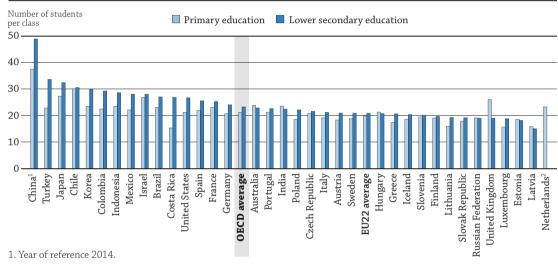
WHAT IS THE STUDENT-TEACHER RATIO AND **HOW BIG ARE CLASSES?**

- The average primary school class in OECD countries in 2015 has 21 students, and this average increases to 23 students in lower secondary education. Since 2005, these average class sizes have fallen for both levels.
- The difference between public and private primary school class sizes varies substantially across OECD countries, but is considerably larger in partner countries.
- There are 15 students per teacher in primary education on average across OECD countries. The figure increases to 16 students per teacher on average at the tertiary level.

Figure D2.1. Average class size in educational institutions, by level of education (2015)



2. Public institutions only.

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

Source: OECD/UIS/Eurostat (2017), Table D2.1. See Source for more information and Annex 3 for notes (www.oecd.org/education/ education-at-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933558686

Context

Class sizes and student-teacher ratios are much-discussed aspects of education and - along with students' instruction time (see Indicator D1), teachers' working time and the division of teachers' time between teaching and other duties (see Indicator D4) - these ratios are among the determinants of the demand for teachers. Together with teachers' salaries (see Indicator D3) and age distribution (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 seen as beneficial, because they allow teachers to focus more on the needs of individual students and reduce 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 (Piketty and Valdenaire, 2006), overall evidence of the effect of class size on student performance is mixed (see for instance Fredriksson, 2013; OECD, 2016).

The ratio of students to teaching staff is an indicator of how resources for education are allocated. Smaller student-teacher ratios often have to be weighed against higher salaries for teachers, investing in their professional development, greater investment in teaching technology, or more widespread use of assistant teachers and other paraprofessionals, whose salaries are often considerably lower than those of teachers.

INDICATOR D2

Other findings

- In almost all countries with available data, the student-teacher ratio decreases or stays the same between the primary and lower secondary levels, despite a general increase in class size between these levels. The exceptions are Chile, Colombia, Costa Rica, India and Mexico.
- On average across OECD countries, the student-teacher ratio in lower secondary education is slightly lower in private institutions than in public institutions. This is most striking in Mexico, where at the secondary level there are on average 17 more students per teacher in public institutions than in private institutions.
- Class size varies significantly across countries. The biggest classes in primary education are observed in Chile (30 students per classroom) and China (37 students per classroom), while in Costa Rica, Latvia, Lithuania and Luxembourg, classes have fewer than 17 students on average.

INDICATOR D2

Analysis

Average class size in primary and lower secondary education

At the primary level, the average class in OECD countries has 21 pupils. There are fewer than 27 pupils per class in nearly all of the countries with available data, with the exception of Chile, China, Israel and Japan.

At the lower secondary level, the average class in OECD countries has 23 students. Among all countries with available data on lower secondary education, that number varies from fewer than 20 students in Estonia, Latvia, Lithuania, Luxembourg, the Russian Federation, the Slovak Republic and the United Kingdom to 32 students per class in Japan, 34 in Turkey and 49 in China (Figure D2.1 and Table D2.1).

The number of students per class tends to increase between primary and lower secondary education. In China, Costa Rica and Turkey, this increase exceeds ten students. On the other hand, the United Kingdom and, to a lesser extent, Australia, Estonia, India and Latvia, see student numbers per class decrease between these two levels of

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 split into several different classes, depending on the subject area.

Class size in public and private institutions

Class size is one factor that parents may consider when deciding on a school for their children; the difference in average class size between public and private schools (and between different types of private institutions) could influence enrolment.

