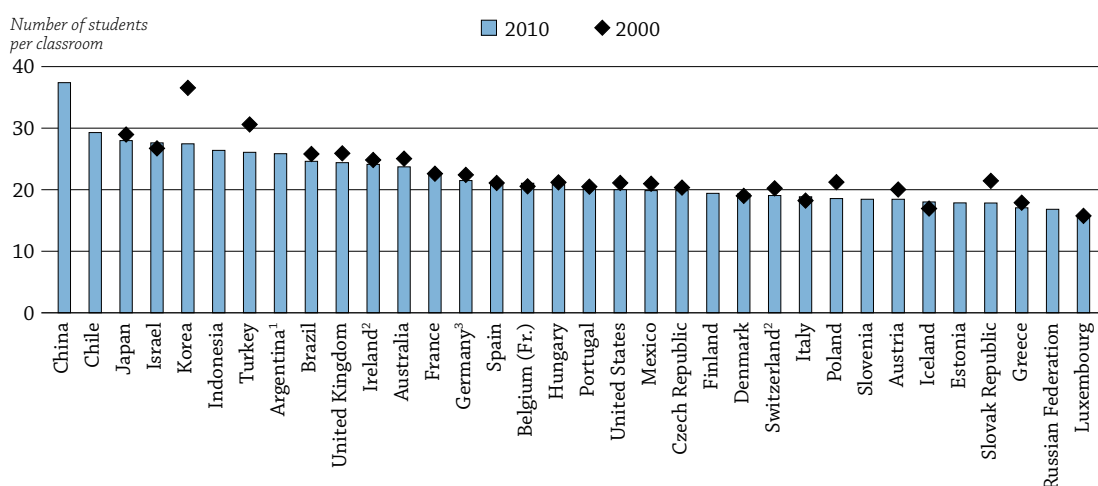


WHAT IS THE STUDENT-TEACHER RATIO AND HOW BIG ARE CLASSES?

- The average class in primary education in OECD countries has more than 21 students, but classes are usually larger in other G20 countries. Among all countries with available data, the number of students per class varies from more than 29 in Chile and China to nearly half that number in Luxembourg and the Russian Federation.
- In more than two-thirds of the countries with comparable data for 2000 and 2010, classes have tended to become smaller in primary education, most notably in countries that had relatively large classes in 2000, such as Korea and Turkey.
- On average in OECD countries, the number of students per class grows by two or more between primary and lower secondary education. In lower secondary education, the average class in OECD countries has about 23 students.

Chart D2.1. Average class size in primary education (2000, 2010)



1. Year of reference 2009 instead of 2010.

2. Public institutions only.

3. Years of reference 2001 and 2010.

Countries are ranked in descending order of average class size in primary education in 2010.

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). 2010 data: Table D2.1. 2000 data: Table D2.5 available on line. See Annex 3 for notes (www.oecd.org/edu/eag2012).

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Context

Class size and student-teacher ratios are much-discussed aspects of education 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. Together with teachers' salaries (see Indicator D3) and the age distribution of teachers (see Indicator D5), class size and student-teacher ratios also have a considerable impact on the level of current expenditure on education (see Indicators B6 and B7).

Smaller classes are often perceived as allowing teachers to focus more on the needs of individual students and reducing the amount of class time needed to deal with disruptions. Yet, while there is some evidence that smaller classes may benefit specific groups of students, such as those from

disadvantaged backgrounds (Krueger, 2002), overall the evidence of the effects of differences in class size on student performance is weak. There is more evidence to support a positive relationship between smaller class size and aspects of teachers' working conditions and outcomes (e.g. allowing for greater flexibility for innovation in the classroom, improved teacher morale and job satisfaction) (Hattie, 2009; OECD, 2009).

The ratio of students to teaching staff indicates how resources for education are allocated. Smaller student-teacher ratios often have to be weighed 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. As larger numbers of children with special needs are integrated into mainstream classes, more use of specialised personnel and support services may limit the resources available for reducing student-teacher ratios.

■ Other findings

- In 21 of the 26 countries with available data, **the student-teacher ratio decreases between the primary level and the lower secondary level, despite a general increase in class size between these levels** (in all countries with available data except one). This decrease in the student-teacher ratio reflects differences in annual instruction time for students, which tends to increase with the level of education.
- On average in OECD countries, the **availability of teaching resources relative to the number of students in secondary education is slightly more favourable in private than in public institutions**. This is most striking in Mexico where, at the secondary level, there are nearly 17 more students per teacher in public than in private institutions. On average across OECD countries, there is at most one student more per class in public than in private institutions at the primary and lower secondary levels.
- On average among countries with available data, **non-instructional staff represent slightly more than one-quarter of the total education personnel in primary, secondary and post-secondary non-tertiary schools, and more than one-third of the total staff at the tertiary level**. There are more than 10 more education personnel per 1 000 students in tertiary education than at the primary, secondary and post-secondary non-tertiary levels of education.

■ Trends

From 2000 to 2010, the average class size in countries with available data for both years decreased by one student at both the primary and lower secondary levels, and the range of class size among OECD countries narrowed. At the lower secondary level, for example, class size ranged from 17.4 students (Iceland) to 38.5 (Korea) in 2000 and from 19.4 students (Luxembourg and the United Kingdom) to 34.7 (Korea) in 2010. However, class size has tended to increase in some countries that had relatively small classes in 2000, most notably in Iceland.

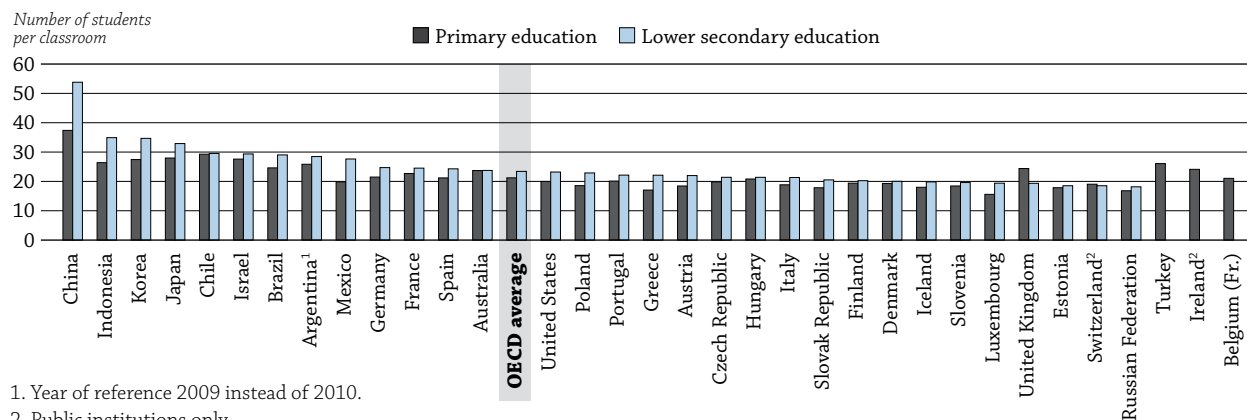
Analysis

Average class size in primary and lower secondary education

The average primary class in OECD countries had more than 21 students in 2010. When considering all countries with available data, that number varies widely and ranges from fewer than 17 in Luxembourg and the Russian Federation to more than 29 in Chile and China. There are fewer than 20 students per primary classroom in nearly half of the countries with available data: Austria, the Czech Republic, Denmark, Estonia, Finland, Greece, Iceland, Italy, Luxembourg, Mexico, Poland, the Russian Federation, the Slovak Republic, Slovenia and Switzerland (public institutions). At the lower secondary level, in general programmes, the average class in OECD countries has more than 23 students (in one-quarter of OECD countries, lower secondary schools have between 22 and 25 students per class). Among all countries with available data, that number varies from 20 or fewer in Denmark, Estonia, Finland, Iceland, Luxembourg, the Russian Federation, Slovenia, Switzerland (public institutions) and the United Kingdom to more than 34 students per class in Indonesia and Korea, and to over 50 in China (Table D2.1).

