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

- The average primary school class in OECD countries has 21 students, and this average increases to 23 in lower secondary education. These figures represent a decrease when compared to the OECD average class sizes in 2005.
- The difference in average class size between public and private institutions in primary education 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 17 students per teacher, on average, at the tertiary level.

Figure D2.1. Average class size, by level of education (2014)


Countries are ranked in descending order of the average class size in lower secondary education.
Source: OECD. Table D2.1. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).
StatLink 雮页 http://dx.doi.org/10.1787/888933398905

## Context

Class size and student-teacher ratios are much-discussed aspects of education and, along with students' instruction time (see Indicator D1), teachers' working time (see Indicator D4), and the division of teachers' time between teaching and other duties, are among the determinants of the demand for teachers. 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 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 differences in class size on student performance is weak.

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, 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 qualified teachers.

## $\square$ Other findings

- With the exceptions of Chile, Colombia, Luxembourg and Mexico, the student-teacher ratio decreases or stays the same between primary and lower secondary levels in all countries with available data, despite a general increase in class size between these levels.
- On average across OECD countries, the student-teacher ratio in lower and upper 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 at least 14 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), while in Latvia, Lithuania and Luxembourg, classes have fewer than 17 students, on average.


## Analysis

## Average class size in primary and lower secondary education

The average primary class in OECD countries had 21 pupils in 2014. There are fewer than 26 pupils per primary classroom in nearly all of the countries with available data, with the exception of Chile, China, India, 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 and Korea, and 49 students in China (Table D2.1).

The number of students per class tends to increase between primary and lower secondary education. In China, Korea and Mexico, the increase in average class size exceeds seven students. Meanwhile, the United Kingdom and, to a lesser extent, Estonia, Latvia and the Russian Federation show a drop in the number of students per class between these two levels of education.

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 and attend 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, and 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, there are marked differences among countries. For example, in Brazil, the Czech Republic, Iceland, Latvia, Poland, the Russian Federation and the United Kingdom, the average primary school class in public institutions is larger than the average class in a private school by more than four students (Table D2.1). However, with the exception of Brazil and the United Kingdom, the private sector is relatively small in all of these countries, representing at most $5 \%$ of students at the primary level (see Table C1.4a in OECD, 2015). In contrast, in China and Luxembourg, the average class in private institutions is larger than that in public institutions by six students.

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 in lower secondary private institutions is larger than in public institutions in 10 countries, smaller in 15 countries and the same in 7 countries. The differences, however, tend to be smaller than in primary education.

In countries where private institutions (including both government-dependent and independent) 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, Indonesia, Israel and Spain, there may be considerable differences in class size between public and private institutions (see Table C1.4a in OECD, 2015). 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, the size of classes in primary and lower secondary education decreased between 2005 and 2014. The most significant change occurred at the lower secondary level, where the average class size decreased by $6 \%$ in that period (Table D2.1). These averages mask considerably large changes in the class sizes of particular countries (Figure D2.2). In Estonia, for example, the average class size in lower secondary education decreased by $35 \%$ in these nine years. In Korea, classes at the primary level are, on average, $28 \%$ smaller. Other countries, however, experienced an increase in the average size of classes between 2005 and 2014, such as Portugal, where the average primary class size increased by $14 \%$, and the Russian Federation, where the increase was $31 \%$.

There have also been different trends in average class sizes within countries, when comparing changes in different types of institutions. In Estonia, while the average class size in primary public institutions experienced a sharp decrease of $15 \%$ between 2005 and 2014, the average class size in private institutions actually increased by $4 \%$.

Indeed, during that period, the average primary class size in four countries (Chile, Estonia, Luxembourg and Turkey) increased in independent private institutions while it decreased in public institutions. The reverse is true in Portugal and Spain. However, even in countries where the average class sizes in public and private institutions have either both decreased or both increased during the period, the magnitude of change sometimes varies considerably. At the lower secondary level, for example, while the average class size in public institutions in Estonia decreased by $35 \%$, the decrease in private institutions was smaller ( $14 \%$ ) during the same period.