In most OECD countries, average class size does not differ between public and private institutions by more than two students per class in both primary and lower secondary education. However, in some countries – for example, Brazil, the Czech Republic, Colombia, Latvia, Poland, the Russian Federation and Turkey - the average public primary school class is larger than the average private school class by more than five students (Table D2.1). But, with the exception of Brazil, the private sector is relatively small in all of these countries, representing at most 5% of students at the primary level (see Education at a Glance Database). In contrast, in China and Luxembourg, the average class in private institutions is larger than in public institutions by at least five students.

At the lower secondary level, where private institutions are more prevalent, the comparison of class size between public and private institutions shows a more mixed picture. The average class in lower secondary private institutions is larger than in public institutions in 11 countries, smaller in 17 countries and the same in 6 countries. The differences, however, tend to be smaller than in primary education.

In countries where private (including both government-dependent and independent) institutions are more prevalent at the primary level (i.e. countries where more than 15% of students are enrolled in these institutions), such as Australia, Brazil, Israel and Spain (see Education at a Glance Database), there may be considerable differences in class size between public and private institutions. Among those countries, private institutions tend to have more students per class than public schools in Australia and Spain.

Trends in average class size

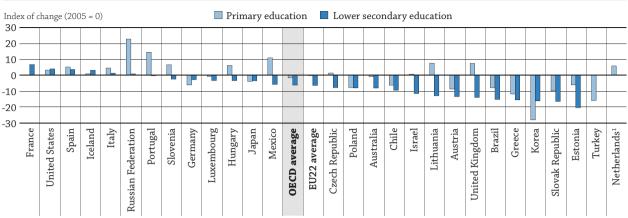
On average across OECD countries, class size decreased between 2005 and 2015 at both primary and lower secondary levels (Figure D2.2). However, while 19 out of 25 countries with available data at the lower secondary level experienced a decrease in average class size, this was only the case for 13 out of the 25 countries at the primary

The most significant decrease occurred at the lower secondary level, where the average class size fell by 6% over the period. These averages mask considerably larger changes in individual countries. In Estonia, for example, the average class size in lower secondary education has decreased by 20% over the past decade. In Korea, classes at the primary level are, on average, 28% smaller than in 2005 - the largest decrease among OECD countries in the past decade. Other countries, however, saw an increase in average class sizes: by 15% in Portuguese primary schools, and by 23% in the Russian Federation.

Interestingly, some countries which have seen large decreases in class size over the past decade still have higher class sizes than other countries. For instance, Chile and Korea are among the five countries with the largest class size at the lower secondary level in 2015 (Figure D2.1), even though their average class size decreased by more than 8% between 2005 and 2015 (Figure D2.2).

D₂





1. Public institutions only.

Countries are ranked in descending order of the index of change in average class size in lower secondary education between 2005 and 2015.

Source: OECD/UIS/Eurostat (2017), Education at a Glance Database, http://stats.oecd.org/. See Source for more information and Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933558705

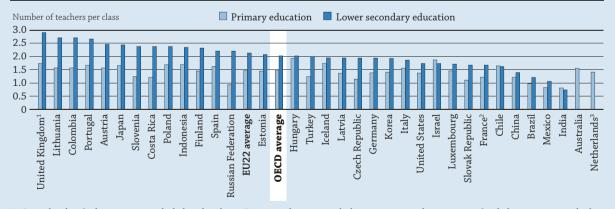
Box D2.1. Number of teachers per class

The number of teachers per class is an indicator of the extent to which the stock of teachers in a country covers the number of classes, given average class sizes. This may offer insights, for example, into the opportunities for teachers to allocate time to non-teaching activities (when there is more than one teacher per class), or whether non-teachers might be needed to cover lessons.

In all countries with available data, with the exception of Chile, India and Israel, the number of full-time equivalent teachers per class is lower in primary than in lower secondary education (Figure D2.a). On average across the OECD, this number goes from 1.5 teachers per class in primary education to 2 in lower secondary education.

