	104	104
	Belgium (Fr.)[2]	101	106	109	99	100	100	99	100	100
	Czech Republic	w	w	w	w	w	w	w	w	w
	Denmark	122	113	110	122	113	110	112	110	105
	England	124	107	107	124	107	107	124	107	107
	Finland	132	129	158	130	116	140	127	123	148
	France	w	w	w	w	w	w	w	w	w
	Germany	w	w	w	w	w	w	w	w	w
	Greece	116	118	121	112	115	118	112	115	118
	Hungary	209	196	201	209	196	201	182	189	204
	Iceland	m	m	m	m	m	m	m	m	m
	Ireland	111	118	113	105	112	112	105	112	112
	Italy	111	111	111	110	110	110	110	110	110
	Japan	107	117	104	107	117	104	107	117	104
	Korea	w	w	w	w	w	w	w	w	w
	Luxembourg	m	m	m	m	m	m	m	m	m
	Mexico	134	133	134	135	138	142	m	m	m
	Netherlands	103	110	100	102	111	100	102	107	99
	New Zealand	101	115	115	101	115	115	101	115	115
	Norway	104	96	105	104	96	105	103	100	101
	Poland	m	m	m	m	m	m	m	m	m
	Portugal	103	112	102	103	112	102	103	112	102
	Scotland	120	115	115	120	115	115	120	115	115
	Slovak Republic	m	m	m	m	m	m	m	m	m
	Spain	95	95	92	m	m	m	94	94	91
	Sweden	w	w	w	w	w	w	w	w	w
	Switzerland	99	96	102	m	m	m	m	m	m
	Turkey	w	w	w	a	a	a	w	w	w
	United States	m	m	m	m	m	m	m	m	m
Partner countries	Brazil	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m
	Estonia	156	155	200	156	155	200	156	155	200
	Israel	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m	m
	Slovenia	m	m	m	m	m	m	m	m	m

1. The index is calculated as teacher salary 2006 in national currency * 100/Teacher salary 1996 in national currency * GDP deflator 2006 (1996=100). See Annex 2 for statistics on GDP deflators and salaries in national currencies in 1996 and 2006.
2. The data for 1996 are based on Belgium as a whole.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

StatLink http://dx.doi.org/10.1787/402280862627

Table D3.3a.

Decisions on payments for teachers in public institutions (2006)

Criteria for base salary and additional payments awarded to teachers in public institutions

		Experience			Criteria based on teaching conditions/responsibilities																				
		Years of experience as a teacher			Management responsibilities in addition to teaching duties			Teaching more classes or hours than required by full-time contract			Special tasks (career guidance or counselling)			Teaching in a disadvantaged, remote or high cost area (location allowance)			Special activities (*e.g.* sports and drama clubs, homework clubs, summer school etc.)			Teaching students with special educational needs (in regular schools)			Teaching courses in a particular field		
OECD countries	Australia	–			–									▲						▲					
	Austria	–	▲			▲			▲			▲						△							
	Belgium (Fl.)	–								△															
	Belgium (Fr.)	–										▲													
	Czech Republic	–	▲	△	–	▲	△		▲	△		▲	△					▲	△	–	▲	△			
	Denmark	–	▲	△	–	▲	△		▲	△		▲	△	–	▲	△		▲	△		▲	△		▲	△
	England	–	▲	△	–	▲	△							–	▲						▲		–	▲	△
	Finland		▲		–	▲			▲	△		▲	△	–	▲			▲	△		▲		–	▲	△
	France	–				▲	△		▲	△		▲	△	–	▲				△	–					
	Germany	–			–					△															
	Greece	–								△			△		▲										
	Hungary	–				▲				△		▲			▲			▲			▲				△
	Iceland	–	▲	△	–	▲	△		▲	△	–	▲	△					▲	△	–	▲	△			
	Ireland	–	▲	△	–	▲								–	▲										
	Italy	–					△			△			△		▲				△						
	Japan	–				▲			▲						▲			▲			▲				
	Korea	–				▲				△						△					▲			▲	
	Luxembourg	–								△			△												
	Mexico	–	▲	△	–	▲		–	▲		–	▲		–	▲								–	▲	
	Netherlands	–	▲	△	–	▲	△	–	▲	△	–	▲	△	–	▲	△	–	▲	△	–	▲	△	–	▲	△
	New Zealand	–				▲						▲			▲			▲			▲			▲	
	Norway	–			–	▲				△		▲			▲								–		
	Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Portugal	–				▲				△		▲								–					
	Scotland	–													▲										
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Spain	–				▲						▲			▲										
	Sweden	–			–					△				–									–		
	Switzerland	–			–					△			△						△	–					
	Turkey	–								△			△		▲				△						
	United States	–				▲									▲			▲						▲	
Partner countries	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	–				▲									▲										
	Estonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Israel	–			–			–			–			–						–					
	Slovenia	–			–					△			△		▲				△		▲			▲	
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

– : Base salary.
▲ : Additional yearly payment.
△ : Additional incidental payment.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/402280862627

D3

Table D3.3a. *(continued)*

Decisions on payments for teachers in public institutions (2006)

Criteria for base salary and additional payments awarded to teachers in public institutions

		Criteria related to teachers' qualifications, training and performance																		Criteria based on demography						Other		
		Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession			Holding a higher than minimum level of teacher certification or training obtained during professional life			Outstanding performance in teaching			Successful completion of professional development activities			Reaching high scores in the qualification examination			Holding an educational qualification in multiple subjects.			Family status (married, number of children)			Age (independent of years of teaching experience)					
OECD countries	Australia	–			–															▲								
	Austria									△										▲						▲		
	Belgium (Fl.)	–				▲																				▲		
	Belgium (Fr.)																									▲		
	Czech Republic							–	▲	△													–		△			
	Denmark	–	▲	△	–	▲	△		▲	△		▲	△				–	▲	△									
	England	–	▲	△				–	▲	△																		
	Finland	–	▲						▲			▲					–											
	France										–									▲								
	Germany																			–			–					
	Greece	–				▲														▲								
	Hungary	–								△	–								△				–					
	Iceland	–	▲	△	–	▲	△					▲	△			△			△				–	▲		▲	△	
	Ireland	–	▲		–	▲																						
	Italy																			–								
	Japan																			▲						▲		
	Korea									△			△								△			▲				
	Luxembourg				–						–									▲			–					
	Mexico	–	▲		–	▲		–	▲		–	▲		–	▲													
	Netherlands	–	▲	△	–	▲	△	–	▲	△	–	▲	△	–	▲	△	–	▲	△									
	New Zealand	–			–				▲																	▲		
	Norway	–			–					△																		
	Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Portugal	–			–			–			–			–						▲								
	Scotland				–																							
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Spain										–																	
	Sweden	–			–			–			–			–														
	Switzerland																			▲						▲		
	Turkey	–						–					△							▲						▲		
	United States		▲			▲				△																		
Partner countries	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile									△																		
	Estonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Israel	–								△	–																	
	Slovenia		▲		–					△	–															▲		
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

– : Base salary.
▲ : Additional yearly payment.
△ : Additional incidental payment.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/402280862627

INDICATOR D4

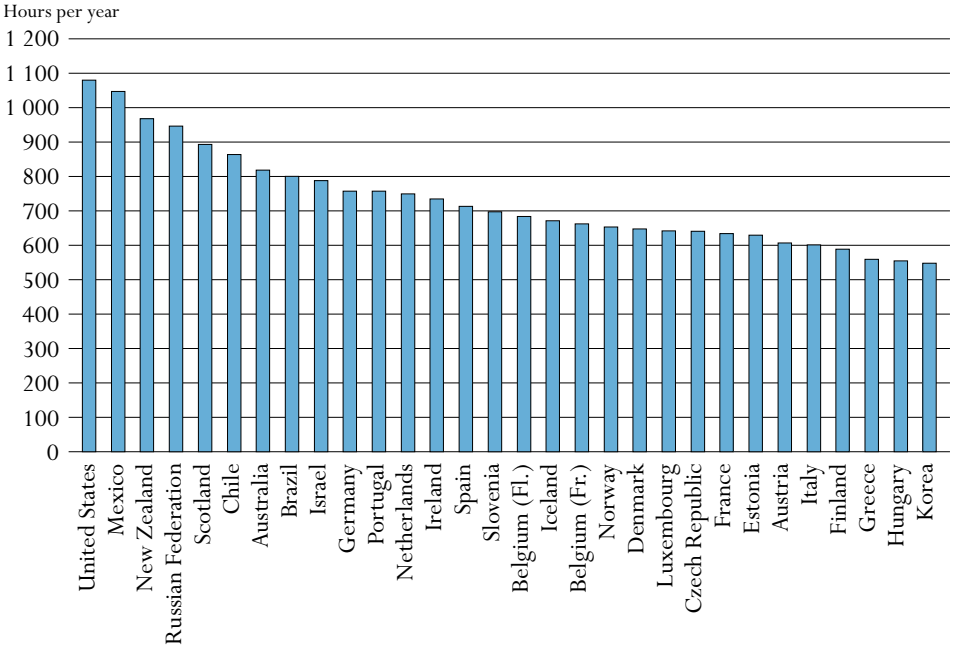
HOW MUCH TIME DO TEACHERS SPEND TEACHING?

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

Key results

Chart D4.1. Number of teaching hours per year in lower secondary education (2006)

The number of teaching hours in public lower secondary schools averages 717 hours per year but ranges from 548 hours in Korea to over 1 000 in Mexico (1 047) and the United States (1 080).



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/eag2008*).
StatLink http://dx.doi.org/10.1787/402318043535

Other highlights of this indicator

- The number of teaching hours in public primary schools averages 812 per year (9 more than in 2005), but ranges from less than 650 in Denmark, Turkey and the partner country Estonia to 1 080 in the United States.
- The average number of teaching hours in upper secondary general education is 667, but ranges from 364 in Denmark to 1 080 in the United States.
- The composition of teachers' annual teaching time, in terms of days, weeks and hours per day, varies considerably. For instance, while teachers in Denmark teach for 42 weeks per year (in primary and secondary education) and teachers in Iceland for 35-36 weeks per year, teachers in Iceland have more total annual teaching time (in hours) than teachers in Denmark.
- Regulations concerning teachers' working time also vary. In most countries, teachers are formally required to work a specific number of hours; in some, teaching time is only specified as the number of lessons per week and assumptions may be made on the amount of non-teaching time required per lesson (at school or elsewhere). For example, in Belgium (Fr.), additional non-teaching hours at school are set at the school level; the government only defines the minimum and maximum number of teaching periods per week at each level of education.

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 countries need to allocate to education (see Indicator B7). 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 activities such as lesson preparation, correction, in-service training and staff meetings. A large proportion of working time spent teaching may indicate that less time is devoted to work such as student assessment and lesson preparation. However, such duties may be performed at the same level as for teachers with less teaching time but outside of regulatory working hours.

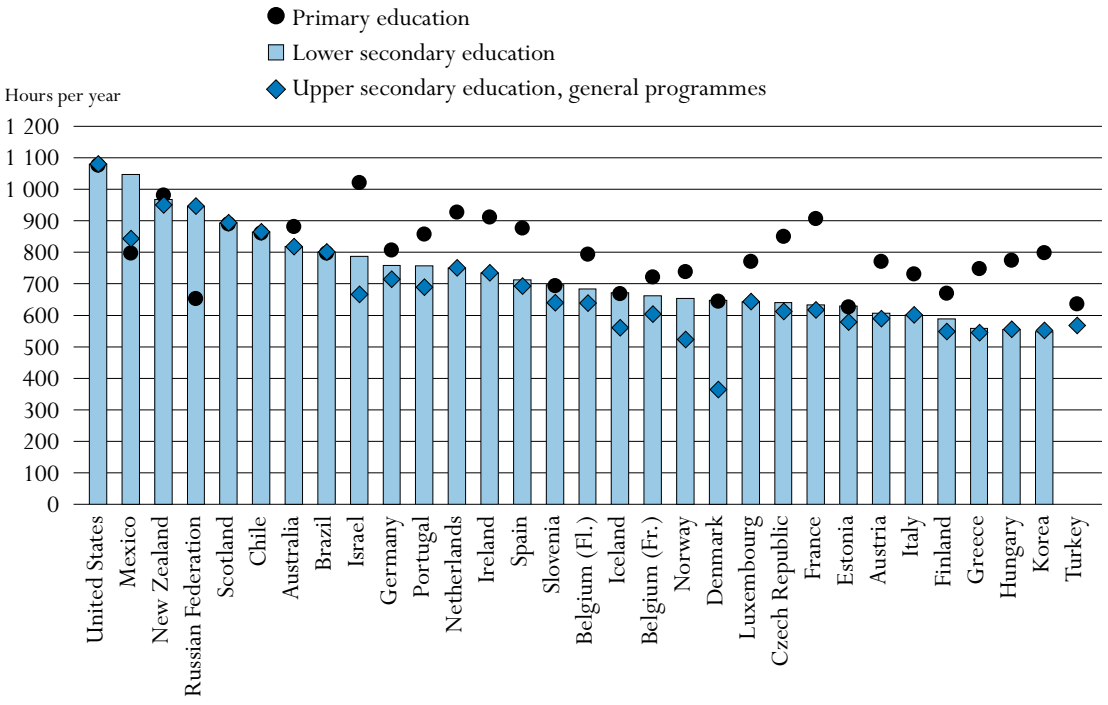
Evidence and explanations

Teaching time in primary education

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

Chart D4.2. Number of teaching hours per year, by level of education (2006)

Net contact time in hours per year in public institutions



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/eag2008*).
StatLink http://dx.doi.org/10.1787/402318043535

A primary school teacher teaches an average of 812 hours per year (9 more than the previous year), but this ranges from less than 650 hours in Denmark, Turkey and the partner country Estonia to 900 or more in France, Ireland, the Netherlands and New Zealand and over 1 000 in the United States and in partner country Israel (Chart D4.2 and Table D4.1).