Figure D2.2. Change in average class size (2005, 2014)
Index of change, $2005=0$


Countries are ranked in descending order of the index of change in lower secondary education between 2005 and 2014.
Source: OECD. Table D2.1. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).


## 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 D2.1).

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

Student-teacher ratios also vary, and to a larger extent, at the secondary school level, ranging from 27 students per full-time equivalent teacher in Mexico to fewer than 10 students per teacher in Austria, Lithuania and the Russian Federation. On average across OECD countries, there are about 13 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 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. This is true in all but four countries: Chile, Colombia, Luxembourg and Mexico. However, the student-teacher ratio in Luxembourg is very low in both levels of education.

This reduction in the student-teacher ratio reflects differences in annual instruction time: since annual instruction time tends to increase with the level of education (see Indicator D1), so does the number of teachers. 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).

At the tertiary level, the student-teacher ratio ranges from over 20 students per teacher in Belgium, Brazil, the Czech Republic, Greece, Indonesia, Korea and Saudi Arabia to 10 in Norway. 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 22 countries with available data at the tertiary level, the ratio of students to teaching staff is lower in short-cycle tertiary education than in bachelor's, master's, doctoral or equivalent levels. Among countries in which the ratio of students to teaching staff is higher in short-cycle tertiary education than in bachelor's, master's, doctoral or equivalent levels, Turkey displays the largest difference: 48 to 1 in short-cycle tertiary education and 17 to 1 in bachelor's, master's, doctoral or equivalent levels (Table D2.2).

Differences between public and private institutions in student-teacher ratios are similar to those observed in class size. On average across the countries for which data are available, the ratios of students to teaching staff are slightly lower in private institutions than in public institutions at the lower and upper secondary levels. The largest differences between public and private institutions are in Brazil, Colombia, Mexico and Turkey, where, at the lower secondary level, there are at least seven more students per teacher in public institutions than in private institutions. At the upper secondary level, Colombia is the country with the highest difference in student-teacher ratios between public and private institutions, a difference of 13 students per teacher (Table D2.3).

However, in some countries, the student-teacher ratio is lower in public institutions than in private institutions. At the lower secondary level, 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.

## General and vocational programmes in upper secondary education

On average across OECD countries, the ratio of students to teaching staff in upper secondary vocational programmes (14 to 1) is slightly higher than that in general programmes (13 to 1) (Figure D2.3). The difference between the ratios of the two programmes can, however, be considerably higher in some countries. In Indonesia, which has the highest difference between programmes of all countries with available data, general programmes have 12 fewer students per teacher than vocational programmes. The difference is also large in Brazil, but the ratio is inversed: general programmes have 9 more students per teacher than vocational programmes. Among OECD countries with comparable data, Chile has the highest rate in both programmes: 24 students per teacher. When partner countries are also considered, Indonesia has the highest ratio in vocational programmes, 28 students per teacher.

Figure D2.3. Ratio of students to teaching staff in upper secondary education, by type of programme (2014)


[^0]
## Box D2.1. What is the relationship between class size and the student-teacher ratio?

The student-teacher ratio is calculated by dividing the number of full-time equivalent students by the number of full-time equivalent teachers at a given level of education and type of institution. 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 two indicators, therefore, measure very different characteristics of the education system. Student-teacher 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

Instructional personnel (teaching staff) includes two categories:
Teachers' aides and teaching/research assistants includes 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. At the tertiary level, academic staff includes personnel whose primary assignment is instruction or research. Teaching staff also includes department chairpersons whose duties include some teaching, but excludes nonprofessional personnel who support teachers in providing instruction to students, such as teachers' aides and other paraprofessional personnel.

## Methodology

Data refer to the academic year 2013/14 and are based on the UOE data collection on education statistics administered by the OECD in 2015 (for details see Annex 3 at www.oecd.org/education/education-at-a-glance-19991487.htm).

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.

## 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

OECD (2015), Education at a Glance 2015: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2015-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, ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche, Direction de lévaluation et de la prospective, Paris, www.education.gouv.fr/cid3865/l-impact-de-la-taille-des-classes-sur-la-reussite-scolaire-dans-les-ecoles-colleges-et-lycees-francais.html\&xtmc=piketty\&xtnp=1\&xtcr=1.