Figure D2.a. Number of teachers per class (2015)

By level of education, calculations based on the number of full-time equivalent teachers and number of classes



- 1. Some levels of education are included with others: Primary education includes pre-primary data on state funded nurseries attached to primary schools. Lower secondary education comprises secondary schools for ages 11-16. See Annex 3 for details.
- 2. Public and government-dependent private institutions only.
- 3. Public institutions only.

Countries are ranked in descending order of the number of teachers per class in lower secondary education.

Source: OECD/UIS/Eurostat (2017), Education at a Glance Database, http://stats.oecd.org/. See Source section for more information and Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933558743

D₂

There is, however, a high degree of cross-country variation. At the primary level, the number of full-time equivalent teachers per class ranges from less than 1.0 in Brazil, India, Mexico and the Russian Federation to at least 1.7 in Hungary, Iceland, Israel and the United Kingdom. At the lower secondary level, it goes from less than 1.5 in Brazil, China, India and Mexico to more than 2.5 in Colombia, Lithuania, Portugal and the United Kingdom.

The increase in the number of teachers per class between primary and lower secondary education may be explained by several factors. For instance, as the annual instruction time tends to increase with the level of education (see Indicator D1), so does the number of teachers. The increase may also result 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; see Indicator D4).

Student-teacher ratios

The ratio of students to teaching staff compares the number of students (full-time equivalent) to the number of teachers (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, or how much time teachers spend teaching. Therefore, it cannot be interpreted in terms of class size (Box D2.2).

At the primary level there are 15 students for every teacher on average across OECD countries. The studentteacher ratio ranges from 10 or fewer in Lithuania and Norway to 27 in Mexico, 29 in India and 33 in South Africa (Table D2.2).

Student-teacher ratios vary even more at secondary level – from fewer than 10 students per teacher in Austria, Latvia and Lithuania to 27 students per teacher in Mexico and 32 in India. The average across OECD countries is about 13 students per teacher at the secondary level (Table D2.2).

On average there are fewer students per teacher at the secondary level than at the primary level. In most countries, the student-teacher ratio decreases or stays the same between primary and lower secondary school despite an increase in class size. However, the student-teacher ratio increases in Chile, Colombia, Costa Rica and India.

This reduction in the student-teacher ratio from the primary to secondary level may result from differences in annual instruction time (as instruction hours tend to increase with the education level, so does the number of teachers) or from differences in teaching hours (the teaching time decreases with the level of education as teacher specialisation increases).

At the tertiary level, the student-teacher ratio ranges from 10 in Norway and Sweden to over 20 in Belgium, Brazil, the Czech Republic, India and Turkey. 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.

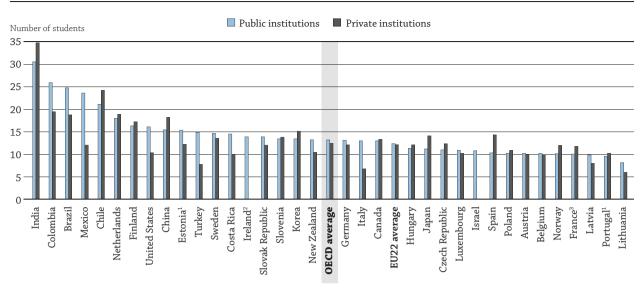
Student-teacher ratios in public and private institutions

Differences between public and private institutions in student-teacher ratios are similar to those observed for class size. On average across countries for which data are available, the ratios of students to teaching staff are slightly higher in public institutions than in private institutions at the lower and upper secondary level (Table D2.3).

At the lower secondary level, the largest differences between public and private institutions are found in Colombia, Iceland, Mexico and Turkey, where there are at least eight more students per teacher in public institutions than in private institutions. However, in some countries the student-teacher ratio is lower in public institutions than in private institutions. This difference is most pronounced in Luxembourg, which has 22 students per teacher in private institutions, compared to 10 students per teacher in public institutions.