Teaching time can be distributed quite differently throughout the year. Korea is the only country in which primary teachers teach for more than five days per week on average, yet their total annual teaching time is below the average because they teach, on average, fewer hours per day. Denmark and Iceland provide an interesting contrast in this respect. They have a similar annual net teaching time in hours (Chart D4.1). However, teachers in Denmark must complete 200 days of instruction in 42 weeks, and those in Iceland 180 days in 36 weeks. The number of hours taught per day of instruction explains the difference.

Primary teachers in Iceland complete 20 fewer days of instruction than teachers in Denmark, but each of these days would include, on average, 3.7 hours of teaching compared to 3.2 in Denmark. Iceland's teachers must provide just over half an hour more teaching time per day of instruction than Denmark's teachers, but this relatively small difference leads to a substantial difference in the number of days of instruction they must complete each year.

Teaching time in secondary education

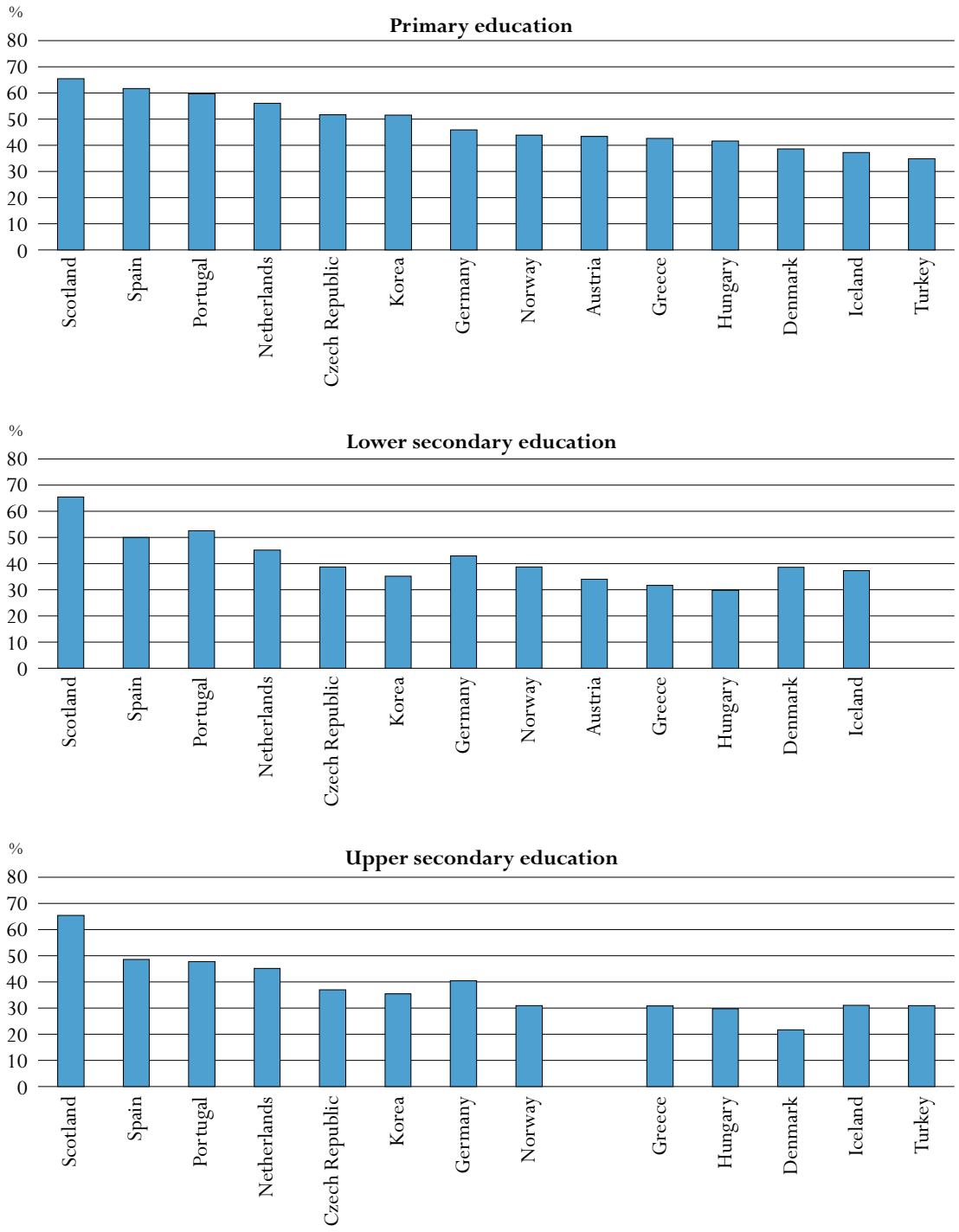
Lower secondary education teachers teach an average of 717 hours per year. The teaching load ranges from less than 600 hours in Finland (589), Greece (559), Hungary (555) and Korea (548) to more than 1 000 hours in Mexico (1 047) and the United States (1 080) (Chart D4.1 and Table D4.1).

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 667 hours per year. Teaching loads range from fewer than 364 hours in Denmark to more than 800 in Australia (817), Mexico (843), Scotland (893) and the partner country Chile (864), over 900 in New Zealand (950) and the partner country the Russian Federation (946) and over 1 000 in the United States (1 080) (Chart D4.2 and Table D4.1).

As for primary teachers, the number of hours of teaching time and the number of days of instruction vary. As a consequence, the average hours per day that teachers teach vary widely, ranging at the lower secondary level from three or fewer per day in Hungary and Korea to five or more in Mexico and New Zealand and the partner country the Russian Federation, and six in the United States. Similarly, at the upper secondary general level, teachers in Denmark, Finland, Greece, Hungary, Korea and Norway teach for three hours (or less) per day on average, compared to five hours in New Zealand and the partner country the Russian Federation and six hours in the United States. Korea provides an interesting example of the differences in the organisation of teachers' work. Korea's teachers must complete the largest number of days of instruction (204) but have the lowest required number of hours of teaching time for lower secondary teachers and the fifth lowest for upper secondary teachers (Chart D4.3). The inclusion of breaks between classes in teaching time in some countries, but not others may explain some of these differences.

Chart D4.3. Percentage of teachers working time spent teaching, by level of education (2006)

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/eag2008*).

StatLink http://dx.doi.org/10.1787/402318043535

Teaching time contrasts between levels

In France and Korea, and in the partner country Israel a primary teacher is required to teach over 220 hours more than a lower secondary teacher and 250 hours more than an upper secondary teacher (general programmes). In Hungary the large difference in teaching time between primary and lower secondary (222 hours) results mainly from taking into account at primary level short breaks for which teachers are responsible for the class. By contrast, there is less than 50 hours or no difference between the number of required instruction hours for primary and lower secondary teachers and sometimes also for primary and upper secondary teachers in Denmark, Iceland, New Zealand, Scotland and the United States, and the partner countries Brazil, Chile, Estonia and Slovenia. Mexico is the only OECD country and the Russian Federation the only partner country, in which secondary teachers complete a substantially larger number of hours of instruction than primary teachers. In Mexico, required teaching hours for lower secondary teachers are just over 30% more than for primary teachers. Upper secondary teachers in Mexico have a smaller number of teaching hours than lower secondary teachers but their required teaching hours are still 5% higher than for primary teachers (Chart D4.1). This is largely because of greater daily contact time.

In interpreting differences among countries in teaching hours, it should be noted that net contact time, as used for the purpose of this indicator, does not necessarily correspond to the teaching load. Contact time is a substantial component, but preparation for classes and the necessary follow-up (including correcting students' work) also need to be included in comparisons of teaching loads. Other relevant elements (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. While some countries formally regulate contact time only, others also establish working hours. 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 D4.3). Typically, the number of hours for teaching is specified (except in England and Sweden and in Switzerland where it is specified at the district level only), but some countries also regulate at the national level the time a teacher has to be present in the school.

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

In Austria (primary and lower secondary education), the Czech Republic, Germany, Hungary, Japan, Korea, the Netherlands and Scotland, teachers' total annual working time, at school or elsewhere, is specified (but the split between time spent at school and time spent elsewhere is not). 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 or not the teachers have to spend the non-teaching hours at school.

Non-teaching time

In Belgium (Fr.), Finland, France, Italy and New Zealand and in partner country Slovenia, there are no formal requirements for how much time should be spent on non-teaching duties. However, this does not mean that teachers are given total freedom to carry out other tasks. In Austria, provisions concerning teaching time are based on the assumption that the teacher's duties (including preparing lessons and tests, marking and correcting papers, examinations, and administrative tasks) amount to total working time of 40 hours a week. In Belgium (Fr.), the additional non-teaching hours at 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 a week (of 50 minutes each) at each level of education (Table D4.1).

Definitions and methodologies

Data are from the 2007 OECD-INES Survey on Teachers and the Curriculum and refer to the school year 2005/06.

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 as set by policy. It is normally calculated as the number of teaching days per year 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 a country's formal policy, 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).
- The time directly associated with teaching and 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 required 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 per week a teacher teaches, less the number of days on which 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/10.1787/402318043535

- *Table D4.2. Number of teaching hours per year (1996, 2006)*

Specific notes on definitions and methodologies regarding this indicator for each country are given in Annex 3 (*www.oecd.org/edu/eag2008*).

D4

Table D4.1.

Organisation of teachers' working time (2006)

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

		Number of weeks of instruction			Number of days of instruction			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)
OECD countries	Australia	40	40	40	198	198	198	884	818	817	1211	1230	1230	a	a	a
	Austria	38	38	38	180	180	180	774	607	589	a	a	a	1784	1784	a
	Belgium (Fl.)	37	37	37	177	178	178	797	684	638	920	a	a	a	a	a
	Belgium (Fr.)	37	37	37	181	181	181	724	662	603	a	a	a	a	a	a
	Czech Republic	40	40	40	194	194	194	854	640	611	a	a	a	1652	1652	1652
	Denmark	42	42	42	200	200	200	648	648	364	1306	1306	m	1680	1680	1680
	England	38	38	38	190	190	190	a	a	a	1265	1265	1265	1265	1265	1265
	Finland	38	38	38	187	187	187	673	589	547	a	a	a	a	a	a
	France	35	35	35	m	m	m	910	634	616	a	a	a	a	a	a
	Germany	40	40	40	193	193	193	810	758	714	a	a	a	1765	1765	1765
	Greece	40	38	38	195	185	185	751	559	544	1500	1425	1425	1762	1762	1762
	Hungary	37	37	37	185	185	185	777	555	555	a	a	a	1864	1864	1864
	Iceland	36	36	35	180	180	175	671	671	560	1650	1650	1720	1800	1800	1800
	Ireland	37	33	33	183	167	167	915	735	735	1036	735	735	a	a	a
	Italy	38	38	38	167	167	167	735	601	601	a	a	a	a	a	a
	Japan	35	35	35	m	m	m	m	m	m	a	a	a	1952	1952	1952
	Korea	37	37	37	204	204	204	802	548	552	a	a	a	1554	1554	1554
	Luxembourg	36	36	36	176	176	176	774	642	642	1022	890	890	a	a	a
	Mexico	42	42	36	200	200	172	800	1047	843	800	1167	971	a	a	a
	Netherlands	40	37	37	195	180	180	930	750	750	a	a	a	1659	1659	1659
	New Zealand	39	39	38	197	194	190	985	968	950	985	968	950	a	a	a
	Norway	38	38	38	190	190	190	741	654	523	1300	1225	1150	1688	1688	1688
	Poland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Portugal	36	36	36	172	172	172	860	757	688	1260	1260	1260	1440	1440	1440
	Scotland	38	38	38	190	190	190	893	893	893	a	a	a	1365	1365	1365
	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	1140	1140	1140	1425	1425	1425
	Sweden	a	a	a	a	a	a	a	a	a	1360	1360	1360	1767	1767	1767
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Turkey	38	a	38	180	a	180	639	a	567	870	a	756	1832	a	1832
	United States	36	36	36	180	180	180	1080	1080	1080	1332	1368	1368	a	a	a
	OECD average	*38*	*38*	*37*	*187*	*185*	*183*	*812*	*717*	*667*	*1185*	*1214*	*1159*	*1662*	*1651*	*1654*
	EU19 average	*38*	*37*	*37*	*185*	*182*	*182*	*806*	*672*	*634*	*1201*	*1173*	*1154*	*1619*	*1619*	*1604*
Partner countries	Brazil	40	40	40	200	200	200	800	800	800	800	800	800	800	800	800
	Chile	40	40	40	192	192	192	864	864	864	1152	1152	1152	a	a	a
	Estonia	39	39	39	175	175	175	630	630	578	1540	1540	1540	a	a	a
	Israel	43	42	42	183	175	175	1025	788	665	1221	945	945	a	a	a
	Russian Federation	34	35	35	164	169	169	656	946	946	m	m	m	m	m	m
	Slovenia	40	40	40	192	192	192	697	697	639	a	a	a	a	a	a

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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INDICATOR D5

HOW ARE EVALUATIONS AND ASSESSMENTS USED IN EDUCATION SYSTEMS?