## Indicator D2 Tables

StatLink ज्ताता
Table D2.1 Average class size by type of institution (2014) and index of change between 2005 and 2014
Table D2.2 Ratio of students to teaching staff in educational institutions (2014)
Table D2.3 Ratio of students to teaching staff, by type of institution (2014)
Cut-off date for the data: 20 July 2016. Any updates on data can be found on line at: http://dx.doi.org/10.1787/eag-data-en

Table D2.1. [1/2] Average class size by type of institution (2014) and index of change between 2005 and 2014 By level of education, calculations based on number of students and number of classes

|  | Primary education |  |  |  |  | Lower secondary education |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ate instituti |  |  |  |  | ate instituti |  |  |
|  | Public institut |  |  |  |  |  |  |  |  |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| OU Australia ü Austria | $\begin{aligned} & 23 \\ & 18 \end{aligned}$ | $\begin{aligned} & 25 \\ & 19 \end{aligned}$ | $\begin{gathered} 25 \\ x(2) \end{gathered}$ | $\begin{gathered} a \\ x(2) \end{gathered}$ | $\begin{aligned} & 24 \\ & 18 \end{aligned}$ | $\begin{aligned} & 23 \\ & 21 \end{aligned}$ | $\begin{aligned} & 25 \\ & 21 \end{aligned}$ | $\begin{gathered} 25 \\ x(7) \end{gathered}$ | $\begin{gathered} a \\ x(7) \end{gathered}$ | $\begin{aligned} & 24 \\ & 21 \end{aligned}$ |
| Belgium (Fr.) Canada | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathbf{m} \\ & \mathbf{m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathbf{m} \\ & \mathbf{m} \end{aligned}$ |
| Chile <br> Czech Republic | $\begin{aligned} & 29 \\ & 21 \end{aligned}$ | $\begin{aligned} & 31 \\ & 15 \end{aligned}$ | $\begin{aligned} & 32 \\ & 15 \end{aligned}$ | $\begin{array}{r} 24 \\ a \end{array}$ | $\begin{aligned} & 30 \\ & 21 \end{aligned}$ | $\begin{aligned} & 30 \\ & 22 \end{aligned}$ | $\begin{aligned} & 31 \\ & 19 \end{aligned}$ | $\begin{aligned} & 33 \\ & 19 \end{aligned}$ | $\begin{array}{r} 25 \\ a \end{array}$ | $\begin{aligned} & 31 \\ & 22 \end{aligned}$ |
| Denmark Estonia | $\begin{gathered} \mathrm{m} \\ 17 \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ 16 \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(2) \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(2) \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ 17 \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ 15 \end{array}$ | $\begin{gathered} \mathrm{m} \\ 13 \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(7) \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(7) \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ 15 \end{gathered}$ |
| Finland <br> France | $\begin{aligned} & 19 \\ & 23 \end{aligned}$ | $\begin{aligned} & 17 \\ & 23 \end{aligned}$ | $\begin{aligned} & 17 \\ & 23^{\mathrm{d}} \end{aligned}$ | $\begin{gathered} a \\ x(3) \end{gathered}$ | $\begin{aligned} & 19 \\ & 23 \end{aligned}$ | $\begin{aligned} & 20 \\ & 25 \end{aligned}$ | $\begin{aligned} & 20 \\ & 26 \end{aligned}$ | $\begin{aligned} & 20 \\ & 26 \end{aligned}$ | $\begin{array}{r} \text { a } \\ 13 \end{array}$ | $\begin{aligned} & 20 \\ & 25 \end{aligned}$ |