At the upper secondary level, the student-teacher ratio is greater in public than in private institutions in 16 countries, smaller in public institutions in 12 countries, and similar for both sectors in 4 countries. Mexico is the country with the highest difference in student-teacher ratios at this level, with 12 more students per teacher in public institutions than in private institutions (Figure D2.3). This mixed pattern in upper secondary education may reflect, in part, differences in the types of programmes offered in public and private institutions. For instance, in Norway, few private schools offer vocational programmes, and the student-teacher ratio is lower in vocational programmes than in general programmes.

Figure D2.3. Ratio of students to teaching staff in upper secondary education, by type of institution (2015)



- 1. Some levels of education are included with others. See Table D2.3 or Annex 3 for details.
- 2. Upper secondary education includes lower secondary.
- 3. Government-dependent private institutions only.

Countries are ranked in descending order of the ratio of students to teaching staff in public institutions.

Source: OECD/UIS/Eurostat (2017), Table D2.3. See Source section for more information and Annex 3 for notes (www.oecd.org/education/educationat-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933558724

Student-teacher ratios in upper secondary vocational and general programmes

On average across the OECD countries for which data are available, the ratio of students to teaching staff in upper secondary vocational programmes is higher than in general programmes (14 to 1 versus 12 to 1) (Table D2.2). These differences can be considerably higher in individual countries, however. In Latvia, vocational programmes have 9 more students per teacher than general programmes. In India - which has the largest difference between programmes of all countries with available data - the ratio is inversed: vocational programmes have 19 fewer students per teacher than general programmes.

Box D2.2. What is the relationship between class size and the student-teacher ratio?

Class size, as 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), and excluding teaching in subgroups. The calculation is done by dividing the number of students by the number of classes. The student-teacher ratio, as presented in Tables D2.2 and D2.3, is calculated by dividing the number of fulltime equivalent students by the number of full-time equivalent teachers at a given level of education and type of institution.

The two indicators, therefore, measure very different characteristics of the educational system. Studentteacher ratios provide information on the level of teaching resources available in a country, whereas class size measures the average number of students that are grouped together in classrooms.

Given the difference between student-teacher ratio and average class size, it is possible for countries with similar student-teacher ratios to have different class sizes. For example, at the primary level, Israel and the United States have similar ratios of students to teaching staff (15 students per teacher) (Table D2.2), but the average class size differs substantially (21 students in the United States and 27 in Israel) (Table D2.1).

Definitions

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 to 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. At the tertiary level, academic staff include personnel whose primary assignment is instruction or research. Teaching staff also include department chairpersons whose duties include some teaching, but exclude non-professional personnel who support teachers in providing instruction to students, such as teachers' aides and other paraprofessional personnel.

Methodology

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 subgroups 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.

Notes on definitions and methodologies regarding this indicator for each country are presented in Annex 3 at www.oecd.org/education/education-at-a-glance-19991487.htm.

Sources

Data refer to the academic year 2014/15 and are based on the UOE data collection on education statistics administered by the OECD in 2016 (for details see Annex 3 at www.oecd.org/education/education-at-a-glance-19991487.htm).

Note regarding data from Israel

The statistical data for Israel are supplied by and are 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

Fredriksson, P., B. Öckert and H. Oosterbeek (2013) "Long-term effects of class size" The Quarterly Journal of Economics, Vol. 128/1, pp. 249-285.

OECD (2016), PISA 2015 Results (Volume II): Policies and Practices for Successful Schools, PISA, OECD Publishing, Paris, http:// dx.doi.org/10.1787/9789264267510-en.

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 [Impact of class size on school performance in French primary, lower secondary and upper secondary institutions: Estimates based on the primary education panel of 1997 and the secondary education panel of 1995], ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche, Direction de l'évaluation et de la prospective, Paris, www.education.gouv.fr/cid3865/l-impact-de-la-taille-des-classes-sur-lareussite-scolaire-dans-les-ecoles-colleges-et-lycees-francais.html&xtmc=piketty&xtnp=1&xtcr=1.