This indicator focuses on evaluation and accountability arrangements for lower secondary public schools. It examines the existence and use of student and school performance and evaluation information. It complements the quantitative information relating to teachers' salaries and working and teaching time (Indicators D3 and D4), instruction time of students (Indicator D1), and the relationship between numbers of students and of teachers (Indicator D2) by providing qualitative information on the type and use of particular school accountability and evaluation arrangements. It also complements the information relating to levels of decision making (Indicator D6). New information is provided about the criteria used for school evaluations and how various performance measures are used in different education systems.

Key results

- A total of 22 OECD and partner countries undertake student examinations and/or assessments and 17 require schools to be evaluated (either self-evaluations and/or inspections by an external body) at regular intervals. For student performance measures, student assessments (evaluations without civil effect for the student) are practised in 17 OECD and partner countries, whereas national examinations (with a civil effect for the student) are practised in 10 OECD and partner countries.

- School self-evaluations are required in 14 countries and are generally required on an annual basis, whereas school inspections are also required in 14 countries but tend to be required once every three years or so. Although school self-evaluations are held more often, evaluations by school inspectorates have, in general, appear to have more influence on schools and teachers in terms of the implications of the evaluation and the accountability structure.

- Both school evaluation and student performance measures are mainly used to provide performance feedback to schools. In general, they have relatively little influence on school financing and other financial implications such as changes to the school budget, provision of rewards or sanctions for schools, or remunerations and bonuses received by teachers.

- In a larger number of countries, the influence of school evaluations is greater than student examinations for the performance appraisals of schools (13 countries, compared to 7 for student examinations), for the appraisal of the performance of school management (9 countries, compared to 1 for student examinations) and the appraisal of the performance of individual teachers (4 countries, compared to 1 for student examinations).

Policy context

School evaluation and accountability measures have received greater attention in recent years as the decentralisation of decision making in school education (see Indicator D6) and a greater focus on output rather than input measures in the public sector have increased the need for performance measures. Different kinds of performance measures can be used to create a system of school evaluation and accountability that can help improve schools (Box D5.1). They can focus on student performance and also on an evaluative framework for assessing the performance and operation of schools.

The impact of these performance measures depends on the objectives and context in which they are developed. As the context and scope of assessments may vary widely from one country to another, it is pertinent to look at the influence attributed to these measures of performance, such as the level of the influence of school self-evaluations on the appraisal of the performance of school management or on remuneration and bonuses received by teachers. This allows for a better understanding of the degree to which these measures are considered in the process of school evaluation and accountability.

Data were collected from countries to identify the existence of different types of information on student performance in 2006. Two categories of student information were identified: national examinations, which have a civil effect on students, and periodic national assessments, which do not. The latter assessments may have been implemented to compare student performance across schools or evaluate the performance of the system as a whole. Information was also collected on the subjects covered (mathematics, science, national language/language of instruction), whether assessments and examinations are compulsory, and at what year or grade level they take place.

For school evaluations, data were collected on the requirements for evaluations by school inspectorates (or equivalent institutions) and school self-evaluations, as well as on the criteria used to focus on different aspects of school performance and operations. Information was also collected on the influence of student performance and school evaluation measures on schools and teachers. Countries were asked whether these measures had a high, moderate, low or no influence upon each of five main areas: performance feedback to schools and teachers; financial implications for schools and teachers; assistance provided to teachers to improve their teaching skills; the likelihood of school closure; and the publication of school results.

Evidence and explanations

Student examinations and assessments and the frequency of school evaluations

In 2006, national student examinations existed in 9 OECD countries and 1 partner country among the 29 OECD and partner countries for which data are available and, except in Scotland and Turkey, were considered compulsory (Table D5.1). In terms of the subjects tested, these can change over years but for the 2006 reference year all countries that conducted national student examinations systematically assessed mathematics and national language or language of instruction. Science was not examined as frequently; this was also true for periodical national assessments of students. Only eight countries included science in their national examinations (seven OECD countries and one partner country). A number of countries included other subjects in their national examinations as well but data were not collected on the complete range of subjects offered across countries.

National student assessments differ from national student examinations in that assessments do not have a civil effect for individual students. Nevertheless, national assessments were more widely conducted among OECD and partner countries (17 out of the 29 countries for which data are available) than national examinations (10 countries). Assessments were conducted in 12 OECD and partner countries which did not have national examinations (Tables D5.1 and D5.2). In terms of the subjects included, mathematics and national language are most common. As in the case of national examinations, science seemed to have less of a priority for national assessments. Only 7 countries conducted science assessments (5 OECD countries and 2 partner countries), whereas 15 countries include mathematics and national language (12 OECD countries and 3 partner countries for both). Whenever a country conducted a periodical national assessment, it covered these two subjects. The only exception is Belgium (Fl. community), where national assessments were exclusively undertaken in science in 2006 (but other assessment have been organised in other school years). Among the nine countries that conducted national assessments in mathematics and the national language, but not in science, only Luxembourg, Scotland and Sweden conducted them in other subjects. England, Korea and Turkey and the partner countries Israel and Slovenia conducted periodical assessments of mathematics, science and national language or language of instruction and other subjects.

National student assessments generally took place between grades 6 and 9, while national examinations generally took place between grades 8 and 10. Except for Italy and Turkey which carried out national examinations at grade 8, all the other countries do so between grades 9 and 10. National student assessments were carried out at grade 9 in England, Korea, Luxembourg, Mexico and Sweden and in the partner country Slovenia. Only Australia conducted national assessments at grade 7, and Belgium (Fl. Community), Scotland and the partner countries Brazil and Israel at grade 8. In Hungary and Turkey, national assessments were carried out at three different grades, from grade 6 to grade 10.

Whenever school self-evaluations are required, these are generally required annually, unlike evaluations by school inspectorates which tend to be required only every three years or so (Tables D5.5 and D5.6). In four countries the requirements for school evaluations are not applicable as there are no school evaluations in these countries. In Japan, there are no requirements for the frequency of school evaluations but these evaluations still take place in a substantial proportion of schools. Even though school self-evaluations are carried out more often than external evaluations, the latter appear to have a greater influence on schools and teachers in terms of the school evaluation and accountability framework and the results are more likely to be published.

Impact of student performance and school evaluation information

Information was collected to ascertain the influence of student examinations and assessments and school evaluations upon schools. For example, it was asked whether student assessments or examinations are used to provide financial incentives to schools and teachers. The information collected focused on: the appraisal and performance feedback to schools and teachers (performance feedback to the school, appraisal of the performance of school management and appraisal of the performance of individual teachers); financial implications (on the school budget, the provision of rewards or sanctions to schools, and remuneration of and bonuses for teachers); assistance provided to teachers to improve their teaching skills; the likelihood of school closure; and, the publication of results (whether or not results of evaluations are published) and if these are further used by governments for the creation of comparative tables of school performance.

In regard to the impact of student performance results, student performance in national examinations appears to have more influence upon the performance feedback provided to schools and teachers than student results in national student assessments. Among the nine countries with data on the influence of national examinations, the results of these examinations were considered as having a high level of influence upon the performance feedback given to schools. This feedback includes: performance feedback to the school (high influence in Iceland, Ireland and Scotland and moderate influence in France and the partner country Estonia); appraisal of the performance of the school management (high influence in Scotland and moderate influence in Ireland); and appraisal of the performance of individual teachers (high influence in Ireland and moderate influence in the partner country Estonia) (Table D5.3). In Italy, Portugal and Turkey, results of national examinations were considered to have had little or no influence on the performance feedback provided to schools and teachers.

Student performance in national student examinations was considered to have had a moderate influence upon the assistance provided to teachers to improve their teaching skills in France, Ireland, Scotland and the partner country Estonia. In Ireland, national examinations were also considered to have had a moderate influence on the likelihood of school closure. The performance of students in national examinations was not considered to have an influence upon school budgets, the provision of financial rewards to schools and the remuneration or bonuses for teachers, except in Scotland, where it was considered to have had a low level of influence on school budgets and the provision of financial rewards or sanctions to schools and in the partner country Estonia, where it was considered to have had a low level of influence on the provision of financial rewards or sanctions.

All but one country with national student examinations published the results. Denmark, Iceland and the partner country Estonia published the results of national student examinations and also used them to compile comparative tables of school performance. Ireland is the only country that does not publish these student examination results.

Periodical national assessments of students were more widely performed than national student examinations (Tables D5.1 and D5.2) and were also considered to have had a large influence upon the performance feedback given to schools and teachers. Results of these assessments were considered to have had a high or moderate influence on the performance feedback provided to schools in Australia, England, Finland, France, Hungary and the partner country Israel. Results of national student assessments were also considered to have had a moderate level of influence on the appraisal of the performance of school management in Hungary. In Australia, England and France students' national assessment results were considered to have had a moderate influence on the assistance provided to teachers to improve their teaching skills. In England, they were also considered to have had a high degree of influence on the likelihood of school closure, in the context of other factors such as the results of school inspections (Table D5.4).

The results of student assessments were published in Australia, Belgium (Fl. community) (only synthetic report on school and system level), England, Italy, Korea, Scotland and Turkey and in partner country Slovenia. Only in England and Turkey were these results used by the government for the creation of comparative tables of school performance.

The implications of school evaluations by an inspectorate or other external body were considered to have focused mainly upon the performance feedback provided to schools and, to a lesser extent, the appraisal of the performance of school management. In 10 OECD countries and one partner country, school evaluations by an inspectorate were considered to have had a high influence upon the performance feedback provided to schools. In seven OECD countries it was considered that there was a high influence upon the performance appraisal of the school management. School evaluations were considered to have had a high influence on the appraisal of the performance of teachers in the Czech Republic, Ireland and Turkey and in extreme cases on the likelihood of school closure in the Czech Republic and England. In Australia and Turkey, school evaluations were considered to have had a high degree of influence upon the assistance provided to teachers to improve their teaching skills. Only in Belgium (Fl. community), were school evaluations considered to have had a fairly (or rather) high influence on school budgets and the provision of financial rewards or sanctions. There was also considered to be a moderate influence on the assistance provided to teachers to improve their teaching skills in Belgium (Fl. community), the Czech Republic, England, Ireland, Portugal and Scotland. Evaluations by a school inspectorate were also considered to have had a moderate influence upon the performance feedback given to schools (Iceland), on appraisal of the performance of school management (Australia, Iceland and Ireland) and on appraisal of the performance of teachers (Australia and Iceland). Implications were also considered to have existed for the school budget (Australia and the Czech Republic), the remuneration and bonuses received by teachers (the Czech Republic and Turkey) and the likelihood of school closure (Belgium (Flemish community) and Ireland). In contrast, school evaluations were considered to have had little influence in Korea and in the partner country Estonia compared to other OECD and partner countries (Table D5.5).

Results of evaluations undertaken by school inspectorates were published by 12 out of 15 countries, but only in Iceland were they used by the government to publish comparisons of the performance of individual schools (Table D5.5). Belgium (Fl. community), the Czech Republic, England, Ireland, Korea, the Netherlands, New Zealand, Portugal, Scotland and Sweden and the partner country Estonia published the results of evaluations undertaken by school inspectorates (or an equivalent body) but did not use them for the creation of comparative tables of school performance. In Australia and Turkey and the partner country Israel results of school evaluations were not published.