| Germany <br> Greece | $\begin{gathered} 21 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 21 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 21^{\mathrm{d}} \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} x(3) \\ m \end{gathered}$ | $\begin{array}{r} 21 \\ \mathbf{m} \end{array}$ | $\begin{gathered} 24 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 24 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 24^{\mathrm{d}} \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} x(8) \\ \mathrm{m} \end{gathered}$ | $24$ <br> m |
| Hungary <br> Iceland | $\begin{aligned} & 21 \\ & 19 \end{aligned}$ | $\begin{aligned} & 20 \\ & 13 \end{aligned}$ | $\begin{aligned} & 21 \\ & 13 \end{aligned}$ | $\begin{array}{r} 16 \\ a \end{array}$ | $\begin{aligned} & 21 \\ & 19 \end{aligned}$ | $\begin{aligned} & 21 \\ & 20 \end{aligned}$ | $\begin{aligned} & 21 \\ & 11 \end{aligned}$ | $\begin{aligned} & 22 \\ & 11 \end{aligned}$ | $\begin{array}{r} 16 \\ a \end{array}$ | $\begin{aligned} & 21 \\ & 20 \end{aligned}$ |
| Ireland Israel | $\begin{aligned} & 25 \\ & 28 \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & 24 \end{aligned}$ | $\begin{array}{r} \text { a } \\ 24 \end{array}$ | $\begin{array}{r} \mathrm{m} \\ \mathrm{a} \end{array}$ | $\begin{gathered} \mathbf{m} \\ \mathbf{2 7} \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ 29 \end{array}$ | $\begin{gathered} \mathrm{m} \\ 24 \end{gathered}$ | $\begin{array}{r} a \\ 24 \end{array}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{a} \end{gathered}$ | $\begin{array}{r} \mathbf{m} \\ \mathbf{2 8} \end{array}$ |
| Italy Japan | $\begin{aligned} & 20 \\ & 27 \end{aligned}$ | $\begin{aligned} & 20 \\ & 29 \end{aligned}$ | a <br> a | $\begin{aligned} & 20 \\ & 29 \end{aligned}$ | $\begin{aligned} & 20 \\ & 27 \end{aligned}$ | $\begin{aligned} & 21 \\ & 32 \end{aligned}$ | $\begin{aligned} & 21 \\ & 33 \end{aligned}$ | a <br> a | $\begin{aligned} & 21 \\ & 33 \end{aligned}$ | $\begin{aligned} & 21 \\ & 32 \end{aligned}$ |
| Korea <br> Latvia | $\begin{aligned} & 24 \\ & 16 \end{aligned}$ | $\begin{array}{r} 28 \\ 9 \end{array}$ | a | $\begin{array}{r} 28 \\ 9 \end{array}$ | $\begin{aligned} & 24 \\ & 16 \end{aligned}$ | $\begin{aligned} & 32 \\ & 15 \end{aligned}$ | $\begin{aligned} & 31 \\ & 10 \end{aligned}$ | $\begin{array}{r} 31 \\ \text { a } \end{array}$ | $\begin{array}{r} \text { a } \\ 10 \end{array}$ | $\begin{aligned} & 32 \\ & 15 \end{aligned}$ |
| Luxembourg Mexico | $\begin{aligned} & 15 \\ & 19 \end{aligned}$ | $\begin{aligned} & 21 \\ & 19 \end{aligned}$ | $\begin{array}{r} 17 \\ \text { a } \end{array}$ | $\begin{aligned} & 21 \\ & 19 \end{aligned}$ | $\begin{aligned} & 16 \\ & 19 \end{aligned}$ | $\begin{aligned} & 19 \\ & 28 \end{aligned}$ | $\begin{aligned} & 19 \\ & 24 \end{aligned}$ | $\begin{array}{r} 20 \\ \text { a } \end{array}$ | $\begin{aligned} & 18 \\ & 24 \end{aligned}$ | $\begin{aligned} & 19 \\ & 28 \end{aligned}$ |