Indicator D2 Tables

StatLink http://dx.doi.org/10.1787/888933562106

Table D2.1 Average class size by type of institution (2015)

Table D2.2 Ratio of students to teaching staff in educational institutions (2015)

Table D2.3 Ratio of students to teaching staff, by type of institution (2015)

Cut-off date for the data: 19 July 2017. Any updates on data can be found on line at http://dx.doi.org/10.1787/eag-data-en.

Table D2.1. Average class size by type of institution (2015)

By level of education, calculations based on number of students and number of classes

	,		imary educati			Lower secondary education						
			vate institutio				Deirota 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)		
O Australia O Austria	23	25	25	a (D)	24	22	24	24	a (E)	23		
Belgium (Fr.)	18 19	19 21	x(2) 21	x(2)	18 20	21 m	21 m	x(7) m	x(7) m	21 m		
Canada	m	m	m	m	m	m	m	m	m	m		
Chile	28	31	33	24	30	29	31	33	25	31		
Czech Republic	21	15	15	a	21	22	19	19	a	22		
Denmark	22	m	22	m	m	21	m	20	m	m		
Estonia	19	15	a	15	19	18	15	a	15	18		
Finland	19	17	17	a (2)	19	20 25	20 26	20	a 12	20		
France Germany	23 21	23 21	x(2) x(2)	x(2) x(2)	23 21	25	26	26 x(7)	13 x(7)	25 24		
Greece	17	20	a a	20	17	21	23	a a	23	21		
Hungary	21	21	21	17	21	21	21	22	17	21		
Iceland	19	15	15	a	19	21	13	13	a	20		
Ireland	25	m	a	m	m	m	m	a	m	m		
Israel	28	24	24	a	27	29	24	24	a	28		
Italy	19	19	a	19	19	21	21	a	21	21		
Japan Korea	27 23	29 28	a a	29 28	27 23	32 30	33 29	a 29	33 a	32 30		
Latvia	16	9	a	9	16	15	12	29 a	12	15		
Luxembourg	15	20	18	20	16	19	19	19	19	19		
Mexico	22	20	a	20	22	28	24	a	24	28		
Netherlands ¹	23 ^d	m	m	m	m	m	m	m	m	m		
New Zealand	m	m	m	m	m	m	m	m	m	m		
Norway	m 10	m 10	m 10	m 10	m	m	m	m	m 15	m		
Poland Portugal	19 21	12 21	10 24	12 20	19 21	23 22	17 24	23 25	15 22	22 23		
Slovak Republic	18	17	17	20 a	18	19	18	18	a	19		
Slovenia	19	20	20	a	19	20	21	21	a	20		
Spain	21	25	25	21	22	25	26	27	21	26		
Sweden	19	17	17	a	19	21	22	22	a	21		
Switzerland	19	m	m	m	m	19	m	m	m	m		
Turkey	24	11	a	11	23	35	20	a	20	34		
United Kingdom United States	27 22	m 18	27 a	14 18	26 21	20 28	m 20	20 a	10 20	19 27		
	<u>'</u>		_ a	10			1	_ a	20			
OECD average	21	20	m	m	21	23	22	m	m	23		
EU22 average	20	19	m	17	20	21	20	m	m	21		
Argentina	m	m	m	m	m	m	m	m	m	m		
Argentina E Brazil China²	24	18	a	18	23	28	24	a	24	27		
	37	43	x(2)	x(2)	37	49	51	x(7)	x(7)	49		
Colombia	24	18	a	18	23	31	24	a	24	29		
Costa Rica	15	17	x(2)	x(2)	15	28	21	x(7)	x(7)	27		
India	24 24	23	26	22	24	24	20	21	20	22		
Indonesia Lithuania	16	22 14	a a	22 14	23 16	30 19	27 19	a a	27 19	29 19		
Russian Federation	19	13	a a	13	19	19	19	a a	19	19		
Saudi Arabia	m m	m	m	m	m m	m m	m m	m	m	m		
South Africa	m	m	m	m	m	m	m	m	m	m		
	1					1						
G20 average	24	22	21	20	24	28	25	25	20	27		

^{1.} Primary includes pre-primary education.