School self-evaluations were considered to have had a high level of influence upon the performance feedback provided to schools (Australia, the Czech Republic, England, Luxembourg, Mexico, Scotland, Sweden and Turkey), on appraisal of the performance of school management (the Czech Republic, Mexico, Scotland, Turkey and the partner country Estonia), and on the appraisal of individual teachers (the Czech Republic and Mexico). In terms of the financial implications of school self-evaluations, only in Sweden were they considered to have a high degree of influence on school budget, and only in the Czech Republic were they considered to have a high degree of influence upon teachers' remuneration and bonuses. In the Czech Republic and Mexico, feedback from school self-evaluations has a high degree of influence on teachers and schools, on assistance to teachers to improve their teaching skills and on the remuneration and bonuses received by teachers (Table D5.6).

Results of self-evaluations were published in Hungary, Japan, Sweden, Turkey and the partner country Estonia, but they were only further used by the government for the creation of comparative tables of school performance in Sweden.

Comparing student examinations and assessments to school evaluations (by school inspectorates and self-assessments), a total of 22 countries undertake national student examinations or assessments and 17 require periodical school evaluations by inspectorates and/or self-evaluation.

Box D5.1. Evaluation and accountability arrangements: Results from PISA 2006

Evaluation and accountability information was also collected in PISA 2006 and analysed to measure the impact upon student performance. System level information similar to that presented in this indicator was collected. Further information was also collected from School Principals to better analyse changes at the school and student-level. This information focused on the nature of school accountability and the ways in which the resulting information was used and made available to various stakeholders and the public at large.

In judging the impact upon student performance, it can be difficult to isolate the influence of single policies, practices or programmes as they tend to be related to each other and to other policies. Moreover, some of these practices are correlated with the demographic and socio-economic characteristics of students in schools. For example, students in countries with a standards-based external evaluation performed 36.1 score points higher on the PISA science scale, roughly equivalent to a school year's progress. However, this effect was not statistically significant once demographic and socio-economic background factors were taken into account.

The strongest impact upon student performance was found in regard to the publication of schools' student achievement data. This was found to have a statistically significant positive impact upon student performance even after accounting for all demographic and socio-economic background characteristics and other school institutional and policy or programme characteristics. Fifteen-year-old students in schools that published this student achievement data scored, on average, 3.5 score points higher on the PISA science scale than students in schools that did not publish achievement data, all other things being equal.

Source: OECD (2007) PISA 2006: Science Competencies for Tomorrow's World.

In general, school evaluations were considered to have had a greater influence upon the factors analysed in this indicator. In a majority of countries, feedback from school evaluations was considered to have had a greater influence upon the performance feedback provided to schools than the performance of students in national examinations and assessments (13 countries, compared to 7 countries for student examinations and assessments); on the appraisal of the performance of school management (9 countries, compared to 1 country for student examinations and assessments); and on the appraisal of the performance of individual teachers (4 countries, compared to 1 country for student examinations and assessments). Furthermore, school evaluations were considered to have had a high influence upon school financing in Belgium (Fl. community) and Sweden; the provision of financial rewards or sanctions to schools in Belgium (Fl. community); assistance provided to teachers to improve their teaching skills

in Australia, the Czech Republic, England, Mexico and Turkey; the remuneration and bonuses received by teachers in the Czech Republic; and in extreme cases on the likelihood of school closure in Belgium (Fl. community), the Czech Republic and England. In contrast, the results of national student assessments and examinations were considered to only have had a high influence on the likelihood of school closure in England and a moderate influence in Ireland and this influence is pertinent only in the context of other information such as that obtained in school evaluations. The results of national student assessments and examinations were considered to have had a moderate influence on the assistance provided to teachers to improve their teaching skills in Australia, England, France, Ireland, Scotland and in the partner country Estonia and a low influence in Hungary and the partner country Israel.

Definitions and methodologies

Data are from the 2007 OECD-INES Survey on Teachers and the Curriculum and refer to the school year 2005/06.

Public institutions

An institution is classified as public if it is: controlled and managed directly by a public education authority or agency, or controlled and managed either by a government agency directly or by a governing body (a council, committee, etc.), most of whose members are either appointed by a public authority or elected by public franchise.

National examinations and assessments

National examinations are to be seen as assessments that have a formal civil effect for students. Countries were instructed to respond irrespective of the scope of the examinations in terms of the subject matter covered; the answer should be yes even if the examinations cover just one or two subject areas. Like examinations, national assessments are most frequently based on tests of student achievement; however, while examinations have a formal civil effect for students, this is not the case for national assessments.

School inspections and evaluations

Requirements for school inspections are the legal frameworks that may operate from the central administrative level or from lower administrative levels, such as regional offices or municipalities. A school inspection may be carried out by inspectors, visitation committees or review panels. School self-evaluation is internal evaluation of schools to improve their own practice and/or to inform parents and the local community.

School evaluation and accountability information

School evaluation and accountability information is defined as any kind of systematic descriptive information to which an evaluative interpretation is given; it may depend on test scores, inspection reports, audits, or statistical data.

Further references

Specific notes on definitions and methodologies regarding this indicator for each country are given in Annex 3 (*www.oecd.org/edu/eag2008*).

Table D5.1.

National examinations in general education programmes (lower secondary education, 2006)

		Do you have national examinations in your country?	Which subjects are assessed in these examinations?				Is it compulsory for schools to administer these examinations?	At what year/grade levels do these examinations take place?
			Mathematics	Science	National language or language of instruction	Other subjects		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD countries	**Australia**	No	a	a	a	a	a	a
	Austria	No	a	a	a	a	a	a
	Belgium (Fl.)	No	a	a	a	a	a	a
	Belgium (Fr.)	m	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	m
	Czech Republic	No	a	a	a	a	a	a
	Denmark	Yes	Yes	Yes	Yes	Yes	Yes	9
	England	No	a	a	a	a	a	a
	Finland	No	a	a	a	a	a	a
	France	Yes	Yes	No	Yes	Yes	Yes	9
	Germany	m	m	m	m	m	m	m
	Greece	m	m	m	m	m	m	m
	Hungary	No	a	a	a	a	a	a
	Iceland	Yes	Yes	Yes	Yes	Yes	Yes	10
	Ireland	Yes	Yes	Yes	Yes	Yes	Yes	10
	Italy	Yes	Yes	Yes	Yes	Yes	Yes	8
	Japan	No	a	a	a	a	a	a
	Korea	No	a	a	a	a	a	a
	Luxembourg	No	a	a	a	a	a	a
	Mexico	No	a	a	a	a	a	a
	Netherlands	No	a	a	a	a	a	a
	New Zealand	No	a	a	a	a	a	a
	Norway	Yes	Yes	Yes	Yes	Yes	Yes	10
	Poland	m	m	m	m	m	m	m
	Portugal	Yes	Yes	No	Yes	No	Yes	9
	Scotland[1]	Yes	Yes	Yes	Yes	Yes	No	10
	Slovak Republic	m	m	m	m	m	m	m
	Spain	No	a	a	a	a	a	a
	Sweden	No	a	a	a	a	a	a
	Switzerland	No	a	a	a	a	a	a
	Turkey	Yes	Yes	Yes	Yes	Yes	No	8
	United States	m	m	m	m	m	m	m
Partner countries	**Brazil**	No	a	a	a	a	a	a
	Chile	m	m	m	m	m	m	m
	Estonia	Yes	Yes	Yes	Yes	Yes	Yes	9
	Israel	No	a	a	a	a	a	a
	Russian Federation	m	m	m	m	m	m	m
	Slovenia	No	a	a	a	a	a	a

1. Year/Grade 10 refers to S4.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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D5

Table D5.2.

National periodical assessments in general education programmes (lower secondary education, 2006)

		Do you have national periodical assessments in your country?	Which subjects are assessed in these assessments?				Is it compulsory for schools to administer these assessments?	At what year/grade levels do these assessments take place?
			Mathematics	Science	National language or language of instruction	Other subjects		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD countries	Australia[1]	Yes	Yes	No	Yes	No	Yes	7
	Austria	No	a	a	a	a	a	a
	Belgium (Fl.)[2]	Yes	No	Yes	No	No	No	8
	Belgium (Fr.)	m	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	m
	Czech Republic	No	a	a	a	a	a	a
	Denmark	No	a	a	a	a	a	a
	England	Yes	Yes	Yes	Yes	Yes	Yes	9
	Finland	Yes	Yes	No	Yes	No	Yes	3
	France	Yes	Yes	No	Yes	No	Yes	6
	Germany	m	m	m	m	m	m	m
	Greece	m	m	m	m	m	m	m
	Hungary	Yes	Yes	No	Yes	No	Yes	6, 8, 10
	Iceland	No	a	a	a	a	a	a
	Ireland	No	a	a	a	a	a	a
	Italy	Yes	Yes	Yes	Yes	m	Yes	6
	Japan	No	a	a	a	a	a	a
	Korea	Yes	Yes	Yes	Yes	Yes	No	9
	Luxembourg	Yes	Yes	No	Yes	Yes	Yes	9
	Mexico	Yes	Yes	No	Yes	No	Yes	9
	Netherlands	No	a	a	a	a	a	a
	New Zealand	No	a	a	a	a	a	a
	Norway	Yes	m	m	m	m	m	m
	Poland	m	m	m	m	m	m	m
	Portugal	No	a	a	a	a	a	a
	Scotland[3]	Yes	Yes	No	Yes	Yes	No	8
	Slovak Republic	m	m	m	m	m	m	m
	Spain	No	a	a	a	a	a	a
	Sweden	Yes	Yes	No	Yes	Yes	Yes	9
	Switzerland	No	a	a	a	a	a	a
	Turkey	Yes	Yes	Yes	Yes	Yes	Yes	6, 7, 8
	United States	m	m	m	m	m	m	m
Partner countries	Brazil	Yes	Yes	No	Yes	No	No	8
	Chile	m	m	m	m	m	m	m
	Estonia	No	a	a	a	a	a	a
	Israel	Yes	Yes	Yes	Yes	Yes	Yes	8
	Russian Federation	m	m	m	m	m	m	m
	Slovenia	Yes	Yes	Yes	Yes	Yes	Yes	9

1. Assessments are administered at the state level.
2. Grade 7 refers to 2nd year A of 1st stage.
3. Year/Grade 8 refers to S2.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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Table D5.3.
Possible influence of national examinations (lower secondary education, 2006)

		Performance feedback			Financial and other implications					Publication of results	
		The performance feedback to the school	The performance appraisal of the school management	The performance appraisal of individual teachers	The school budget	The provision of another financial reward or sanction	The assistance provided to teachers to improve their teaching skills	Remuneration and bonuses received by teachers	Likelihood of school closure	Are the results of evaluations published?	Published in tables that compare school performance?
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD countries	**Australia**	a	a	a	a	a	a	a	a	a	a
	Austria	a	a	a	a	a	a	a	a	a	a
	Belgium (Fl.)	a	a	a	a	a	a	a	a	a	a
	Belgium (Fr.)	m	m	m	m	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	m	m	m	m
	Czech Republic	a	a	a	a	a	a	a	a	a	a
	Denmark	m	m	m	m	m	m	m	m	Yes	Yes
	England	a	a	a	a	a	a	a	a	a	a
	Finland	a	a	a	a	a	a	a	a	a	a
	France	Moderate	None	None	None	None	Moderate	None	None	Yes	No
	Germany	m	m	m	m	m	m	m	m	m	m
	Greece	m	m	m	m	m	m	m	m	m	m
	Hungary	a	a	a	a	a	a	a	a	a	a
	Iceland	High	Low	Low	None	None	None	None	None	Yes	Yes
	Ireland	High	Moderate	High	None	None	Moderate	None	Moderate	No	No
	Italy	None	None	None	None	None	None	None	None	Yes	No
	Japan	a	a	a	a	a	a	a	a	a	a
	Korea	a	a	a	a	a	a	a	a	a	a
	Luxembourg	a	a	a	a	a	a	a	a	a	a
	Mexico	a	a	a	a	a	a	a	a	a	a
	Netherlands	a	a	a	a	a	a	a	a	Yes	No
	New Zealand	a	a	a	a	a	a	a	a	a	a
	Norway	m	m	m	None	None	m	a	None	Yes	No
	Poland	m	m	m	m	m	m	m	m	m	m
	Portugal	None	None	None	None	None	None	None	None	Yes	No
	Scotland	High	High	Low	Low	Low	Moderate	None	None	Yes	No
	Slovak Republic	m	m	m	m	m	m	m	m	m	m
	Spain	a	a	a	a	a	a	a	a	a	a
	Sweden	a	a	a	a	a	a	a	a	a	a
	Switzerland	a	a	a	a	a	a	a	a	a	a
	Turkey	Low	None	None	None	None	None	None	None	Yes	No
	United States	m	m	m	m	m	m	m	m	m	m
Partner countries	**Brazil**	a	a	a	a	a	a	a	a	a	a
	Chile	m	m	m	m	m	m	m	m	m	m
	Estonia	Moderate	None	Moderate	None	Low	Moderate	None	None	Yes	Yes
	Israel	a	a	a	a	a	a	a	a	a	a
	Russian Federation	m	m	m	m	m	m	m	m	m	m
	Slovenia	a	a	a	a	a	a	a	a	a	a

None: No influence at all
Low: Low level of influence
Moderate: Moderate level of influence
High: High level of influence

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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Table D5.4.