The number of students per class tends to increase between primary and lower secondary education. In Brazil, China, Greece, Indonesia, Japan, Korea, Mexico and Poland, the increase in average class size exceeds four students. Meanwhile, the United Kingdom and, to a lesser extent, Switzerland (public institutions only) show a drop in the number of students per class between these two levels of education (Chart D2.2).

Chart D2.2. Average class size in educational institutions, by level of education (2010)



1. Year of reference 2009 instead of 2010.

2. Public institutions only.

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

Source: OECD. Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). Table D2.1. See Annex 3 for notes (www.oecd.org/edu/eag2012).

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The size of the average primary school class decreased slightly between 2000 and 2010 in countries with available data in both years (21.4 students per class in 2010 as compared to 22.5 in 2000), and this partially results from the fact that some countries implemented reforms on class size during that period (see Indicator B7). However, among countries with comparable data, class size decreased, and most notably (by more than four students) in countries that had larger classes in 2000, such as Korea and Turkey. Class size increased or was unchanged in countries that had the smallest classes in 2000, such as Denmark, Iceland, Italy and Luxembourg (Chart D2.1). In lower secondary school, the gap between the smallest and largest classes narrowed between 2000 and 2010: among countries with comparable data for both years, class size varied from 17.4 students (Iceland) to 38.5 (Korea) in 2000 and from 19.4 students (Luxembourg and the United Kingdom) to 34.7 (Korea) in 2010 (Table D2.1 and Table D2.4, available on line).

The indicator on class size is limited to primary and lower secondary education because class size is difficult to define and compare at higher levels, where students often attend several different classes, depending on the subject area.

Student-teacher ratios

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

Box D2.1. Relationship between class size and student-teacher ratio

The number of students per class is calculated 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 amount of instruction time compared to the length of teachers' working days, the proportion of time teachers spend teaching, and how students are grouped within classes and team teaching arrangements.

For example, in a school of 48 full-time students and 8 full-time teachers, the student-teacher ratio is 6 to 1. If teachers' work week is estimated to be 35 hours, including 10 hours teaching, and if instruction time for each student is 40 hours per week, then regardless of how students are grouped in the 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.

Using a different approach, the class size presented in Table D2.1 is defined as the number of students who are following a common course of study, based on the highest number of common courses (usually compulsory studies), excluding teaching in subgroups. Thus, the estimated class size will be close to the average class size of Table D2.1 where teaching in subgroups is less frequent, such as in primary and lower secondary education.

Because of these definitions, similar student-teacher ratios between countries can result in different class sizes. For example, at the primary level, the Czech Republic and Japan have similar ratio of student to teaching staff (18.7 in the Czech Republic and 18.4 in Japan – Table D2.2), but the average class size differs substantially (19.9 in the Czech Republic and 28.0 in Japan – Table D2.1). The explanation may lie in the higher number of instruction time in Japan (Table D1.1) and less teaching time for teachers in Japan (707 hours in Japan compared with 862 in the Czech Republic – Table D4.1).

At the primary level, there are 16 students for every teacher, on average in OECD countries. The student-teacher ratio ranges from more than 23 students per teacher in Brazil, Chile, Mexico and South Africa, to fewer than 11 in Hungary, Luxembourg, Norway, Poland and Portugal (Chart D2.3).

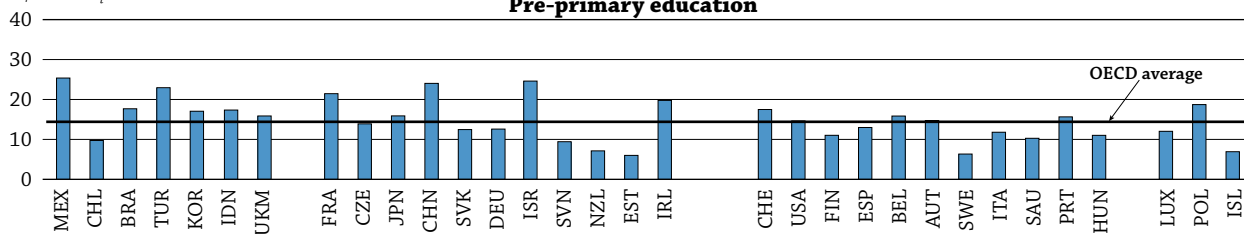
Student-teacher ratios also vary, and to a larger extent, at the secondary school level, ranging from 30 students per full-time equivalent teacher in Mexico to fewer than 11 in Austria, Belgium, Iceland, Luxembourg, Norway, Portugal, Saudi Arabia and Spain. On average among OECD countries, there are about 14 students per teacher at the secondary level (Table D2.2).

As the differences in student-teacher ratios indicate, there are fewer full-time equivalent students per full-time equivalent teachers at the secondary level than at the primary level of education. In most countries, the student-teacher ratio decreases between primary and lower secondary school, despite an increase in class size. This is true in all but five OECD countries: Chile, Italy, Mexico, Poland and the United Kingdom.

Chart D2.3. Ratio of students to teaching staff in educational institutions, by level of education (2010)

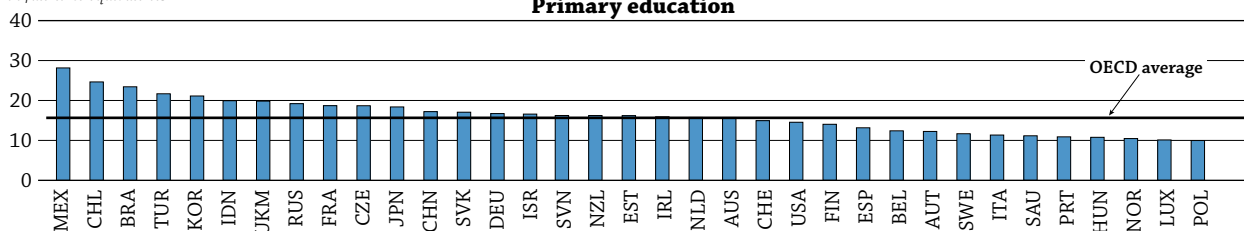
Number of students per teacher
in full-time equivalents