 $\textbf{Source:} \ OECD/UIS/Eurostat \ (2017). \ See \textit{Source } section \ for \ more \ information \ and \ Annex \ 3 \ for \ notes \ (\underline{www.oecd.org/education/education-at-a-glance-19991487.htm}).$ Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink http://dx.doi.org/10.1787/888933561783

^{2.} Year of reference 2014.

A corrigendum has been issued for this page. See: http://www.oecd.org/about/publishing/Corrigendum-Education-at-a-Glance2017.pdf

Table D2.2. Ratio of students to teaching staff in educational institutions (2015)

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

		By level of education, calculations based on full-time equivalents										
				Upper	secondary edi	ıcation			Tertiary education			
		Primary education	Lower secondary education	General programmes	Vocational programmes (4)	All programmes	All secondary education	Post- secondary non-tertiary education	Short-cycle tertiary (8)	Bachelor's, master's, doctoral or equivalent level	All tertiary	
0	Australia	15	x(3)	12 ^d	m	m	m	m	m	15	m	
ü	Austria	12	9	10	10	10	9	12	9	16	14	
U	Belgium	13	10	10	10	10	10	16	x(10)	x(10)	23	
	Canada ¹	17 ^d	x(1)	x(5)	x(5)	13	13	m	m	m	m	
	Chile	21	22	23	23	23	23	a	m	m	m	
	Czech Republic	19	12	11	11	11	11	21	11	23	23	
	Denmark	m	m	m	m	m	m	m	m	m	m	
	Estonia	13	10	14	17 ^d	15 ^d	12 ^d	x(4)	a	14	14	
	Finland	14	9	14	18	16	13	18	a	15	15	
	France ²	19	15	9	13	10	13	x(8)	20 ^d	18	19	
	Germany	15	13	13	14	13	13	13	13	12	12	
	Greece	m	m	m	m	m	m	15	a	m	m	
	Hungary	11	11	11	13	11	11	14	15	15	15	
	Iceland	11	10	m	m	m	m	m	m	m	m	
	Ireland ³	16	x(5)	14 ^d	a	14 ^d	14	m	x(10)	x(10)	20	
	Israel ³	15	12	x(5)	x(5)	11	11	m	m	m	m	
	Italy	12	12	13	12	12	12	m (5.40)	a	20	20	
	Japan	17	14	x(5)	x(5)	12 ^d	13 ^d	x(5, 10)	m	m	m	
	Korea Latvia	17	16	15	12	14 10	15 9	a	m 21	m 19	m 19	
	Luxembourg	12 11	8 11	8	16 12	11	11	23 m	21 11	8	8	
	Mexico	27	34	x(5)	x(5)	20	27	a	18	15	15	
	Netherlands	17	16	16	19	18	17	a	15	15	15	
	New Zealand	16	16	12	18	13	14	20	18	17	17	
	Norway	10	10	11	10	10	10	13	13	10	10	
	Poland	11	10	12	9	10	10	14	8	15	15	
	Portugal	14	10	x(5)	x(5)	10 ^d	10 ^d	x(5, 10)	x(10)	x(10)	14 ^d	
	Slovak Republic	17	12	14	13	14	12	14	8	13	13	
	Slovenia	16	8	12	14	13	11	a	19	17	17	
	Spain	14	12	12	10	11	11	a	11	13	13	
	Sweden	13	12	x(5)	x(5)	14	13	10	10	10	10	
	Switzerland ³	16	12	11	m	m	m	m	a	m	m	
	Turkey	18	17	14	14	14	15	a	52	18	22	
	United Kingdom ⁴	18	14 ^d	x(2)	m (5)	m 15	16	a(10)	x(10)	x(10)	16 14 ^d	
	United States	15	15	x(5)	x(5)	15	15	x(10)	x(10)	x(10)	14"	
	OECD average	15	13	12	14	14	13	m	m	m	16	
	EU22 average	14	11	12	13	13	12	m	m	m	16	
STS	Argentina	m	m	m	m	m	m	m	m	m	m	
ŧ	Brazil China	25	25	26	12	24	24	25	13	25	25	
5	China	16	12	x(5)	x(5)	16	14	x(9)	22	18 ^d	19 ^d	
	Colombia	24	26	x(5)	x(5)	24	26	20	12	13	13	
	Costa Rica	13	14	x(5)	x(5)	14	14	a	m	m	m	
	India	29	30	34	15	33	32	9	a	24	24	
	Indonesia	m 10	m 7	m	m	m	m	m 10	m	m 10	m 10	
	Lithuania	10	7 10d	8	9	8	8	16 29 ^d	a 11 ^d	16	16 11 ^d	
	Russian Federation Saudi Arabia	21 11	10 ^d	x(2)	x(7, 8)	x(2, 7, 8)	10 m		x(10)	11 x(10)	20	
	South Africa ⁵	33	m x(3)	m 28 ^d	m m	m m	m m	a m	x(10) m	x(10) m	m	
			'	1		1		1		'		
	G20 average	19	17	18	14	17	16	19	20	17	18	