| Netherlands <br> New Zealand | $\begin{gathered} 23^{\mathrm{d}} \\ \mathrm{~m} \end{gathered}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{gathered} \mathrm{x}(1) \\ \mathrm{m} \end{gathered}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{gathered} 23 \\ \mathbf{m} \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ 25 \end{array}$ | $\begin{gathered} m \\ 21 \end{gathered}$ | a a | $\begin{gathered} m \\ 21 \end{gathered}$ | $\begin{array}{r} \mathbf{m} \\ \mathbf{2 5} \end{array}$ |
| Norway ${ }^{1}$ <br> Poland | $\begin{gathered} \mathrm{m} \\ 19 \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ 11 \end{array}$ | $\begin{gathered} \mathrm{m} \\ 10 \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ 12 \end{array}$ | $\begin{array}{r} \text { m } \\ 18 \end{array}$ | $\begin{array}{r} \mathrm{m} \\ 23 \end{array}$ | $\begin{array}{r} \mathrm{m} \\ 17 \end{array}$ | $\begin{array}{r} \mathrm{m} \\ 23 \end{array}$ | $\begin{gathered} \mathrm{m} \\ 15 \end{gathered}$ | $\begin{array}{r} \mathbf{m} \\ \mathbf{2 2} \end{array}$ |
| Portugal Slovak Republic | $\begin{aligned} & 21 \\ & 18 \end{aligned}$ | $\begin{aligned} & 21 \\ & 17 \end{aligned}$ | $\begin{aligned} & 24 \\ & 17 \end{aligned}$ | $\begin{array}{r} 20 \\ 0 \end{array}$ | $\begin{aligned} & 21 \\ & 18 \end{aligned}$ | $\begin{aligned} & 23 \\ & 19 \end{aligned}$ | $\begin{aligned} & 24 \\ & 18 \end{aligned}$ | $\begin{aligned} & 25 \\ & 18 \end{aligned}$ | $\begin{array}{r} 22 \\ 0 \end{array}$ | $\begin{aligned} & 23 \\ & 19 \end{aligned}$ |
| Slovenia <br> Spain | $\begin{aligned} & 19 \\ & 21 \end{aligned}$ | $\begin{aligned} & 20 \\ & 24 \end{aligned}$ | $\begin{aligned} & 20 \\ & 25 \end{aligned}$ | $\begin{array}{r} \text { a } \\ 22 \end{array}$ | $\begin{aligned} & 19 \\ & 22 \end{aligned}$ | $\begin{aligned} & 20 \\ & 25 \end{aligned}$ | $\begin{aligned} & 21 \\ & 26 \end{aligned}$ | $\begin{aligned} & 21 \\ & 27 \end{aligned}$ | $\begin{array}{r} a \\ 22 \end{array}$ | $\begin{aligned} & 20 \\ & 25 \end{aligned}$ |
| Sweden <br> Switzerland | $\begin{gathered} 18 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 16 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 16 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} \mathrm{a} \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 18 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 20 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 21 \\ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} 21 \\ \mathrm{~m} \end{array}$ | $\begin{gathered} \mathrm{a} \\ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} \mathbf{2 0} \\ \mathbf{m} \end{array}$ |
| Turkey <br> United Kingdom | $\begin{aligned} & 23 \\ & 26 \end{aligned}$ | $\begin{aligned} & 19 \\ & 21 \end{aligned}$ | $\begin{array}{r} \text { a } \\ 27 \end{array}$ | $\begin{aligned} & 19 \\ & 14 \end{aligned}$ | $\begin{aligned} & 23 \\ & 25 \end{aligned}$ | $\begin{aligned} & 28 \\ & 20 \end{aligned}$ | $\begin{aligned} & 19 \\ & 18 \end{aligned}$ | $\begin{array}{r} a \\ 20 \end{array}$ | $\begin{aligned} & 19 \\ & 11 \end{aligned}$ | $\begin{aligned} & 28 \\ & 19 \end{aligned}$ |