Possible influence of national periodical assessments (lower secondary education, 2006)

		Performance feedback			Financial and other implications					Publication of results	
		The performance feedback to the school	The performance appraisal of the school management	The performance appraisal of individual teachers	The school budget	The provision of another financial reward or sanction	The assistance provided to teachers to improve their teaching skills	Remuneration and bonuses received by teachers	Likelihood of school closure	Are the results of evaluations published?	Published in tables that compare school performance?
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD countries	Australia	High	Low	None	Low	None	Moderate	None	None	Yes	No
	Austria	a	a	a	a	a	a	a	a	a	a
	Belgium (Fl.)	m	m	m	None	None	m	None	None	Yes	No
	Belgium (Fr.)	m	m	m	m	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	m	m	m	m
	Czech Republic	a	a	a	a	a	a	a	a	a	a
	Denmark	a	a	a	a	a	a	a	a	a	a
	England	High	Low	None	None	None	Moderate	None	High	Yes	Yes
	Finland	Moderate	a	a	m	m	m	m	a	No	No
	France	Moderate	None	None	None	None	Moderate	None	None	No	No
	Germany	m	m	m	m	m	m	m	m	m	m
	Greece	m	m	m	m	m	m	m	m	m	m
	Hungary	High	Moderate	Low	m	m	Low	Low	None	No	No
	Iceland	a	a	a	a	a	a	a	a	a	a
	Ireland	a	a	a	a	a	a	a	a	a	a
	Italy	None	None	None	None	None	None	None	None	Yes	No
	Japan	a	a	a	a	a	a	a	a	a	a
	Korea	None	None	None	None	None	None	None	None	Yes	No
	Luxembourg	None	None	None	None	None	None	None	None	No	No
	Mexico	m	m	m	a	a	m	m	a	No	No
	Netherlands	a	a	a	a	a	a	a	a	a	a
	New Zealand	a	a	a	a	a	a	a	a	a	a
	Norway	m	m	m	m	m	m	m	m	m	m
	Poland	m	m	m	m	m	m	m	m	m	m
	Portugal	a	a	a	a	a	a	a	a	a	a
	Scotland	None	None	None	None	None	None	None	None	Yes	No
	Slovak Republic	m	m	m	m	m	m	m	m	m	m
	Spain	a	a	a	a	a	a	a	a	a	a
	Sweden	m	m	m	m	m	m	m	m	m	m
	Switzerland	a	a	a	a	a	a	a	a	a	a
	Turkey	Low	None	None	None	None	None	None	None	Yes	Yes
	United States	m	m	m	m	m	m	m	m	m	m
Partner countries	Brazil	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m
	Estonia	a	a	a	a	a	a	a	a	a	a
	Israel	High	Low	Low	None	None	Low	None	None	No	No
	Russian Federation	m	m	m	m	m	m	m	m	m	m
	Slovenia	Low	Low	None	None	None	None	None	None	Yes	No

None: No influence at all
Low: Low level of influence
Moderate: Moderate level of influence
High: High level of influence

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
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Table D5.5.

Possible influence of school evaluations by an inspectorate (lower secondary education, 2006)

		Requirements for school evaluations[1]	Performance feedback[2]			Financial and other implications[2]					Publication of results	
			The performance feedback to the school	The performance appraisal of the school management	The performance appraisal of individual teachers	The school budget	The provision of another financial reward or sanction	The assistance provided to teachers to improve their teaching skills	Remuneration and bonuses received by teachers	Likelihood of school closure	Are the results of evaluations published?	Published in tables that compare school performance?
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD countries	**Australia**	1 per 3y	High	Moderate	Moderate	Moderate	a	High	a	a	No	No
	Austria	None	a	a	a	a	a	a	a	a	a	a
	Belgium (Fl.)	1 per 3y+	High	High	Low	High	High	Moderate	a	Moderate	Yes	No
	Belgium (Fr.)	m	m	m	m	m	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	m	m	m	m	m
	Czech Republic	1 per 3y	High	High	High	Moderate	Low	Moderate	Moderate	High	Yes	No
	Denmark	m	m	m	m	m	m	m	m	m	m	m
	England	1 per 3y	High	Low	None	None	None	Moderate	None	High	Yes	No
	Finland	a	a	a	a	a	a	a	a	a	a	a
	France	m	m	m	m	m	m	m	m	m	m	m
	Germany	m	m	m	m	m	m	m	m	m	m	m
	Greece	m	m	m	m	m	m	m	m	m	m	m
	Hungary	a	a	a	a	a	a	a	a	a	a	a
	Iceland	1 per 3y	Moderate	Moderate	Moderate	a	a	a	a	a	Yes	Yes
	Ireland	1 per 3y+	High	Moderate	High	None	None	Moderate	None	Moderate	Yes	No
	Italy	None	a	a	a	a	a	a	a	a	a	a
	Japan	m	a	a	a	a	a	a	a	a	a	a
	Korea	1 per 3y	Low	Low	Low	None	Low	Low	None	None	Yes	No
	Luxembourg	None	a	a	a	a	a	a	a	a	a	a
	Mexico	m	m	m	m	m	m	m	m	m	m	m
	Netherlands	1 per y	m	m	m	m	m	m	m	m	Yes	No
	New Zealand	1 per 3y	High	High	Low	None	None	Low	None	Low	Yes	No
	Norway	a	a	a	a	a	a	a	a	a	a	a
	Poland	m	m	m	m	m	m	m	m	m	m	m
	Portugal	1 per 3y+	High	High	a	a	a	Moderate	None	a	Yes	No
	Scotland	1 per 3y+	High	High	Low	Low	Low	Moderate	None	None	Yes	No
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m
	Spain	None	a	a	a	a	a	a	a	a	a	a
	Sweden	1 per 3y+	High	High	Low	Low	Low	None	Low	Low	Yes	m
	Switzerland	m	m	m	m	m	m	m	m	m	m	m
	Turkey	1+ per y	High	High	High	None	None	High	Moderate	Low	No	No
	United States	m	m	m	m	m	m	m	m	m	m	m
Partner countries	**Brazil**	None	a	a	a	a	a	a	a	a	a	a
	Chile	m	m	m	m	m	m	m	m	m	m	m
	Estonia	1 per y	None	None	None	None	None	None	None	None	Yes	No
	Israel	m	High	m	m	None	None	None	None	None	No	No
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m
	Slovenia	None	a	a	a	a	a	a	a	a	a	a

Note 1
None: There are no requirements for school evaluation
1+ per y: Greater than once per year
1 per y: Once per year
1 per 2y: Once every two years
1 per 3y: Once every three years
1 per 3y+: Once every three + years

Note 2
None: No influence at all
Low: Low level of influence
Moderate: Moderate level of influence
High: High level of influence

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
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Table D5.6.
Possible influence of school self-evaluations (lower secondary education, 2006)

		Requirements for school self-evalautions[1]	Performance feedback[2]			Financial and other implications[2]					Publication of results	
			The performance feedback to the school	The performance appraisal of the school management	The performance appraisal of individual teachers	The school budget	The provision of another financial reward or sanction	The assistance provided to teachers to improve their teaching skills	Remuneration and bonuses received by teachers	Likelihood of school closure	Are the results of evaluations published?	Published in tables that compare school performance?
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD countries	**Australia**	1 per y	High	Moderate	Moderate	Moderate	a	High	a	a	No	No
	Austria	None	a	a	a	a	a	a	a	a	a	a
	Belgium (Fl.)	None	a	a	a	a	a	a	a	a	a	a
	Belgium (Fr.)	m	m	m	m	m	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	m	m	m	m	m
	Czech Republic	1 per y	High	High	High	Moderate	Moderate	High	High	None	No	No
	Denmark	m	m	m	m	m	m	m	m	m	m	m
	England	1 per y	High	Low	Low	None	None	High	None	Moderate	No	No
	Finland	m	m	m	m	m	m	m	m	m	m	m
	France	m	m	m	m	m	m	m	m	m	m	
	Germany	m	m	m	m	m	m	m	m	m	m	m
	Greece	m	m	m	m	m	m	m	m	m	m	m
	Hungary	1 per 3y+	Low	Moderate	Low	Low	Low	Low	Low	None	Yes	No
	Iceland	1+ per y	Moderate	Moderate	Moderate	a	a	a	a	a	No	No
	Ireland	None	a	a	a	a	a	a	a	a	a	a
	Italy	None	a	a	a	a	a	a	a	a	a	a
	Japan	m	m	m	m	m	m	m	m	m	Yes	No
	Korea	1 per y	Low	None	None	None	None	Low	None	None	No	No
	Luxembourg	1 per y	High	Low	None	None	None	None	None	None	No	No
	Mexico	1+ per y	High	High	High	a	a	High	a	a	No	No
	Netherlands	m	m	m	m	m	m	m	m	m	m	m
	New Zealand	1 per 3y	m	m	m	m	m	m	m	m	No	No
	Norway	None	a	a	a	a	a	a	a	a	a	a
	Poland	m	m	m	m	m	m	m	m	m	m	m
	Portugal	1+ per y	None	None	None	None	None	None	None	None	No	No
	Scotland	1 per y	High	High	Low	Low	Low	Moderate	None	None	No	No
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m
	Spain	None	a	a	a	a	a	a	a	a	a	a
	Sweden	1 per y	High	Moderate	Low	High	Low	None	Low	None	Yes	Yes
	Switzerland	m	m	m	m	m	m	m	m	m	m	m
	Turkey	1 per y	High	High	None	None	Low	High	Low	None	Yes	No
	United States	m	m	m	m	m	m	m	m	m	m	m
Partner countries	**Brazil**	None	a	a	a	a	a	a	a	a	a	a
	Chile	m	m	m	m	m	m	m	m	m	m	m
	Estonia	1 per 3y	Moderate	High	Low	Moderate	Low	Moderate	None	None	Yes	No
	Israel	m	m	m	m	None	None	None	None	None	No	No
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m
	Slovenia	None	a	a	a	a	a	a	a	a	a	a

Note 1
None: There are no requirements for school evaluation
1+ per y: Greater than once per year
1 per y: Once per year
1 per 2y: Once every two years
1 per 3y: Once every three years
1 per 3y+: Once every three + years

Note 2
None: No influence at all
Low: Low level of influence
Moderate: Moderate level of influence
High: High level of influence

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
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INDICATOR D6

WHAT IS THE LEVEL OF DECISION MAKING IN EDUCATION SYSTEMS?

This indicator shows where decisions are made in public institutions at the lower secondary level of education. The level of decision making (from central or state levels to school levels) is presented over all, as well as for different domains. The level of decision making for different aspects of the curriculum is also examined and complemented by the mode of decision making at school level, in general as well as in specific domains.

Highlights of this indicator

- Overall, in about one-quarter of OECD and partner countries, decisions are mostly highly centralised. The majority of decisions in Australia, Luxembourg, Mexico, Portugal and Spain and the largest share of decisions in Austria are taken at the central and/or state level of government.
- In more than one-half of OECD and partner countries, decisions are more often taken at the school level. In Belgium (Fl. community), the Czech Republic, Hungary and New Zealand and the partner countries Estonia and Slovenia, the majority of decisions are taken at the school level, as are nearly all decisions in England and the Netherlands.
- Decisions on the organisation of instruction are predominantly taken by schools in all OECD and partner countries. The scenario is more varied for other areas of decision making, but most decisions on personnel management and the use of resources are taken at local or school levels in the majority of countries. Decisions on planning and structures are mostly the domain of more centralised tiers of government.
- On average in OECD countries, just under half of the decisions taken by schools are taken in full autonomy, about the same proportion as those taken within a framework set by a higher authority. Yet, there are substantial differences between some countries. For example, decisions taken by schools in consultation with others levels are relatively rare, but constitute the majority of decisions at school level in Luxembourg.
- Schools are less likely to make autonomous decisions related to planning and structures than to other areas.
- Between 2003 and 2007, decision making continued to become more decentralised in about one-half of the countries, most notably in Australia and Iceland. The opposite trend was evident in Italy.

Policy context

An important factor in educational policy is the division of responsibility among national, regional and local authorities, as well as schools. Placing more decision-making authority at lower levels of the educational system has been a key aim of educational restructuring and systemic reform in many countries since the early 1980s. Yet, simultaneously, there have been frequent examples of strengthening the influence of central authorities in setting standards, curriculum and assessments. For example, a freeing of "process" and financial regulations has often been accompanied by an increase in the control of output from the centre and by national curriculum frameworks.