^{1.} Primary includes pre-primary education.

^{2.} Public and government-dependent private institutions only.

^{3.} For Ireland, public institutions only for all levels. For Israel, public institutions only for upper secondary education and all secondary. For Switzerland, public institutions only for primary, lower secondary and upper secondary general.

^{4.} Lower secondary education comprises secondary schools for age 11-16. Upper secondary includes colleges for age 16+ and adult learning. See Annex 3 for details.

 $^{5.\} Year\ of\ reference\ 2014.$

Source: OECD/UIS/Eurostat (2017). See Source section for more information and Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm). $Please\ refer\ to\ the\ Reader's\ Guide\ for\ information\ concerning\ symbols\ for\ missing\ data\ and\ abbreviations.$

StatLink http://dx.doi.org/10.1787/888933561802

Table D2.3. Ratio of students to teaching staff, by type of institution (2015)

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

		Lo	Lower secondary education			Upper secondary education Private institutions				Al	ll secondary programmes				
		ıs	Private institutions		ıs					Priv	ate instituti	ons			
		Public institutions	Total private institutions	Government- dependent private institutions	Independent private institutions	Public institutions	Total private institutions	Government- dependent private institutions	Independent private institutions	Public institutions	Total private institutions	Government- dependent private institutions	Independent private institutions		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
8	Australia ¹	x(5)	x(6)	x(7)	a	13 ^d	12 ^d	12 ^d	a	13 ^d	12 ^d	12 ^d	a		
OEC	Austria	9	10	x(2)	x(2)	10	10	x(6)	x(6)	9	10	x(10)	x(10)		
•	Belgium	9	10	10	m	10	10	10	m	10	10	10	m		
	Canada	m	m	m	m	13	13	x(6)	x(6)	13	13	x(10)	x(10)		
	Chile	18	25	27	20	21	24	26	16	20	25	26	17		
	Czech Republic	12	10	10	a	11	12	12	a	11	12	12	a		
	Denmark	m	m	m	m	m	m	m	m	m	m	m	m		
	Estonia ²	10	8	a	8	15 ^d	12 ^d	a	12 ^d	12^{d}	10 ^d	a	$10^{\rm d}$		
	Finland	9	9	9	a	16	17	17	a	13	16	16	a		
	France	15	m	18	m	10	m	12	m	12	m	15	m		
	Germany	13	13	x(2)	x(2)	13	12	x(6)	x(6)	13	13	x(10)	x(10)		
	Greece	m	m	a	m	m	m	a	m	m	m	a	m		
	Hungary Iceland	10 11	11 3	12 3	9 a	11 m	12 m	11 m	13 m	11 m	12 m	12 m	12 m		
	Ireland	x(5)	m	a	m	14 ^d	m	a	m	14	m	a	m		
	Israel	12	10	10	a	11	m	m	a	11	m	m	a		
	Italy	12	11	a	11	13	7	a	7	12	8	a	8		
	Japan ³	14	12	a	12	11 ^d	$14^{\rm d}$	a	$14^{\rm d}$	13^{d}	$14^{\rm d}$	a	$14^{\rm d}$		
	Korea	15	17	17	a	13	15	15	a	14	15	15	a		
	Latvia	8	4	a	4	10	8	a	8	9	6	a	6		
	Luxembourg	10	22	x(2)	x(2)	11	10	13	9	10	14	27	16		
	Mexico	37	18	a	18	24	12	a	12	31	14	a	14		
	Netherlands	16	16	a	16	18	19	a	19	17	18	a	18		