Pre-primary education



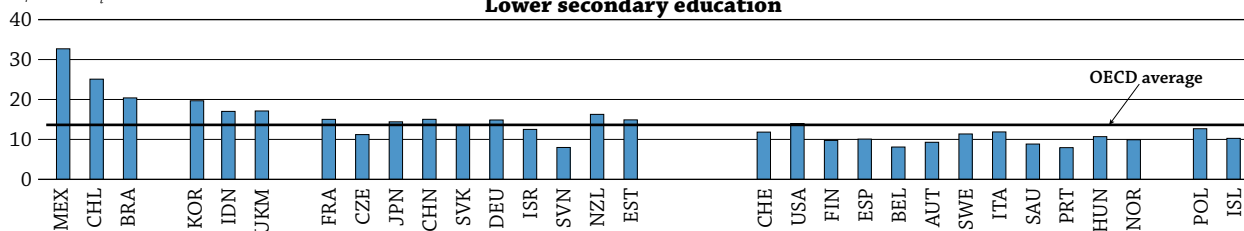
Number of students per teacher
in full-time equivalents

Primary education



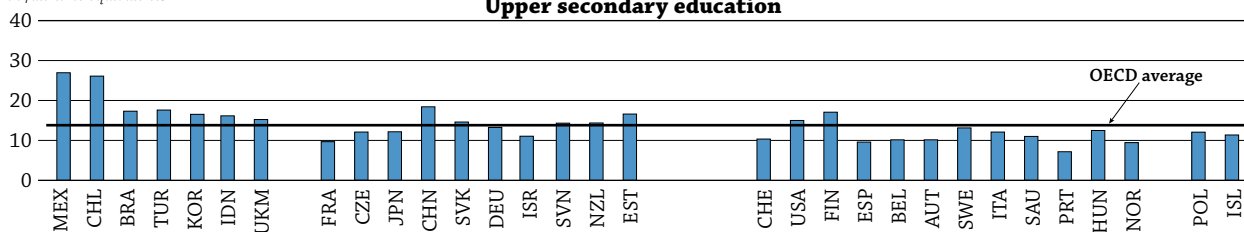
Number of students per teacher
in full-time equivalents

Lower secondary education



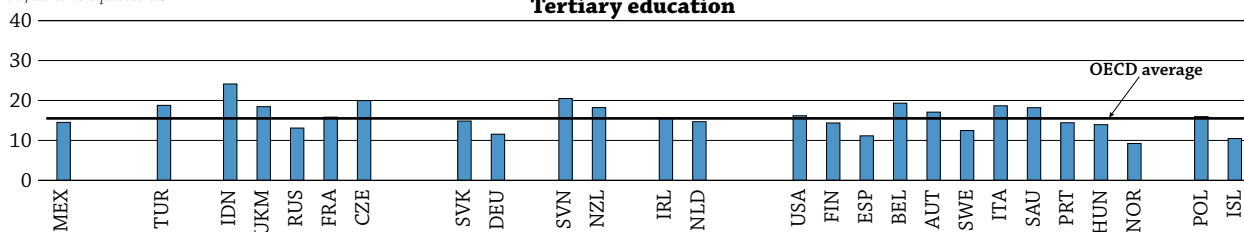
Number of students per teacher
in full-time equivalents

Upper secondary education



Number of students per teacher
in full-time equivalents

Tertiary education



Countries are ranked in descending order of students to teaching staff ratios in primary education.

Source: OECD. China, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). Saudi Arabia: UNESCO Institute for Statistics and Observatory on Higher Education. Table D2.2. See Annex 3 for notes (www.oecd.org/edu/eag2012).

Please refer to the Reader's Guide for list of country codes for country names used in this chart.

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This reduction in the student-teacher ratio reflects differences in annual instruction time, which tends to increase with the level of education (see Indicator D1). 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 of education (the number of teaching hours tends to decrease with the level of education, as teacher specialisation increases). The general trend is consistent among countries, but evidence is mixed as to whether smaller student-teacher ratios are more desirable from an educational perspective at higher levels of education.

For the pre-primary level (see also Indicator C2), Table D2.2 shows the ratio of student to teaching staff and also the ratio of students to contact staff (teachers and teachers' aides). Some countries make extensive use of teachers' aides at the pre-primary level. Fifteen countries reported smaller ratios of students to contact staff (Column 1 of Table D2.2) than of students to teaching staff. However, few countries have large numbers of teachers' aides. As a result, the ratios of students to contact staff are substantially lower than the ratios of students to teaching staff (at least two fewer pupils) in Austria, Brazil, China, France, Germany, Ireland, Israel and the United States. The difference is particularly large in Ireland and Israel, where there are at least 10 fewer pupils per contact staff than per teaching staff.

At the tertiary level, the student-teacher ratio ranges from 20 or more students per teacher in the Czech Republic, Indonesia, Slovenia and South Africa to fewer than 11 in Iceland and Norway (Table D2.2). However, comparisons at this level should be made with caution since it is difficult to calculate full-time equivalent students and teachers on a comparable basis. In 6 of the 12 countries with comparable data at the tertiary level, the ratio of students to teaching staff is lower in more vocationally-oriented programmes (tertiary-type B) than in academic (tertiary-type A) and advanced research programmes. Turkey is the only country with a significantly higher student-teacher ratio in vocational programmes at the tertiary level (Table D2.2).

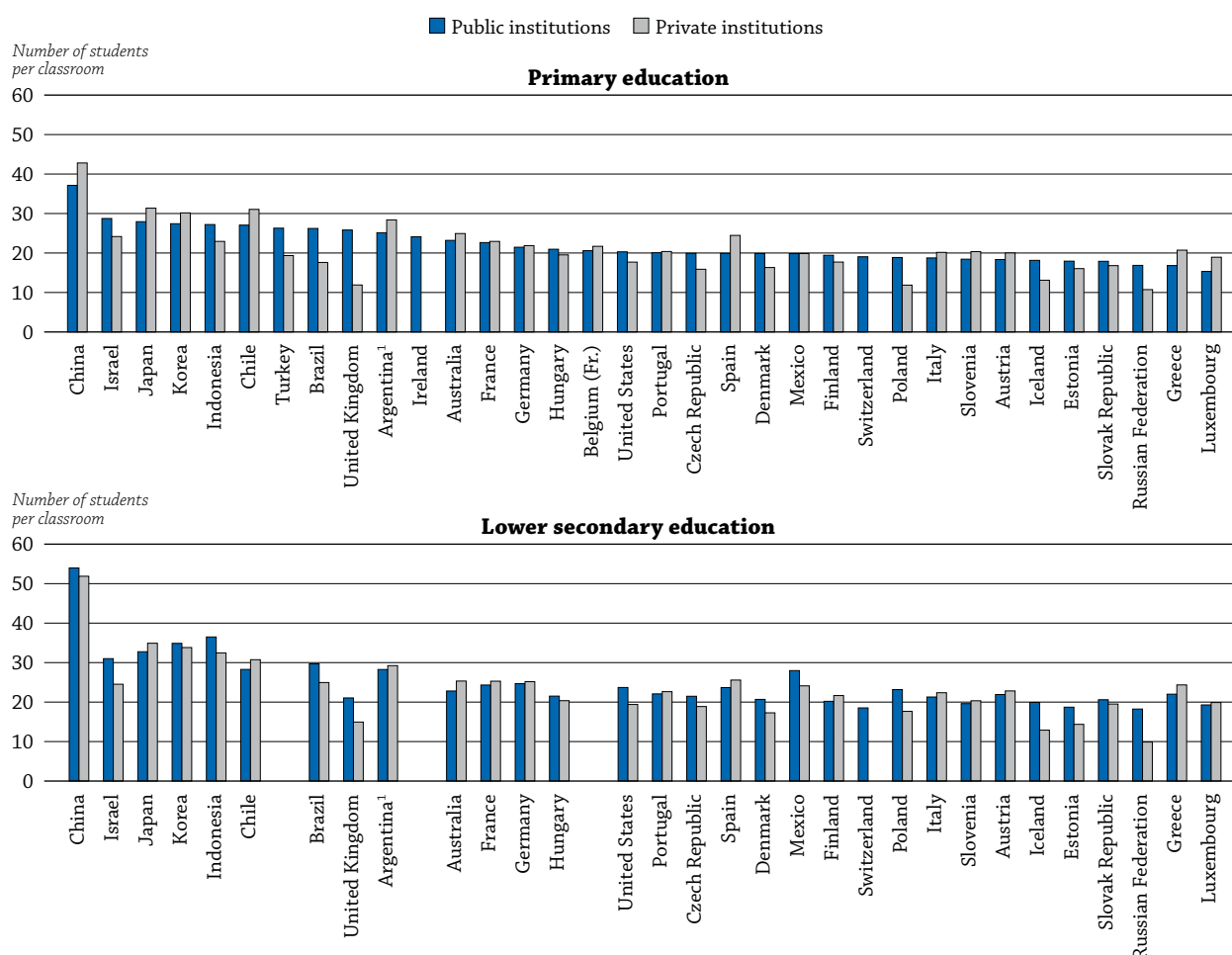
Teaching resources in public and private institutions