There are many reasons for changes in patterns of responsibility and they vary from country to country. The most common goals are increased efficiency and improved financial control, reduction of bureaucracy, increased responsiveness to local communities, creative management of human resources, improved potential for innovation and the creation of conditions that provide better incentives for improving the quality of schooling. Among the more controversial policy-related issues are a heightened interest in measures of accountability. These sometimes provide the background for measures that are more "centralised", such as national assessment programmes and centrally established frameworks.

Various motives are attributed to the desire to increase the autonomy of schools, such as enhancing the quality, effectiveness and responsiveness of schooling. School autonomy is believed to foster responsiveness to local requirements but is also sometimes seen as involving mechanisms for choice that favour already advantaged groups in society. Setting centrally determined frameworks in which individual schools make decisions is a possible counterbalance against complete school autonomy.

This indicator presents results from data collected in 2007 on decision making at the lower secondary level of education and updates the previous survey, which took place in 2003. Responses were compiled in each country by a panel of experts representing different levels of the decision-making process at the lower secondary level. While the questionnaire was largely the same in both collections, the composition of the panel in each country may have somewhat changed.

Evidence and explanations

Level of decision making in public lower secondary education

In more than one-half of the OECD and partner countries for which data are available (15 out of 25) the largest share of the decisions that affect lower secondary education is taken by the school itself. In at least two-thirds of the OECD and partner countries, most decisions are taken at the local level or by schools. The school itself is by far the most important level of decision making in Belgium (Fl. community), the Czech Republic, England, Hungary, the Netherlands, and New Zealand, as well as in the partner countries Estonia and Slovenia, where well over half of decisions are taken at the school level. In England and the Netherlands, more than 90% of decisions are taken at the school level. Decision making at the local level as opposed to the school level is a feature of the lower secondary education system in Finland, where 70% of decisions are taken at that level, and to a lesser extent in Scotland, where 53% of decisions are taken at that level (Table D6.1).

Central government dominates decision making in Luxembourg and to a lesser extent in Portugal, where around 50% or more of the decisions are taken by the central authority. By contrast, in Australia, Belgium (Fl. community), the Netherlands and Spain, the central government (Community for Flemish community of Belgium) often sets the framework for decision making, but does not take final decisions related to implementation. In the Czech Republic, England, Finland, Germany, Hungary, Korea, the Netherlands and Spain and the partner country Estonia, the central government takes less than 10% of decisions relating to public lower secondary education (Table D6.1).

In federal countries, as well as in countries with largely autonomous sub national entities, there is a tendency towards a greater role for the states or autonomous provinces as the most important centralised decision-making authority. This is particularly true in Australia, Mexico and Spain where 56%, 48% and 42%, respectively, of decisions are taken at the state level.

In Austria, France, Germany, Iceland and Norway, decision making is more evenly distributed among the central level, the intermediate level and the schools (Table D6.1). In Australia, Belgium (Fl. community), Luxembourg, the Netherlands, New Zealand and Portugal, only one level of government takes decisions regarding education beyond those made by schools.

Domains of decision making

Because a general assessment of the roles played in the decision-making process includes decisions made on different domains, an aggregate measure can hide differences in the degree of centralisation of decisions for those areas. For example, a country may centralise almost all decisions about the curriculum, whereas schools may have nearly complete control over decisions about teaching methods. The distribution of decisions taken by each administrative level across four domains of decision making (with respect to the organisation of instruction, personnel management, planning and structures, and resources – see "Definitions and methodologies") is an indicator of "functional decentralisation", which takes into account the fact that decision making may be decentralised in certain activities and centralised in others.

When decisions are differentiated according to domain, the data show that decisions about the organisation of instruction are predominantly taken by schools in all countries reporting data. Thus, decisions such as the choice of teaching methods and textbooks, criteria for grouping students within schools and day-to-day methods of student assessment are largely the responsibility of the school. They are the sole responsibility of the schools in England, Hungary and New Zealand (Table D6.2).

For personnel management, planning and structures, and resources, schools generally take fewer decisions and the patterns are more mixed. On average, schools are least likely to have decision-making responsibility in the area of planning and structures (ranging from decisions to open or close a school, through to programme design and credentialing). In 11 of the 25 OECD and partner countries for which data are available on decision making by domain, at least 50% of decisions in these areas are taken centrally; in Portugal, they are all taken centrally. In Australia, Germany and Spain, more than 70% of these decisions are taken at state level. Even in countries which tend to be more decentralised (less than 50% of decisions taken centrally), such as Austria, Iceland and Sweden, the central government has an important role in decision making concerning planning and structures of the education system (Tables D6.1 and D6.2b).

For personnel management (including decisions on the hiring and dismissal of staff and on setting salary schedules and conditions of work), more than 50% of decisions are taken at school or local level in 14 out of the 25 OECD and partner countries. The majority of decisions are more often taken at school level in Belgium (Fl. community), the Czech Republic, England, Hungary, the Netherlands, New Zealand, Sweden and in the partner countries Estonia and Slovenia and at the local level in Finland, Iceland, Norway and Scotland. The majority of these decisions are taken centrally in France, Luxembourg and Portugal, and by the state or provincial government in Australia, Japan and Mexico (Table D6.2b).

Decision making at the central level is less frequent for the allocation and use of resources. Only Luxembourg and Portugal take 50% or more of the decisions on resources at the central level. The state level has most responsibility in Australia and even sole responsibility in Mexico. In Germany, where the *Länder* generally have a relatively high degree of responsibility for decisions, no decisions are taken by that tier of government on the allocation or use of resources; these are mainly in the hands of local government. At least 50% of decisions are in fact taken at the local level in about one-half of the OECD and partner countries, and at the school level in nearly one-quarter. In three countries, all decisions are taken at one level: at the school level in England and the Netherlands and at the local level in Finland (Tables D6.2a and D6.2b).

Modes of decision making

The degree of autonomy that schools have in their decision making is variable. On average in OECD countries, just under half of the decisions taken by schools are taken in full autonomy; about the same proportion as those taken within a framework set by a higher authority. Decisions taken after consultation with others in the education system or taken under other circumstances are relatively rare. Only in Luxembourg are most decisions taken at the school level taken in consultation with other levels.

Among the eight OECD and partner countries in which most decision making is in the hands of the schools, around 50% of these decisions are taken in full autonomy in Belgium (Fl. community), England, Hungary, the Netherlands and New Zealand or within a framework set by a higher authority in the Czech Republic and the partner countries Estonia and Slovenia. For the first five countries, the remainder of the decisions are mainly taken within a framework set by a higher authority, and for two of the last three, they are taken in full autonomy, while in Slovenia, they are taken after consultation with other bodies in the educational system. In Italy, Korea and Sweden, where the proportion of decisions taken by schools is also around the OECD average (46%), schools' decisions are also predominantly taken in full autonomy (Table D6.3).

Perhaps predictably, decisions taken by schools in countries which tend to have more centralised decision making are more likely to be subject to an overarching framework. This is the case in Australia, Austria, Portugal and Spain. However, in Mexico, where most decisions are taken centrally and only 20% by the school, schools have full autonomy for most of the decisions in their hands.

Whatever the proportion of decisions taken at school level, the majority of these decisions are taken in full autonomy in one-half of OECD and partner countries and are taken within a framework set by a higher authority in less than one-third.

Modes of decision making by domain

Within the four broad domains of decision making, decisions taken by schools related to planning and structures are least likely to be taken in full autonomy and are most likely to be taken within a framework. This is well illustrated in the Netherlands, for instance, where school-level decisions are largely taken in full autonomy in all areas except planning and structures (where all decisions are taken within a framework). However, in Austria very few decisions on planning and structures are the responsibility of the school (only 10% of decisions), and all of these are taken after consultation with other bodies in the educational system. Belgium (Fl. community) also presents an unusual situation, as most decisions on planning and structures are made at the school level, mostly with full autonomy (Tables D6.4a and D6.4b).

For the organisation of instruction and personnel management, school decision making in most countries is a bit more likely to be taken in full autonomy than within a framework set by a higher authority. Generally, these are the only two modes of decision making used by schools in these domains. However the patterns vary among countries. In Korea and the Netherlands, for instance, all decisions taken by schools on the organisation of instruction are taken in full autonomy, whereas about 11% of such decisions are taken autonomously by schools in Austria, the Czech Republic, Portugal and Spain. However, for personnel management, decisions taken at other levels in consultation with schools are sometimes the main decision-making mode. This is particularly the case in Japan and Scotland where this is the only mode of decision used (but only 21% or less of decisions in this domain are made at school level).

Although, on average, schools are least likely to take decisions on the allocation and use of resources, they are most likely to be consulted on such decisions taken by others in the education system. In Austria, Denmark, Germany, Luxembourg, Scotland and Spain, more than 50% of decisions on resources are taken in consultation with schools. This is even the sole decision-making mode in Finland. However, when decisions are taken at school level in this domain, schools have full decision-making autonomy in Hungary, Italy, the Netherlands, Norway and Sweden (Table D6.4b).

Between 2003 and 2007, decision making in most countries has become more decentralised

Between 2003 and 2007, decision making continued to become more decentralised in nearly one-half of the countries examined. It is most noticeable in Australia and Iceland where at least 15% of decisions are now taken at a more decentralised level. However, the extent of the shift towards more decentralised decisions is generally less than 5 percentage points. It is less pronounced than between 1998 and 2003 when in 14 out of 19 countries decisions were taken at a more decentralised level over that five-year period and when the move towards decentralisation concerned 30% of decisions in the Czech Republic, Korea and Turkey (see Indicator D6 in *Education at a Glance 2004*). At the same time, there have been some small shifts towards more centralised decision making in some countries between 2003 and 2007. In Italy, the proportion of decisions taken at the central level increased from 23 to 31% between 2003 and 2007. Spain presents the particularity of a shift from fewer decisions at state level towards more decisions at central as well as local or school levels (Table D6.6).

Definitions and methodologies

Data are from the 2007 OECD-INES survey on decision making in education and refer to the school year 2006/07. This indicator shows the percentage of educational decisions taken at specific levels in public lower secondary education. Decentralisation is concerned with the division of power between levels of government. This concept has two dimensions: *i)* the locus of decision making, that is, the level of decision-making authority; and *ii)* the mode of decision making, which relates to the degree of autonomous or "shared" decision making.

The questionnaire distinguished between six levels of decision making: central governments, state governments, provincial/regional authorities or governments, sub-regional or inter-municipal authorities or governments, local authorities or governments, schools or school boards or committees.

The questionnaire provided information on four domains:

- *Organisation of instruction*: student admissions; student careers; instruction time; choice of textbooks; grouping students; additional support for students; teaching methods; day-to-day student assessment.
- *Personnel management*: hiring and dismissal of teaching and non-teaching staff; duties and conditions of service of staff; salary scales of staff; influence over the careers of staff.
- *Planning and structures*: opening or closure of schools; creation or abolition of a grade level; design of programmes of study; selection of programmes of study taught in a particular school; choice of subjects taught in a particular school; definition of course content; setting of qualifying examinations for a certificate or diploma; credentialing (examination content, marking and administration).
- *Resources*: allocation and use of resources for teaching staff, non-teaching staff, capital and operating expenditure.

The questionnaire also sought information on how autonomously decisions are taken. The most important factor in determining the mode is "who decides". The following categories are provided: full autonomy, after consultation with bodies located at another level within the education system, independently but within a framework set by a higher authority, other mode.

More detailed information on specific countries (*e.g.* decentralisation in Denmark; a shifting four-layer administrative organisation in France; main objectives of Greek education policy; recruitment, selection and allocation of teachers in Norway) is available in the 2004 edition of *Education at a Glance* available at: *www.oecd.org/edu/eag2004*.

The indicators were calculated to give equal importance to each of the four domains. Each domain contributes 25% to the results. As the number of items is not the same in each domain, each item is weighted by the inverse of the number of items in its domain.

Table D6.1.