| United States | 22 | 18 | a | 18 | 21 | 28 | 20 | a | 20 | 27 |
| OECD average EU22 average | $\begin{aligned} & 21 \\ & 20 \end{aligned}$ | $\begin{aligned} & 20 \\ & 18 \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & 21 \\ & 20 \end{aligned}$ | $\begin{aligned} & 23 \\ & 21 \end{aligned}$ | $\begin{aligned} & 21 \\ & 20 \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & 23 \\ & 21 \end{aligned}$ |
| $\begin{aligned} & \text { n Argentina } \\ & \text { Brazil } \end{aligned}$ | $\begin{array}{r} \mathrm{m} \\ 25 \end{array}$ | $\begin{gathered} \mathrm{m} \\ 18 \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ \mathrm{a} \end{array}$ | $\begin{gathered} \mathrm{m} \\ 18 \end{gathered}$ | $\begin{array}{r} \mathbf{m} \\ \mathbf{2 3} \end{array}$ | $\begin{gathered} \mathrm{m} \\ 28 \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ 24 \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ \mathrm{a} \end{array}$ | $\begin{gathered} \mathrm{m} \\ 24 \end{gathered}$ | $\begin{gathered} \mathbf{m} \\ \mathbf{2 7} \end{gathered}$ |
| c. China Colombia | $\begin{gathered} 37 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 43 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} x(2) \\ m \end{gathered}$ | $\begin{gathered} x(2) \\ \mathrm{m} \end{gathered}$ | $\begin{gathered} \mathbf{3 7} \\ \mathbf{m} \end{gathered}$ | $\begin{gathered} 49 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 51 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} \mathrm{x}(7) \\ \mathrm{m} \end{gathered}$ | $\begin{gathered} \mathrm{x}(7) \\ \mathrm{m} \end{gathered}$ | $49$ $\mathbf{m}$ |
| Costa Rica India ${ }^{2}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(5) \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(5) \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(5) \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(5) \end{gathered}$ | $\begin{gathered} \mathbf{m} \\ \mathbf{2 6} \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(10) \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(10) \end{gathered}$ | $\begin{gathered} m \\ x(10) \end{gathered}$ | $\begin{gathered} m \\ \mathrm{x}(10) \end{gathered}$ | $\begin{array}{r} \mathbf{m} \\ \mathbf{3 0} \end{array}$ |
| Indonesia <br> Lithuania | $\begin{aligned} & 25 \\ & 16 \end{aligned}$ | $\begin{aligned} & 22 \\ & 15 \end{aligned}$ | a a | $\begin{aligned} & 22 \\ & 15 \end{aligned}$ | $\begin{aligned} & 25 \\ & 16 \end{aligned}$ | $\begin{aligned} & 31 \\ & 19 \end{aligned}$ | $\begin{aligned} & 31 \\ & 20 \end{aligned}$ | a <br> a | $\begin{aligned} & 31 \\ & 20 \end{aligned}$ | $\begin{aligned} & 31 \\ & 19 \end{aligned}$ |
| Russian Federation Saudi Arabia | 21 $m$ | $\begin{gathered} 13 \\ \mathrm{~m} \end{gathered}$ | a $\mathrm{m}$ | $\begin{gathered} 13 \\ \mathrm{~m} \end{gathered}$ | 20 m | 19 m | 12 m | a m | 12 m | 19 m |
| South Africa | m | m | m | m | m | m | m | m | m | m |
| G20 average | 24 | 23 | m | m | 24 | 28 | 26 | m | m | 28 |