Countries encourage and provide resources to both public and private schools for various reasons. One is to broaden the choices of schooling available to students and their families. Class size is one factor that parents may consider when deciding on a school for their children, and the difference in average class size between public and private schools (and between different type of private institutions) could influence enrolment.

Among countries for which data are available, average class size does not differ between public and private institutions by more than one student per class for both primary and lower secondary education (Chart D2.4 and Table D2.1). However, there are marked differences among countries. For example, at the primary level, in Brazil, the Czech Republic, Iceland, Indonesia, Israel, Poland, the Russian Federation, Turkey and the United Kingdom, average class size in public institutions is larger by four or more students per class. However, with the exception of Brazil and Indonesia, the private sector is relatively small in all of these countries, representing at most 5% of students at the primary level (see Table C1.4). In contrast, average class size in private institutions is larger than that in public institutions by four or more students in China and in Spain, where more than 30% of pupils are enrolled in private institutions.

The comparison of class size between public and private institutions shows a mixed picture at the lower secondary level, where private institutions are more prevalent. The average class size in lower secondary schools is larger in private institutions than in public institutions in 13 OECD countries, although differences tend to be smaller than in primary education.


In countries where private institutions are more prevalent at the primary and lower secondary levels (i.e. countries where more than 10% of students at these levels are enrolled in private institutions), such as Argentina, Australia, Belgium (French Community), Brazil, Chile, Denmark, France, Indonesia, Portugal and Spain, there may be large differences in class size between public and private institutions. However, where these differences are large (a difference of four students or more at both levels in Brazil and Indonesia, and at the primary level only in Argentina, Chile and Spain), private institutions tend to have more students per class than public schools, except in Brazil and Indonesia (see Tables C1.4 and D2.1). This suggests that in countries in which a substantial proportion of students and families choose private schools, class size is not a determining factor in their decision.

Chart D2.4. Average class size in public and private institutions, by level of education (2010)

1. Year of reference 2009 instead of 2010.

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

Source: OECD, Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). Table D2.1. See Annex 3 for notes (www.oecd.org/edu/eag2012).

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Comparing the number of student to teaching staff shows a similar picture. On average among countries for which data are available, ratios of students to teaching staff are slightly lower in private institutions than in public institutions at the lower secondary and combined lower and upper secondary levels, but not at the upper secondary level alone (Table D2.3). The largest differences between public and private institutions are in Brazil and Mexico where, at the lower secondary level, there are at least nine more students per teacher in public institutions than in private institutions. At the upper secondary level in Mexico, the difference between student-teacher ratios in public and private institutions is even larger than at the lower secondary level.

However, in some countries, the student-teacher ratio is lower in public institutions than in private institutions. This is most pronounced at the lower secondary level in Spain, which has some 15 students per teacher in private institutions, but fewer than 9 students per teacher in public institutions.

Teaching staff and non-teaching staff employed in education

The size of the teaching staff has an impact on the training of children and students, and also on expenditure on educational institutions (expenditure on compensation of teachers). However expenditure is also dependent on the size of the non-teaching staff in the education sector. There are significant differences in

the distribution of education staff between teaching and other categories among countries with available data, reflecting differences among countries in the organisation and management of schooling. These differences reflect the numbers of staff that countries employ in non-teaching capacities, e.g. principals without teaching responsibilities, guidance counsellors, school nurses, librarians, researchers without teaching responsibilities, bus drivers, janitors and maintenance workers, and administrative and management personnel both inside and outside the school.

At the primary, secondary and post-secondary non-tertiary levels of education, among the 12 OECD countries reporting data for the different categories, the teaching and non-teaching staff employed in primary and secondary schools ranges from about 90 people or fewer per 1 000 students enrolled in Japan and Mexico to 125 or more per 1 000 students in the Czech Republic, Italy and the United States, and exceeds 150 people per 1 000 students in Iceland.

Among these 12 countries for which data are available for the different categories of personnel employed in education, non-instructional staff (staff other than teaching staff, teachers' aides and research assistants) represents on average slightly more than one-quarter of the total education personnel in primary, secondary and post-secondary non-tertiary schools. In five of these countries (the Czech Republic, Iceland, Italy, Mexico and the United States), such staff represents between 30% and 40% of total education personnel; in Chile, this proportion reaches 60% (Table D2.4a). However, in some countries (e.g. Chile, the Czech Republic and Mexico) large shares of non-instructional staff are not necessarily associated with higher-than-average expenditure per student; expenditure per student in these countries is below the OECD average (Table B1.2). This implies that the salary levels for the different categories are low enough to counterbalance the larger proportion of non-teaching staff within the total number of education personnel.

In Hungary, Iceland and Italy, maintenance and operations personnel working in primary, secondary and post-secondary non-tertiary schools represent at least 20 people per 1 000 students enrolled in these schools. Administrative personnel represent 10 people or fewer per 1 000 students enrolled in primary, secondary and post-secondary non-tertiary schools in Chile, France, Hungary, Iceland, Japan, Mexico, Slovenia, the United Kingdom and the United States, and 20 people or more per 1 000 students in Australia and the Czech Republic. In contrast, staff employed in school and higher-level management exceeds 6 people per 1 000 students in Mexico, Norway, the Slovak Republic, Slovenia, the United Kingdom and the United States, and 10 per 1 000 students in Iceland (Table D2.4a). Finally, people employed to provide professional support for students are relatively numerous in Chile, Italy, Slovenia, the United Kingdom and the United States, where there are about 10 per 1 000 students enrolled in these levels.