Percentage of decisions taken at each level of government in public lower secondary education (2007)

		Central	State	Provincial/ regional	Sub-regional	Local	School	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD countries	Australia	n	56	n	n	n	44	**100**
	Austria	27	22	n	n	22	30	**100**
	Belgium (Fl.)	n	29	n	n	n	71	**100**
	Belgium (Fr.)	m	m	m	m	m	m	**m**
	Canada	m	m	m	m	m	m	**m**
	Czech Republic	6	n	n	n	33	61	**100**
	Denmark	19	n	n	n	40	41	**100**
	England	4	n	n	n	5	91	**100**
	Finland	2	n	n	n	76	22	**100**
	France	27	n	6	28	n	39	**100**
	Germany	4	31	17	n	18	30	**100**
	Greece	m	m	m	m	m	m	**m**
	Hungary	4	n	n	n	27	69	**100**
	Iceland	23	n	n	n	37	40	**100**
	Ireland	m	m	m	m	m	m	**m**
	Italy	31	n	16	n	6	47	**100**
	Japan	13	n	21	n	45	21	**100**
	Korea	7	n	36	n	8	49	**100**
	Luxembourg	68	n	n	n	n	32	**100**
	Mexico	30	48	2	n	n	20	**100**
	Netherlands	6	n	n	n	n	94	**100**
	New Zealand	24	n	n	n	n	76	**100**
	Norway	25	n	n	n	40	35	**100**
	Poland	m	m	m	m	m	m	**m**
	Portugal	57	n	n	n	n	43	**100**
	Scotland	17	n	n	n	53	30	**100**
	Spain	9	42	10	n	3	36	**100**
	Sweden	18	n	n	n	35	47	**100**
	Switzerland	m	m	m	m	m	m	**m**
	Turkey	m	m	m	m	m	m	**m**
	United States	m	m	m	m	m	m	**m**
Partner countries	Brazil	m	m	m	m	m	m	**m**
	Chile	m	m	m	m	m	m	**m**
	Estonia	4	n	n	n	30	66	**100**
	Israel	m	m	m	m	m	m	**m**
	Russian Federation	m	m	m	m	m	m	**m**
	Slovenia	38	n	n	n	4	58	**100**

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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Table D6.2a.

Percentage of decisions taken at each level of government in public lower secondary education, by domain (2007)

		Organisation of instruction							Personnel management						
		Central	State	Provincial/ regional	Sub-regional	Local	School	Total	Central	State	Provincial/ regional	Sub-regional	Local	School	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD countries	Australia	n	11	n	n	n	89	**100**	n	58	n	n	n	42	**100**
	Austria	11	n	n	n	n	89	**100**	25	38	n	n	33	4	**100**
	Belgium (Fl.)	n	11	n	n	n	89	**100**	n	25	n	n	n	75	**100**
	Belgium (Fr.)	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Canada	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Czech Republic	11	n	n	n	n	89	**100**	4	n	n	n	21	75	**100**
	Denmark	n	n	n	n	11	89	**100**	25	n	n	n	33	42	**100**
	England	n	n	n	n	n	100	**100**	17	n	n	n	n	83	**100**
	Finland	n	n	n	n	33	67	**100**	8	n	n	n	71	21	**100**
	France	11	n	n	11	n	78	**100**	63	n	25	n	n	13	**100**
	Germany	n	13	n	n	n	88	**100**	17	38	38	n	n	8	**100**
	Greece	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Hungary	n	n	n	n	n	100	**100**	17	n	n	n	25	58	**100**
	Iceland	11	n	n	n	11	78	**100**	n	n	n	n	67	33	**100**
	Ireland	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Italy	11	n	n	n	n	89	**100**	42	n	25	n	n	33	**100**
	Japan	n	n	n	n	44	56	**100**	n	n	54	n	46	n	**100**
	Korea	11	n	n	n	11	78	**100**	17	n	33	n	8	42	**100**
	Luxembourg	44	n	n	n	n	56	**100**	88	n	n	n	n	13	**100**
	Mexico	33	n	n	n	n	67	**100**	29	63	8	n	n	n	**100**
	Netherlands	11	n	n	n	n	89	**100**	13	n	n	n	n	88	**100**
	New Zealand	n	n	n	n	n	100	**100**	17	n	n	n	n	83	**100**
	Norway	13	n	n	n	25	63	**100**	n	n	n	n	54	46	**100**
	Poland	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Portugal	11	n	n	n	n	89	**100**	67	n	n	n	n	33	**100**
	Scotland	n	n	n	n	11	89	**100**	25	n	n	n	75	n	**100**
	Spain	n	11	n	n	n	89	**100**	25	38	n	n	n	38	**100**
	Sweden	n	n	n	n	11	89	**100**	n	n	n	n	33	67	**100**
	Switzerland	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Turkey	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	United States	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
Partner countries	Brazil	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Chile	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Estonia	n	n	n	n	11	89	**100**	n	n	n	n	25	75	**100**
	Israel	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Russian Federation	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Slovenia	11	n	n	n	n	89	**100**	33	n	n	n	n	67	**100**

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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Table D6.2b.

Percentage of decisions taken at each level of government in public lower secondary education, by domain (2007)

		Planning and structures							Resources						
		Central	State	Provincial/ regional	Sub-regional	Local	School	Total	Central	State	Provincial/ regional	Sub-regional	Local	School	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD countries	Australia	n	71	n	n	n	29	**100**	n	83	n	n	n	17	**100**
	Austria	70	20	n	n	n	10	**100**	n	29	n	n	54	17	**100**
	Belgium (Fl.)	n	29	n	n	n	71	**100**	n	50	n	n	n	50	**100**
	Belgium (Fr.)	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Canada	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Czech Republic	10	n	n	n	40	50	**100**	n	n	n	n	71	29	**100**
	Denmark	50	n	n	n	50	n	**100**	n	n	n	n	67	33	**100**
	England	n	n	n	n	20	80	**100**	n	n	n	n	n	100	**100**
	Finland	n	n	n	n	100	n	**100**	n	n	n	n	100	n	**100**
	France	33	n	n	33	n	33	**100**	n	n	n	67	n	33	**100**
	Germany	n	71	n	n	14	14	**100**	n	n	29	n	54	17	**100**
	Greece	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Hungary	n	n	n	n	17	83	**100**	n	n	n	n	67	33	**100**
	Iceland	85	n	n	n	15	n	**100**	n	n	n	n	54	46	**100**
	Ireland	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Italy	71	n	14	n	n	14	**100**	n	n	25	n	25	50	**100**
	Japan	50	n	n	n	20	30	**100**	n	n	29	n	71	n	**100**
	Korea	n	n	75	n	n	25	**100**	n	n	38	n	13	50	**100**
	Luxembourg	71	n	n	n	n	29	**100**	67	n	n	n	n	33	**100**
	Mexico	57	29	n	n	n	14	**100**	n	100	n	n	n	n	**100**
	Netherlands	n	n	n	n	n	100	**100**	n	n	n	n	n	100	**100**
	New Zealand	40	n	n	n	n	60	**100**	38	n	n	n	n	63	**100**
	Norway	86	n	n	n	14	n	**100**	n	n	n	n	67	33	**100**
	Poland	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Portugal	100	n	n	n	n	n	**100**	50	n	n	n	n	50	**100**
	Scotland	43	n	n	n	43	14	**100**	n	n	n	n	83	17	**100**
	Spain	10	90	n	n	n	n	**100**	n	29	42	n	13	17	**100**
	Sweden	70	n	n	n	30	n	**100**	n	n	n	n	67	33	**100**
	Switzerland	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Turkey	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	United States	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
Partner countries	Brazil	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Chile	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Estonia	14	n	n	n	36	50	**100**	n	n	n	n	50	50	**100**
	Israel	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Russian Federation	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**
	Slovenia	83	n	n	n	17	n	**100**	25	n	n	n	n	75	**100**

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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Table D6.3.

Percentage of decisions taken at the school level in public lower secondary education, by mode of decision making (2007)

		In full autonomy	After consultation with other bodies in the educational system	Within framework set by a higher authority	Other	Total, excluding "in consultation"	Decisions taken at other levels in consultation with schools[1]	Total, including "in consultation"
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD countries	**Australia**	11	n	33	n	**44**	3	**47**
	Austria	3	7	20	n	**30**	4	**34**
	Belgium (Fl.)	49	n	22	n	**71**	n	**71**
	Belgium (Fr.)	m	m	m	m	**m**	m	**m**
	Canada	m	m	m	m	**m**	m	**m**
	Czech Republic	6	n	55	n	**61**	n	**61**
	Denmark	19	4	18	n	**41**	19	**60**
	England	48	4	39	n	**91**	n	**91**
	Finland	18	n	4	n	**22**	17	**39**
	France	27	6	6	n	**39**	8	**48**
	Germany	8	n	22	n	**30**	17	**47**
	Greece	m	m	m	m	**m**	m	**m**
	Hungary	38	4	24	3	**69**	1	**70**
	Iceland	22	12	3	3	**40**	n	**40**
	Ireland	m	m	m	m	**m**	m	**m**
	Italy	35	n	11	n	**47**	n	**47**
	Japan	8	n	n	13	**21**	5	**27**
	Korea	30	n	19	n	**49**	n	**49**
	Luxembourg	n	8	25	n	**32**	36	**68**
	Mexico	11	9	n	n	**20**	n	**20**
	Netherlands	63	n	25	6	**94**	n	**94**
	New Zealand	46	4	27	n	**76**	10	**86**
	Norway	29	n	6	n	**35**	n	**35**
	Poland	m	m	m	m	**m**	m	**m**
	Portugal	7	n	36	n	**43**	n	**43**
	Scotland	11	13	6	n	**30**	20	**50**
	Spain	3	6	27	n	**36**	8	**44**
	Sweden	42	n	5	n	**47**	n	**47**
	Switzerland	m	m	m	m	**m**	m	**m**
	Turkey	m	m	m	m	**m**	m	**m**
	United States	m	m	m	m	**m**	m	**m**
Partner countries	**Brazil**	m	m	m	m	**m**	m	**m**
	Chile	m	m	m	m	**m**	m	**m**
	Estonia	20	n	46	n	**66**	n	**66**
	Israel	m	m	m	m	**m**	m	**m**
	Russian Federation	m	m	m	m	**m**	m	**m**
	Slovenia	9	16	33	n	**58**	n	**58**

1. The number of decisions taken at other levels but in consultation with schools as a percentage of all decisions.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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D6

Table D6.4a.

Percentage of decisions taken at the school level in public lower secondary education, by mode of decision making and domain (2007)

		Organisation of instruction							Personnel management						
		In full autonomy	After consultation with other bodies in the educational system	Within framework set by a higher authority	Other	Total, excluding "in consultation"	Decisions taken at other levels in consultation with schools	Total, including "in consultation"	In full autonomy	After consultation with other bodies in the educational system	Within framework set by a higher authority	Other	Total, excluding "in consultation"	Decisions taken at other levels in consultation with schools	Total, including "in consultation"
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD countries	Australia	44	n	44	n	**89**	n	**89**	n	n	42	n	**42**	n	**42**
	Austria	11	n	78	n	**89**	n	**89**	n	n	4	n	**4**	n	**4**
	Belgium (Fl.)	78	n	11	n	**89**	n	**89**	42	n	33	n	**75**	n	**75**
	Belgium (Fr.)	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Canada	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Czech Republic	11	n	78	n	**89**	n	**89**	n	n	75	n	**75**	n	**75**
	Denmark	33	n	56	n	**89**	n	**89**	42	n	n	n	**42**	8	**50**
	England	78	11	11	n	**100**	n	**100**	63	4	17	n	**83**	n	**83**
	Finland	56		11	n	**67**	n	**67**	17		4	n	**21**	8	**29**
	France	67	11	n	n	**78**	n	**78**	8	4	n	n	**13**	n	**13**
	Germany	13	n	75	n	**88**	n	**88**	4	n	4	n	**8**	21	**29**
	Greece	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Hungary	56	n	33	11	**100**	n	**100**	46	n	13	n	**58**	4	**63**
	Iceland	44	11	11	11	**78**	n	**78**	25	8	n	n	**33**	n	**33**
	Ireland	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Italy	67	n	22	n	**89**	n	**89**	25	n	8	n	**33**	n	**33**
	Japan	33	n	n	22	**56**	n	**56**	n	n	n	n	**n**	21	**21**
	Korea	78	n	n	n	**78**	n	**78**	25	n	17	n	**42**	n	**42**
	Luxembourg	n	22	33	n	**56**	n	**56**	n	8	4	n	**13**	33	**46**
	Mexico	44	22	n	n	**67**	n	**67**	n	n	n	n	**n**	n	**n**
	Netherlands	89	n	n	n	**89**	n	**89**	63	n	n	25	**88**	n	**88**
	New Zealand	89	n	11	n	**100**	n	**100**	38	n	46	n	**83**	n	**83**
	Norway	38	n	25	n	**63**	n	**63**	46	n		n	**46**	n	**46**
	Poland	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Portugal	11	n	78	n	**89**	n	**89**	n	n	33	n	**33**	n	**33**
	Scotland	44	33	11	n	**89**	n	**89**	n	n	n	n	**n**	13	**13**
	Spain	11	n	78	n	**89**	n	**89**	n	25	13	n	**38**	n	**38**
	Sweden	78	n	11	n	**89**	n	**89**	58	n	8	n	**67**	n	**67**
	Switzerland	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Turkey	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	United States	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
Partner countries	Brazil	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Chile	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Estonia	22	n	67	n	**89**	n	**89**	25	n	50	n	**75**	n	**75**
	Israel	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Russian Federation	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Slovenia	33	n	56	n	**89**	n	**89**	4	4	58	n	**67**	n	**67**

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

StatLink http://dx.doi.org/10.1787/402350028873

Table D6.4b.