	New Zealand	16	13	a	13	13	10	11	10	15	11	11	11		
	Norway	10	8	8	a	10	12	12	a	10	11	11	a		
	Poland	10	9	11	8	10	11	12	11	10	10	11	10		
	Portugal ³	10	15	15	14	10 ^d	10 ^d	11 ^d	10^{d}	10 ^d	12 ^d	13 ^d	11 ^d		
	Slovak Republic	12	11	11	a	14	12	12	a	13	12	12	a		
	Slovenia	8 11	7	7 15	a 14	13 10	14 14	13 15	17 13	11 11	13 15	12 15	17 13		
	Spain Sweden	12	15 16	16	14 a	15	14	15	13 a	13	15	14	13 a		
	Switzerland	12	m	m	m	m	m	m m	m	m	m	m m	m		
	Turkey	17	9	a	9	15	8	a	8	16	8	a	8		
	United Kingdom ⁴	15 ^d	14 ^d	16 ^d	7^{d}	m	m	m	m	15	17	19	7		
	United States	16	10	a	10	16	10	a	10	16	10	a	10		
	OFCD	10	10			10	10			10	10				
	OECD average EU22 average	13 11	12 12	m m	m m	13 12	12 12	m m	m m	13 12	13 12	m m	m m		
5	Argentina	m	m	m	m	m	m	m	m	m	m	m	m		
tne	Argentina Brazil China	26	21	a	21	25	19	a	19	25	20	a	20		
Par	China	12	17	x(2)	x(2)	15	18	x(6)	x(6)	13	18	x(6)	x(6)		
	Colombia	29	19	x(2)	x(2)	26	19	x(6)	x(6)	28	19	x(6)	x(6)		
	Costa Rica	15	10	x(2)	x(2)	14	10	x(6)	x(6)	15	10	x(6)	x(6)		
	India	29	32	36	31	31	35	34	35	30	34	35	33		
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m		
	Lithuania	7	10	a	10	8	6	a	6	8	9	a	9		
	Russian Federation	10 ^d	5 ^d	a	5 ^d	x(1)	x(2)	a	x(4)	10	5	a	5		
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m		
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m		
	G20 average	17	15	20	14	16	15	18	15	16	14	19	13		

 $^{1. \} Includes \ only \ general \ programmes \ in \ lower \ and \ upper \ secondary \ education.$

StatLink http://dx.doi.org/10.1787/888933561821

 $^{2.\} Upper\ secondary\ education\ includes\ programmes\ from\ lower\ secondary\ and\ post-secondary\ non-tertiary.$

^{3.} Upper secondary education includes programmes from post-secondary non-tertiary.

 $^{4. \} Lower secondary education comprises secondary schools for age 11-16. \ Upper secondary includes colleges for age 16+ and adult learning. See Annex 3 for details.$ $\textbf{Source:} \ OECD/UIS/Eurostat \ (2017). \ See \textit{Source section for more information and Annex 3 for notes} \ (\underline{www.oecd.org/education/education-at-a-glance-19991487.htm}).$ Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.



From: Education at a Glance 2017

OECD Indicators

Access the complete publication at:

https://doi.org/10.1787/eag-2017-en

Please cite this chapter as:

OECD (2017), "Indicator D2 What is the student-teacher ratio and how big are classes?", in *Education at a Glance 2017: OECD Indicators*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/eag-2017-30-en

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

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

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