At the tertiary level of education, there are also significant differences in the distribution of education staff among instructional and other categories of personnel in the nine OECD countries for which data are available. Education staff varies from fewer than 85 people per 1 000 students in France to 160 or more per 1 000 students in Hungary. Compared to the primary, secondary and post-secondary non-tertiary levels of education, there are more than 10 more teaching and non-teaching staff per 1 000 students in tertiary education, on average among the eight countries with available data for the different levels of education.

In tertiary education, non-instructional staff represents an average of nearly 40% of total education personnel, among countries with available data for the different categories. In most of these countries, non-teaching staff represents between 25% and 40% of total staff, but exceeds 50% in Hungary and the United Kingdom (Table D2.4b). In the United Kingdom, this is attributed to the larger proportions of management personnel in comparison to other countries.

Definitions

Instructional personnel (teaching staff) includes two categories:

- **Teachers' aides and teaching/research assistants** include non-professional personnel or students who support teachers in providing instruction to students.

- **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.

Non-instructional personnel comprises four categories.

- **Maintenance and operations personnel** include personnel who support the maintenance and operation of schools, the transportation of students to and from school, school security and catering. This category includes the following types of personnel: masons, carpenters, electricians, maintenance staff, repairers, painters and paperhangers, plasterers, plumbers and vehicle mechanics. It also includes bus drivers and other vehicle operators, construction workers, gardeners and grounds staff, bus monitors and crossing guards, cooks, custodians, food servers and others with similar functions.
- **Professional support for students** includes professional staff who provide services to students that support their learning. In many cases, these staff originally qualified as teachers but then moved into other professional positions within the education system. This category also includes all personnel employed in education systems who provide health and social support services to students, such as guidance counsellors, librarians, doctors, dentists, nurses, psychiatrists and psychologists, and other staff with similar responsibilities.
- **School and higher-level administrative personnel** includes all personnel who support the administration and management of schools and of higher levels of the education system. The category includes: receptionists, secretaries, typists and word processing staff, bookkeepers and clerks, analysts, computer programmers, network administrators, and others with similar functions and responsibilities.
- **School and higher-level management** includes professional personnel who are responsible for school management and administration and personnel whose primary responsibility is the quality control and management of higher levels of the education system. This category covers principals, assistant principals, headmasters, assistant headmasters, superintendents of schools, associate and assistant superintendents, commissioners of education and other management staff with similar responsibilities.

Methodology

Data refer to the academic year 2009-10 and are based on the UOE data collection on education statistics administered by the OECD in 2011 (for details see Annex 3 at www.oecd.org/edu/eag2012).

Calculations cover expenditure by public institutions or, where available, by both public and private institutions.

Class size is calculated by dividing the number of students enrolled by the number of classes. In order to ensure comparability among countries, special-needs programmes are 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** 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.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

References

Ehrenberg, R., et al. (2001), “Class Size and Student Achievement”, *Psychological Science in the Public Interest*, Vol. 2, No. 1, pp. 1-30.

Finn, J. (1998), *Class Size and Students at Risk: What is Known? What is Next?*, US Department of Education, Office of Educational Research and Improvement, National Institute on the Education of At-Risk Students, Washington, DC.

Hattie, J. (2009), *Visible Learning; A synthesis of over 800 Meta-analyses Relating to Achievement*, Routledge, London.

Krueger, A.B. (2002), “Economic Considerations and Class Size”, National Bureau of Economic Research Working Paper, No. 8875.

OECD (2009), *Creating Effective Teaching and Learning Environments: First Results from TALIS*, OECD Publishing.

Piketty, T. and M. Valdenaire (2006), *L'Impact de la taille des classes sur la réussite scolaire dans les écoles, collèges et lycées français : Estimations à partir du panel primaire 1997 et du panel secondaire 1995*, ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche, Direction de l'évaluation et de la prospective, Paris.

Notes on definitions and methodologies regarding this indicator for each country are presented in Annex 3 at www.oecd.org/edu/eag2012.

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

- **Table D2.5. Average class size, by type of institution and level of education (2000)**


StatLink  <http://dx.doi.org/10.1787/888932668071>

Table D2.1. **Average class size, by type of institution and level of education (2010)**

Calculations based on number of students and number of classes

		Primary education					Lower secondary education (general programmes)					
		Public institutions	Private institutions			Total: Public and private institutions	Public institutions	Private institutions			Total: Public and private institutions	
			Total private institutions	Government- dependent private institutions	Independent private institutions			Total private institutions	Government- dependent private institutions	Independent private institutions		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
OECD	Australia	23.2	24.9	24.9	a	23.7	22.8	25.3	25.3	a	23.7	
	Austria	18.4	20.0	x(2)	x(2)	18.4	21.9	22.8	x(7)	x(7)	22.0	
	Belgium	m	m	m	m	m	m	m	m	m	m	
	Belgium (Fr.)	20.6	21.7	21.7	m	21.0	m	m	m	m	m	
	Canada	m	m	m	m	m	m	m	m	m	m	
	Chile	27.1	31.1	32.5	23.7	29.3	28.3	30.7	31.9	24.7	29.5	
	Czech Republic	19.9	15.9	15.9	a	19.9	21.5	18.9	18.9	a	21.4	
	Denmark	19.9	16.3	16.3	a	19.3	20.7	17.3	17.3	a	20.0	
	Estonia	17.9	16.0	a	16.0	17.9	18.7	14.4	a	14.4	18.5	
	Finland	19.4	17.7	17.7	a	19.4	20.2	21.7	21.7	a	20.3	
	France	22.6	22.9	x(2)	x(2)	22.7	24.3	25.3	25.5	13.4	24.5	
	Germany	21.5	21.9	21.9	x(3)	21.5	24.7	25.2	25.2	x(8)	24.7	
	Greece	16.8	20.7	a	20.7	17.1	22.0	24.3	a	24.3	22.1	
	Hungary	21.0	19.5	19.5	a	20.8	21.5	20.4	20.4	a	21.4	
	Iceland	18.1	13.1	13.1	a	18.0	19.9	12.9	12.9	a	19.8	
	Ireland	24.1	m	a	m	m	m	m	a	m	m	
	Israel	28.7	24.2	24.2	a	27.6	31.0	24.5	24.5	a	29.4	
	Italy	18.8	20.2	a	20.2	18.8	21.3	22.4	a	22.4	21.3	
	Japan	27.9	31.4	a	31.4	28.0	32.8	34.9	a	34.9	32.9	
	Korea	27.4	30.2	a	30.2	27.5	34.9	33.8	33.8	a	34.7	
	Luxembourg	15.3	18.9	19.4	18.9	15.6	19.3	19.9	20.0	19.8	19.4	
	Mexico	19.9	19.9	a	19.9	19.9	28.0	24.1	a	24.1	27.6	
	Netherlands ¹	22.4	m	m	m	m	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	18.9	11.9	11.2	12.1	18.6	23.2	17.7	23.7	15.9	22.9	
	Portugal	20.1	20.4	23.5	19.3	20.1	22.1	22.6	23.4	21.5	22.1	
	Slovak Republic	17.9	16.8	16.8	n	17.8	20.6	19.5	19.5	n	20.5	
	Slovenia	18.4	20.4	20.4	n	18.4	19.6	20.3	20.3	n	19.6	
	Spain	19.9	24.5	24.5	24.3	21.2	23.7	25.6	25.8	23.9	24.3	
	Sweden	m	m	m	m	m	m	m	m	m	m	
	Switzerland	19.1	m	m	m	m	18.5	m	m	m	m	
	Turkey	26.3	19.4	a	19.4	26.1	a	a	a	a	a	
	United Kingdom	25.8	11.9	19.1	11.7	24.4	21.1	14.9	18.9	9.6	19.4	
	United States	20.3	17.7	a	17.7	20.0	23.7	19.4	a	19.4	23.2	
	OECD average		21.3	20.3	20.2	20.4	21.2	23.3	22.4	22.7	20.6	23.4
	EU21 average		20.0	18.8	19.0	18.2	19.8	21.9	21.2	21.7	18.9	21.8
Other G20	Argentina ²	25.1	28.4	29.7	24.1	25.8	28.3	29.2	30.0	26.7	28.5	
	Brazil	26.2	17.6	a	17.6	24.6	29.7	25.0	a	25.0	29.0	
	China	37.1	42.8	x(2)	x(2)	37.4	54.0	51.9	x(7)	x(7)	53.8	
	India	m	m	m	m	m	m	m	m	m	m	
	Indonesia	27.2	22.9	a	22.9	26.4	36.5	32.5	a	32.5	34.9	
	Russian Federation	16.9	10.7	a	10.7	16.8	18.2	9.9	a	9.9	18.2	
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	
	South Africa	m	m	m	m	m	m	m	m	m	m	
	G20 average		24.4	22.9	~	~	24.2	26.7	24.9	~	~	26.4