Percentage of decisions taken at the school level in public lower secondary education, by mode of decision making and domain (2007)

		Planning and structures							Resources						
		In full autonomy	After consultation with other bodies in the educational system	Within framework set by a higher authority	Other	Total, excluding "in consultation"	Decisions taken at other levels in consultation with schools	Total, including "in consultation"	In full autonomy	After consultation with other bodies in the educational system	Within framework set by a higher authority	Other	Total, excluding "in consultation"	Decisions taken at other levels in consultation with schools	Total, including "in consultation"
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD countries	Australia	n	n	29	n	**29**	n	**29**	n	n	17	n	**17**	13	**29**
	Austria	n	10	n	n	**10**	n	**10**	n	17	n	n	**17**	17	**33**
	Belgium (Fl.)	43	n	29	n	**71**	n	**71**	33	n	17	n	**50**	n	**50**
	Belgium (Fr.)	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Canada	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Czech Republic	n	n	50	n	**50**	n	**50**	13	n	17	n	**29**	n	**29**
	Denmark	n	n	n	n	**n**	14	**14**	n	17	17	n	**33**	54	**88**
	England	20	n	60	n	**80**	n	**80**	33	n	67	n	**100**	n	**100**
	Finland	n	n	n	n	**n**	n	**n**	n	n	n	n	**n**	58	**58**
	France	n	8	25	n	**33**	17	**50**	33	n	n	n	**33**	17	**50**
	Germany	n	n	14	n	**14**	n	**14**	17	n	n	n	**17**	46	**63**
	Greece	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Hungary	17	17	50	n	**83**	n	**83**	33	n	n	n	**33**	n	**33**
	Iceland	n	n	n	n	**n**	n	**n**	17	29	n	n	**46**	n	**46**
	Ireland	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Italy	n	n	14	n	**14**	n	**14**	50	n	n	n	**50**	n	**50**
	Japan	n	n	n	30	**30**	n	**30**	n	n	n	n	**n**	n	**n**
	Korea	n	n	25	n	**25**	n	**25**	17	n	33	n	**50**	n	**50**
	Luxembourg	n	n	29	n	**29**	43	**71**	n	n	33	n	**33**	67	**100**
	Mexico	n	14		n	**14**	n	**14**	n	n	n	n	**n**	n	
	Netherlands	n	n	100	n	**100**	n	**100**	100	n	n	n	**100**	n	**100**
	New Zealand	40	n	20	n	**60**	40	**100**	17	17	29	n	**63**	n	**63**
	Norway	n	n	n	n	**n**	n	**n**	33	n	n	n	**33**	n	**33**
	Poland	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Portugal	n	n	n	n	**n**	n	**n**	17	n	33	n	**50**	n	**50**
	Scotland	n	n	14	n	**14**	43	**57**	n	17	n	n	**17**	25	**42**
	Spain	n	n	n	n	**n**	n	**n**	n	n	17	n	**17**	33	**50**
	Sweden	n	n	n	n	**n**	n	**n**	33	n	n	n	**33**	n	**33**
	Switzerland	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Turkey	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	United States	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
Partner countries	Brazil	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Chile	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Estonia	n	n	50	n	**50**	n	**50**	33	n	17	n	**50**	n	**50**
	Israel	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Russian Federation	m	m	m	m	**m**	m	**m**	m	m	m	m	**m**	m	**m**
	Slovenia	n	n	n	n	**n**	n	**n**	n	58	17	n	**75**	n	**75**

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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Table D6.5.

Level of government at which different types of decisions about curriculum are taken in public lower secondary education (2007)

OECD countries

	Choice of textbooks	Design of programmes	Selection of programmes offered	Range of subjects taught	Definition of course content
Australia	**School** Autonomous	**School** Framework at State level	**School** Framework at State level	**School** Framework at State level	**State** Autonomous
Austria	**School** Framework at Central level	**Central** Consultation with State level	**School** Consultation with State level	**Central** Consultation with State level	**Central** Consultation with State level
Belgium (Fl.)	**School** Autonomous	**State** Autonomous	**School** Framework at State level	**School** Framework at State level	**School** Framework at State level
Belgium (Fr.)	m	m	m	m	m
Canada	m	m	m	m	m
Czech Republic	**School** Framework at Central level	**School** Framework at Central level	**School** Framework at Central level	**Central** Autonomous	**School** Framework at Central level
Denmark	**School** Autonomous	**Central** Autonomous	**Local** Framework at Central level	**Central** Autonomous	**Local** Consultation with School
England	**School** Autonomous	**School** Framework at Central level	**School** Framework at Central level	**School** Framework at Central level	**School** Framework at Central level
Finland	**Local** Autonomous	**Local** Framework at Central level	**Local** Framework at Central level	**Local** Framework at Central level	**Local** Framework at Central level
France	**School** Autonomous	**Central** Consultation with School	**School** Consultation with sub-regional level	**School** Framework at regional level	**School** Framework at Central level
Germany	**School** Framework at State level	**State** Autonomous	**State** Autonomous	**State** Autonomous	**State** Autonomous
Greece	m	m	m	m	m
Hungary	**School** Framework at Central level	**School** Framework at Central level	**School** Autonomous	**School** Autonomous	**School** Framework at Central level
Iceland	**School** Other	**Central** Autonomous	**School** Other	**Central** Autonomous	**Central** Autonomous
Ireland	m	m	m	m	m
Italy	**School** Framework at Central level	**Central** Autonomous	**Central** Autonomous	**Central** Autonomous	**Central** Autonomous
Japan	**Local** Other	**Central** Autonomous	**Central** Autonomous	**School** Other	**School** Other
Korea	**School** Autonomous	Regional Framework at Central level	Regional Framework at regional level	Regional Framework at Central level	**School** Framework at regional level
Luxembourg	**Central** Autonomous	**Central** Consultation with School	**Central** Consultation with School	**Central** Consultation with School	**School** Framework at Central level
Mexico	**Central** Autonomous	**State** Framework at Central level	**Central** Consultation with State level	**Central** Autonomous	**Central** Autonomous
Netherlands	**School** Autonomous	**School** Framework at **Central** level	**School** Framework at **Central** level	**School** Framework at **Central** level	**School** Framework at **Central** level
New Zealand	**School** Autonomous	**School** Framework at Central level	**School** Autonomous	**School** Autonomous	**School** Autonomous

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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Table D6.5. *(continued)*

Level of government at which different types of decisions about curriculum are taken in public lower secondary education (2007)

	Choice of textbooks	Design of programmes	Selection of programmes offered	Range of subjects taught	Definition of course content
Norway	**School** Autonomous	**Central** Autonomous	**Central** Autonomous	**Central** Autonomous	**Central** Autonomous
Poland	m	m	m	m	m
Portugal	**School** Framework at central level	**Central** Autonomous	**Central** Autonomous	**Central** Autonomous	**Central** Autonomous
Scotland	**School** Autonomous	**Local** Framework at central level	**School** Framework at central level	**School** Framework at central level	**Central** Consultation with school
Slovak Republic	m	m	m	m	m
Spain	**School** Framework at state level	**State** Framework at central level	**Central** Autonomous	**State** Framework at central level	**State** Consultation with central level
Sweden	**School** Autonomous	**Central** Autonomous	**Local** Autonomous	**Central** Autonomous	**Central** Autonomous
Poland	m	m	m	m	m
Switzerland	m	m	m	m	m
Turkey	m	m	m	m	m
United States	m	m	m	m	m
Brazil	m	m	m	m	m
Chile	m	m	m	m	m
Estonia	**School** Framework at central level	**Local** Framework at central level	**Local** Framework at central level	**School** Framework at central level	**School** Framework at central level
Israel	m	m	m	m	m
Russian Federation	m	m	m	m	m
Slovenia	**School** Framework at central level	**Central** Autonomous	**Central** Autonomous	**Central** Autonomous	**Central** Autonomous

Partner countries

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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D6

Table D6.6.

Percentage of decisions taken at each level of government in public lower secondary education (2007, 2003 and difference)

		2007							2003							Difference 2007 with 2003					
		Central	State	Provincial/ regional	Sub-regional	Local	School	Total	Central	State	Provincial/ regional	Sub-regional	Local	School	Total	Central	State	Provincial/ regional	Sub-regional	Local	School
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OECD countries	Australia	n	56	n	n	n	44	**100**	n	76	n	n	n	24	**100**	n	-20	n	n	n	20
	Austria	27	22	n	n	22	30	**100**	27	22	n	n	23	29	**100**	n	n	n	n	-1	1
	Belgium (Fl.)	n	29	n	n	n	71	**100**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Belgium (Fr.)	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Czech Republic	6	n	n	n	33	61	**100**	7	n	1	n	32	60	**100**	n	n	-1	n	1	n
	Denmark	19	n	n	n	40	41	**100**	19	n	n	n	38	44	**100**	n	n	n	n	3	-3
	England	4	n	n	n	5	91	**100**	11	n	n	n	4	85	**100**	-7	n	n	n	1	6
	Finland	2	n	n	n	76	22	**100**	2	n	n	n	71	27	**100**	n	n	n	n	5	-5
	France	27	n	6	28	n	39	**100**	24	n	10	35	n	31	**100**	3	n	-4	-7	n	8
	Germany	4	31	17	n	18	30	**100**	4	30	17		17	32	**100**	n	1	n	n	n	-2
	Greece	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Hungary	4	n	n	n	27	69	**100**	4	n	n	n	29	68	**100**	1	n	n	n	-1	1
	Iceland	23	n	n	n	37	40	**100**	25	n	n	n	50	25	**100**	-2	n	n	n	-13	15
	Ireland	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Italy	31	n	16	n	6	47	**100**	23	n	16	n	15	46	**100**	8	n	n	n	-8	n
	Japan	13	n	21	n	45	21	**100**	13	n	21	n	44	23	**100**	n	n	n	n	2	-2
	Korea	7	n	36	n	8	49	**100**	9	n	34	n	8	48	**100**	-2	n	2	n	n	1
	Luxembourg	68	n	n	n	n	32	**100**	66	n	n	n	n	34	**100**	2	n	n	n	n	-2
	Mexico	30	48	2	n	n	20	**100**	30	45	2	n	n	22	**100**	n	3	n	n	n	-2
	Netherlands	6	n	n	n	n	94	**100**	4	n	n	n	n	96	**100**	2	n	n	n	n	-2
	New Zealand	24	n	n	n	n	76	**100**	25	n	n	n	n	75	**100**	-1	n	n	n	n	1
	Norway	25	n	n	n	40	35	**100**	32	n	n	n	32	37	**100**	-7	n	n	n	8	-1
	Poland	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Portugal	57	n	n	n	n	43	**100**	50	n	8	n	n	41	**100**	6	n	-8	n	n	2
	Scotland	17	n	n	n	53	30	**100**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Spain	9	42	10	n	3	36	**100**	n	57	15	n	n	28	**100**	9	-15	-4	n	3	8
	Sweden	18	n	n	n	35	47	**100**	18	n	n	n	36	47	**100**	m	m	m	m	m	m
	Switzerland	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Turkey	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	United States	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
Partner countries	Brazil	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Estonia	4	n	n	n	30	66	**100**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Israel	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	**m**	m	m	m	m	m	m	**m**	m	m	m	m	m	m
	Slovenia	38	n	n	n	4	58	**100**	m	m	m	m	m	m	**m**	m	m	m	m	m	m

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag2008*).

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

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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 and 2000 data, both the OECD average and OECD total are calculated for countries providing 1995, 2000 and 2005 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/eag2008* 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/eag2008* 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/eag2008*.

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 Glance 2008* 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
AUT	Austria
BEL	Belgium
BFL	Belgium (Flemish Community)
BFR	Belgium (French Community)
BRA	Brazil
CAN	Canada
CHL	Chile
CZE	Czech Republic
DNK	Denmark
ENG	England
EST	Estonia
FIN	Finland
FRA	France
DEU	Germany
GRC	Greece
HUN	Hungary
ISL	Iceland
IRL	Ireland
ISR	Israel
ITA	Italy
JPN	Japan
KOR	Korea
LUX	Luxembourg
MEX	Mexico
NLD	Netherlands
NZL	New Zealand
NOR	Norway
POL	Poland
PRT	Portugal
RUS	Russian Federation
SCO	Scotland
SVK	Slovak Republic
SVN	Slovenia
ESP	Spain
SWE	Sweden
CHE	Switzerland
TUR	Turkey
UKM	United Kingdom
USA	United States

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