1. Year of reference 2006.

2. Year of reference 2009.

Source: OECD, Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). See Annex 3 for notes (www.oecd.org/edu/eag2012).

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


StatLink  <http://dx.doi.org/10.1787/888932667976>

Table D2.2. **Ratio of students to teaching staff in educational institutions (2010)**

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

		Pre-primary education		Primary education	Secondary education			Post-secondary non-tertiary education	Tertiary education			
		Students to contact staff (teachers and teachers' aides)	Students to teaching staff		Lower secondary education	Upper secondary education	All secondary education		Tertiary-type B	Tertiary-type A and advanced research programmes	All tertiary education	
												(1)
OECD	Australia ^{1, 2}	m	m	15.7	x(6)	x(6)	12.0	m	m	14.9	m	
	Austria	10.3	14.7	12.2	9.3	10.1	9.6	10.8	x(10)	x(10)	17.1	
	Belgium ³	15.9	15.9	12.4	8.1	10.1	9.4	x(5)	x(10)	x(10)	19.3	
	Canada ^{2, 4}	m	x(4)	x(4)	17.7	15.8	17.1	m	m	18.2	m	
	Chile	9.4	9.7	24.6	25.1	26.1	25.8	a	m	m	m	
	Czech Republic	13.6	13.9	18.7	11.2	12.1	11.7	18.6	17.5	20.2	20.0	
	Denmark	m	m	x(4)	11.5	m	m	m	m	m	m	
	Estonia	m	6.0	16.2	14.9	16.6	15.9	x(5)	m	m	m	
	Finland	m	11.0	14.0	9.8	17.1	13.7	x(5)	n	14.4	14.4	
	France ³	14.2	21.5	18.7	15.0	9.7	12.3	x(8)	16.4	15.7	15.8	
	Germany	9.9	12.6	16.7	14.9	13.2	14.4	14.8	14.2	11.1	11.6	
	Greece	m	m	m	m	m	m	m	m	m	m	
	Hungary	m	11.0	10.8	10.7	12.5	11.6	15.3	19.5	13.5	13.9	
	Iceland	6.9	6.9	x(4)	10.3	11.3	10.6	x(5, 10)	x(10)	x(10)	10.5	
	Ireland ²	9.0	19.8	15.9	x(6)	x(6)	14.4	x(6)	x(10)	x(10)	15.6	
	Israel ²	12.5	24.6	16.6	12.6	11.0	11.7	m	a	m	m	
	Italy ²	11.8	11.8	11.3	11.9	12.1	12.0	m	7.3	18.8	18.7	
	Japan	15.1	15.9	18.4	14.4	12.2	13.2	x(5, 10)	m	m	m	
	Korea	17.1	17.1	21.1	19.7	16.5	18.0	a	m	m	m	
	Luxembourg	m	12.0	10.1	x(6)	x(6)	9.1	m	m	m	m	
	Mexico	25.4	25.4	28.1	32.7	26.9	30.4	a	15.7	14.5	14.5	
	Netherlands ²	m	x(3)	15.7	x(6)	x(6)	16.5	x(6)	x(10)	x(10)	14.7	
	New Zealand	7.1	7.1	16.2	16.3	14.4	15.3	23.0	19.2	18.0	18.2	
	Norway ²	m	m	10.5	9.9	9.4	9.7	x(5)	x(10)	x(10)	9.2	
	Poland	m	18.7	10.0	12.7	12.1	12.3	14.9	10.3	16.0	16.0	
	Portugal	m	15.7	10.9	7.9	7.2	7.5	x(5, 10)	x(10)	x(10)	14.4	
	Slovak Republic	12.4	12.5	17.1	13.6	14.6	14.1	14.2	8.5	15.0	14.9	
	Slovenia	9.4	9.4	16.2	8.0	14.3	11.0	x(5)	x(10)	x(10)	20.5	
	Spain	m	13.0	13.2	10.1	9.6	9.9	a	9.2	11.7	11.2	
	Sweden	6.3	6.3	11.7	11.4	13.1	12.3	12.3	x(10)	x(10)	12.5	
	Switzerland ^{1, 2}	m	17.5	14.9	11.8	10.3	11.4	m	m	m	m	
	Turkey	m	23.0	21.7	a	17.6	17.6	a	58.7	14.4	18.8	
	United Kingdom	15.0	15.9	19.8	17.1	15.2	16.0	x(5)	x(10)	x(10)	18.5	
	United States	11.4	14.6	14.5	14.0	15.0	14.4	18.0	x(10)	x(10)	16.2	
		OECD average	12.3	14.4	15.8	13.7	13.8	13.8	15.8	16.4	15.5	15.5
		EU21 average	11.6	13.4	14.3	11.7	12.5	12.3	14.4	12.9	15.2	15.8
Other G20	Argentina ⁴	m	m	m	m	m	m	a	m	12.6	m	
	Brazil	13.0	17.7	23.4	20.4	17.3	19.0	a	x(10)	x(10)	m	
	China	21.6	24.0	17.2	15.0	18.4	16.5	m	m	m	m	
	India	m	m	m	m	m	m	m	m	m	m	
	Indonesia	16.1	17.4	19.9	17.0	16.1	16.7	a	x(10)	x(10)	24.1	
	Russian Federation ^{2, 5}	m	m	19.2	x(6)	x(6)	11.3	x(6)	10.5	13.9	13.1	
	Saudi Arabia	m	10.3	11.2	8.8	11.0	9.7	a	x(10)	x(10)	18.2	
	South Africa ⁴	m	x(3)	33.6	x(6)	x(6)	24.4	a	x(10)	x(10)	26.6	
		G20 average	~	17.5	19.4	15.6	15.5	16.2	~	~	~	~

1. Includes only general programmes in upper secondary education.

2. Public institutions only (in Australia, tertiary-type A and advanced research programmes only; in Canada, at the tertiary level only; in Ireland, at the pre-primary and secondary levels only; in Israel, at the pre-primary level only; in Italy, from pre-primary to secondary levels; in the Russian Federation, at the primary level only).

3. Excludes independent private institutions.

4. Year of reference 2009.

5. Excludes part-time personnel in public institutions at lower secondary and general upper secondary levels.

Source: OECD, Argentina, China, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). Saudi Arabia: UNESCO Institute for Statistics and Observatory on Higher Education. South Africa: UNESCO Institute for Statistics. See Annex 3 for notes (www.oecd.org/edu/eag2012).

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


StatLink  <http://dx.doi.org/10.1787/888932667995>

Table D2.3. **Ratio of students to teaching staff, by type of institution (2010)***By level of education, calculations based on full-time equivalents*

		Lower secondary education				Upper secondary education				All secondary education				
		Public	Private			Public	Private			Public	Private			
			Total private institutions	Government-dependent private institutions	Independent private institutions		Total private institutions	Government-dependent private institutions	Independent private institutions		Total private institutions	Government-dependent private institutions	Independent private institutions	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
OECD	Australia ¹	x(9)	x(10)	x(11)	a	x(9)	x(10)	x(11)	a	12.3	11.7	11.7	a	
	Austria	9.2	10.6	x(2)	x(2)	10.3	9.2	x(6)	x(6)	9.6	9.8	x(10)	x(10)	
	Belgium ²	7.5	m	8.5	m	10.7	m	9.8	m	9.5	m	9.4	m	
	Canada ^{3, 4, 5}	17.8	15.6	x(2)	x(2)	15.9	14.4	x(6)	x(6)	17.1	15.1	x(10)	x(10)	
	Chile	24.2	26.0	27.8	17.9	26.6	25.7	28.8	14.3	25.7	25.8	28.5	15.3	
	Czech Republic	11.3	9.6	9.6	a	11.8	14.0	14.0	a	11.5	13.2	13.2	a	
	Denmark ⁴	11.3	12.8	12.8	m	m	m	m	m	m	m	m	m	
	Estonia	15.0	11.8	a	11.8	16.8	13.2	a	13.2	16.0	12.7	a	12.7	
	Finland ⁶	9.8	9.8	9.8	a	16.4	21.4	21.4	a	13.2	18.7	18.7	a	
	France	14.7	m	16.3	m	9.6	m	10.0	m	12.1	m	13.1	m	
	Germany	14.9	14.4	14.4	x(3)	13.4	12.2	12.2	x(7)	14.4	13.7	13.7	x(11)	
	Greece	m	m	m	m	m	m	m	m	m	m	m	m	
	Hungary	10.7	10.3	10.3	a	12.6	12.1	12.1	a	11.6	11.5	11.5	a	
	Iceland ^{4, 6}	10.3	9.4	9.4	n	11.4	10.8	10.8	n	10.6	10.6	10.6	n	
	Ireland ²	x(9)	x(10)	a	x(12)	x(9)	x(10)	a	x(12)	14.4	m	a	m	
	Israel	12.8	a	m	a	11.0	a	a	a	11.7	a	m	a	
	Italy	11.9	m	a	m	12.1	m	a	m	12.0	m	a	m	
	Japan ⁶	14.6	12.7	a	12.7	11.5	13.9	a	13.9	13.1	13.6	a	13.6	
	Korea	19.7	19.9	19.9	a	16.0	17.3	17.3	a	18.0	17.9	17.9	a	
	Luxembourg	9.4	x(10)	x(11)	x(12)	8.8	x(10)	x(11)	x(12)	9.1	9.2	10.2	8.4	
	Mexico	35.5	20.3	a	20.3	32.3	15.2	a	15.2	34.4	17.6	a	17.6	
	Netherlands ²	x(9)	m	a	m	x(9)	m	a	m	16.5	m	a	m	
	New Zealand	16.5	13.1	n	13.1	14.4	14.3	19.0	11.8	15.4	14.0	19.0	12.3	
	Norway	9.9	m	m	m	9.4	m	m	m	9.7	m	m	m	
	Poland	12.8	10.0	11.9	9.4	11.9	13.6	14.1	13.5	12.3	12.3	13.0	12.2	
	Portugal	7.7	10.8	10.8	10.9	7.5	6.1	9.5	5.3	7.6	7.4	10.2	6.3	
	Slovak Republic	13.6	13.1	13.1	n	14.9	12.9	12.9	n	14.2	13.0	13.0	n	
	Slovenia ²	8.0	3.8	3.8	n	14.3	13.4	x(6)	x(6)	11.0	12.7	x(10)	x(10)	
	Spain	8.6	14.9	14.8	15.2	8.6	14.1	13.4	14.9	8.6	14.6	14.6	15.0	
	Sweden	11.2	12.6	12.6	n	12.8	14.8	14.8	n	12.0	14.0	14.0	n	
	Switzerland ⁷	11.8	m	m	m	10.3	m	m	m	11.4	m	m	m	
	Turkey	a	a	a	a	18.5	7.2	a	7.2	18.5	7.2	a	7.2	
	United Kingdom ²	17.3	16.4	19.8	11.0	12.4	19.8	21.8	11.2	14.5	18.9	21.4	11.1	
	United States	14.4	10.7	a	10.7	15.6	10.7	a	10.7	14.9	10.7	a	10.7	
	OECD average		13.5	13.1	12.5	9.5	13.7	13.9	15.1	9.4	13.8	13.6	14.6	9.5
	EU21 average		11.4	11.5	12.5	11.7	12.1	13.6	13.8	11.6	12.1	13.0	13.5	10.9
Other G20	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	
	Brazil	22.1	12.6	a	12.6	18.9	11.8	a	11.8	20.7	12.2	a	12.2	
	China	m	m	m	m	m	m	m	m	m	m	m	m	
	India	m	m	m	m	m	m	m	m	m	m	m	m	
	Indonesia	21.2	12.6	a	12.6	17.7	14.8	a	14.8	19.8	13.6	a	13.6	
	Russian Federation	10.1	m	a	m	m	m	a	m	m	m	a	m	
	Saudi Arabia	10.2	3.4	x(2)	x(2)	10.5	13.8	x(6)	x(6)	10.3	7.0	x(10)	x(10)	
	South Africa ³	x(9)	x(10)	x(10)	x(10)	x(9)	x(10)	x(10)	x(10)	25.1	14.3	x(10)	x(10)	
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	

1. Includes only general programmes in lower and upper secondary education.

2. Upper secondary includes post-secondary non-tertiary education.

3. Year of reference 2009.

4. Lower secondary includes primary education.

5. Lower secondary includes pre-primary education.

6. Upper secondary education includes programmes from post-secondary education.

7. Includes only general programmes in upper secondary education.

Source: OECD, Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). Saudi Arabia, South Africa: UNESCO Institute for Statistics. See Annex 3 for notes (www.oecd.org/edu/eag2012).

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


StatLink  <http://dx.doi.org/10.1787/888932668014>

Table D2.4a. **Teaching staff and non-teaching staff employed in primary, secondary and post-secondary non-tertiary education institutions (2010)**

Teaching staff and non-teaching staff in primary, secondary and post-secondary non-tertiary educational institutions per 1000 students, calculation based on full time equivalents

	Instructional personnel		Professional support for students	Management/Quality Control/Administration		Maintenance and operations personnel	Total teaching and non-teaching staff
	Classroom teachers, academic staff & other teachers	Teacher aides and teaching/research assistants		School- and higher-level management	School- and higher-level administrative personnel		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD							
Australia	71.9	x(5)	2.6	m	22.4	3.0	99.8
Austria	96.0	m	m	m	m	m	m
Belgium	95.5	m	m	m	m	m	m
Canada ¹	59.0	m	m	m	m	m	m
Chile	39.7	4.3	49.5	4.1	3.1	9.1	109.8
Czech Republic	73.6	2.0	8.0	4.5	20.5	16.8	125.4
Denmark	86.8	m	m	m	m	m	m
Estonia	62.5	m	m	m	m	m	m
Finland ²	72.5	9.7	m	2.8	m	m	m
France ³	84.0	7.0	4.8	3.0	3.9	0.9	103.5
Germany	61.0	m	m	m	m	m	m
Greece	m	m	m	m	m	m	m
Hungary ⁴	87.1	m	2.7	m	8.8	19.9	118.4
Iceland ^{2, 4}	94.3	8.6	5.9	12.1	4.9	25.3	151.1
Ireland	65.7	m	m	m	m	m	m
Israel	70.8	a	a	4.6	m	m	m
Italy ^{2, 3, 4}	85.2	3.1	11.8	0.5	12.9	23.1	136.5
Japan ^{2, 4}	65.3	m	5.4	5.6	4.9	5.3	86.4
Korea ²	51.9	m	m	3.0	m	m	m
Luxembourg	104.8	m	m	m	m	m	m
Mexico ^{2, 4}	34.4	0.2	1.1	6.3	9.9	4.1	56.0
Netherlands ³	62.1	m	m	m	m	m	m
New Zealand	63.0	m	m	m	m	m	m
Norway ^{2, 3}	99.5	10.7	m	9.3	m	m	119.6
Poland ²	88.9	m	6.3	3.3	m	m	98.5
Portugal	112.2	m	m	m	m	m	m
Slovak Republic ²	67.6	1.6	m	7.5	m	m	m
Slovenia	78.4	9.3	10.2	6.1	1.1	m	105.2
Spain	88.6	m	m	m	m	m	m
Sweden	83.2	m	m	m	m	m	m
Switzerland ³	76.5	m	m	m	m	m	m
Turkey	48.9	m	m	m	m	m	m
United Kingdom ^{2, 4}	57.7	15.5	12.9	6.6	8.2	2.8	103.7
United States	68.9	15.5	10.7	6.6	10.0	14.2	125.9
OECD average	74.5	7.3	10.2	5.4	9.2	11.3	110.0
Average for countries with data on each category	70.0	7.3	10.5	5.5	9.2	11.3	110.1
EU21 average	81.8	6.5	7.8	4.0	10.9	12.7	114.3
Other G20							
Argentina	m	m	m	m	m	m	m
Brazil	48.6	m	m	m	m	m	m
China	m	m	m	m	m	m	m
India	m	m	m	m	m	m	m
Indonesia	m	m	m	m	m	m	m
Russian Federation	81.6	m	m	m	m	m	m
Saudi Arabia	m	m	m	m	m	m	m
South Africa	m	m	m	m	m	m	m
G20 average	m	m	m	m	m	m	m

1. Year of reference 2009.

2. School- and higher-level management excludes higher-level management.

3. Public institutions only.

4. School- and higher-level administrative personnel excludes higher-level administrative personnel.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2012).

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


StatLink  <http://dx.doi.org/10.1787/888932668033>

Table D2.4b. **Teaching staff and non-teaching staff employed in tertiary education institutions (2010)**

Teaching staff and non-teaching staff in tertiary educational institutions per 1000 students, calculation based on full time equivalents

		Instructional personnel		Professional support for students	Management/quality control/administration		Maintenance and operations personnel	Total teaching and non-teaching staff
		Classroom teachers, academic staff & other teachers	Teacher aides and teaching/research assistants		School- and higher-level management	School- and higher-level administrative personnel		
		(1)	(2)		(4)	(5)	(6)	(7)
OECD	Australia	m	m	m	m	m	m	m
	Austria ^{1, 2}	58.5	m	2.6	1.6	32.3	4.2	99.3
	Belgium	51.7	m	m	m	m	m	m
	Canada	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m
	Czech Republic	50.1	1.8	7.0	1.5	29.3	10.0	99.6
	Denmark	m	m	m	m	m	m	m
	Estonia	m	m	m	m	m	m	m
	Finland	69.6	m	m	m	m	m	m
	France ^{3, 4}	64.5	a	1.2	m	8.4	9.4	83.5
	Germany	86.5	m	m	m	m	m	m
	Greece	m	m	m	m	m	m	m
	Hungary ^{1, 2, 5}	71.7	m	x(5)	x(5)	96.7	x(5)	168.4
	Iceland ^{1, 2}	95.5	x(1)	3.2	4.4	35.3	8.4	146.8
	Ireland	63.9	m	m	m	m	m	m
	Israel	m	m	m	m	m	m	m
	Italy ^{1, 2}	53.5	9.0	3.0	0.4	26.0	2.8	94.7
	Japan	m	m	m	m	m	m	m
	Korea	m	m	m	m	m	m	m
	Luxembourg	m	m	m	m	m	m	m
	Mexico ^{1, 2}	68.9	m	6.5	6.3	27.7	10.4	119.7
	Netherlands	m	m	m	m	m	m	m
	New Zealand ²	54.9	m	m	m	m	m	m
	Norway ⁴	108.2	m	m	m	m	m	m
	Poland ^{1, 2}	62.7	m	0.1	m	34.3	6.2	103.3
	Portugal	69.3	m	m	m	m	m	m
	Slovak Republic ¹	67.3	m	m	0.9	m	m	m
	Slovenia	48.8	28.9	18.5	2.5	2.7	4.4	105.8
	Spain	89.6	m	m	m	m	m	m
	Sweden	80.2	m	m	m	m	m	m
	Switzerland	m	m	m	m	m	m	m
	Turkey	53.2	m	m	m	m	m	m
	United Kingdom ^{1, 2}	54.2	a	m	43.9	32.2	17.4	147.7
	United States	61.8	m	m	m	m	m	m
	OECD average	67.5	13.2	5.3	7.7	32.5	8.1	116.9
	Average for countries with data on each category	62.1	13.2	5.9	9.1	32.9	8.1	118.2
	EU21 average	66.2	5.4	2.8	9.7	37.0	8.3	113.8
Other G20	Argentina	m	m	m	m	m	m	m
	Brazil	38.3	m	m	m	m	m	m
	China	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m
	Russian Federation	76.3	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m

1. School- and higher-level management excludes higher-level management.

2. School- and higher-level administrative personnel excludes higher-level administrative personnel.


3. School- and higher-level management excludes school-level management.

4. Public institutions only.

5. Tertiary-type B is partially included with upper secondary education.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2012).

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

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