1. Students are organised in groups that vary in size during the school day.
2. Year of reference 2013.

Sources: OECD. Argentina, China, Colombia, Costa Rica, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Lithuania: Eurostat. See 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.


Table D2．1．［2／2］Average class size by type of institution（2014）and index of change between 2005 and 2014 By level of education，calculations based on number of students and number of classes

|  | Index of change between 2005 and $2014(2005=100)$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary education |  |  |  | Lower secondary education |  |  |  |
|  | Public institutions | Government－ dependent private institutions | Independent private institutions | Total public and private institutions | Public institutions | Government－ dependent private institutions | Independent private institutions | Total public and private institutions |
|  | （11） | （12） | （13） | （14） | （15） | （16） | （17） | （18） |
| Q Australia | 98 |  |  |  |  |  | m | 96 |
| O Austria | 91 | m | m | 91 | 87 | m | m | 87 |
| Belgium (Fr.) | $\mathrm{m}$ | $\mathrm{m}$ | $\mathrm{m}$ | m | $\mathrm{m}$ | $\mathrm{m}$ | $\mathrm{m}$ | $\mathrm{m}$ |
|  | 86 | $\begin{gathered} \mathrm{m} \\ 98 \end{gathered}$ |  | 94 | 86 | 95 | 101 | 92 |
| Czech Republic | 101 | 92 | $\mathrm{m}$ | $100$ | 92 | 88 | m | 92 |
| Denmark | m | m | m | m | m | m | m | m |
| Estonia | 85 | $\mathrm{x}(13)$ | $104{ }^{\text {d }}$ | 85 | 65 | $\mathrm{x}(13)$ | $86^{\text {d }}$ | 65 |
| Finland | m | m | m | m | m | m | m | m |
| France | m | m | m | m | 107 | 105 | 100 | 107 |
| Germany | 94 | $91^{\text {d }}$ | $\mathrm{x}(12)$ | 94 | 98 | $93^{\text {d }}$ | $\mathrm{x}(16)$ | 98 |
| Greece | m | m | m | m | m | m | m | m |
| Hungary | 106 | 110 | m | 106 | 97 | 101 | m | 97 |
| Iceland | 102 | 98 | m | 101 | 101 | 90 | m | 101 |
| Ireland | 102 | m | m | m | m | m | m | m |
| Israel | 104 | m | m | 100 | 92 | m | m | 89 |
| Italy | 108 | m | 103 | 107 | 103 | m | 98 | 102 |
| Japan | 97 | m | 86 | 96 | 97 | m | 93 | 97 |
| Korea | 72 | m | 86 | 72 | 88 | 90 | m | 88 |
| Latvia | m |  |  |  |  |  | m | m |
| Luxembourg | 99 | 83 | 112 | 100 | 97 | 97 | 86 | 96 |
| Mexico |  |  |  |  |  | a |  | 93 |
| Netherlands | m | m | m | 106 | m | m | m | m |
| New Zealand | m | m | m | m | m | m | m | m |
| Norway ${ }^{1}$ | m | m | m | m | m | m | m | m |
| Poland | 94 | 82 | 100 | 92 | 94 | 86 | 102 | 93 |
| Portugal | 117 | 95 | 96 | 114 | 100 | 102 | 99 | 100 |
| Slovak Republic | 90 | 88 | m | 90 | 84 | 81 | m | 84 |
| Slovenia | 105 | 115 | m | 105 | 96 | 101 | m | 96 |
| Spain | 106 | 102 | 91 | 104 | 106 | 99 | 91 | 103 |
| Sweden | m | m | m | m | m | m | m | m |
| Switzerland | m | m |  |  | m | m | m | m |
| Turkey | 84 | m | 115 | 84 | m | m | m | m |
| United Kingdom | 102 | m | 127 | 105 | 83 | 108 | 116 | 86 |
| United States | 103 | a | 99 | 103 | 105 | a | 95 | 104 |
| OECD average | 98 | m | m | 98 | 94 | m | m | 94 |
| EU22 average | 100 | m | m | 100 | 94 | m | m | 93 |



1．Students are organised in groups that vary in size during the school day．
2．Year of reference 2013.
Sources：OECD．Argentina，China，Colombia，Costa Rica，India，Indonesia，Saudi Arabia，South Africa：UNESCO Institute for Statistics．Lithuania：Eurostat．See 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 ⿹⿻弋一𣥂刂｜st http：／／dx．doi．org／10．1787／888933398873

What is the student-teacher ratio and how big are classes? - INDICATOR D2 CHAPTER D
A corrigendum has been issued for this page. See: http://www.oecd.org/about/publishing/Corrigendum-Education-at-a-Glance2016.pdf

Table D2.2. Ratio of students to teaching staff in educational institutions (2014) By level of education, calculations based on full-time equivalents

|  | Primary | Lower secondary | Upper secondary |  |  | All secondary education | Postsecondary non-tertiary | Tertiary |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | General programmes | Vocational programmes | All programmes |  |  | Short-cycle tertiary | Bachelor's, master's, doctoral or equivalent level | All tertiary |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| $\begin{aligned} & \text { Qu Australia } \\ & \text { O Austria } \end{aligned}$ | 16 | $\mathrm{x}(3)$ | $12^{\text {d }}$ | m | m | m | m | m | 15 | m |
|  | 12 | 9 | 10 | 10 | 10 | 9 | 11 | 9 | 17 | 15 |
| Belgium | 13 | 9 | 10 | 10 | 10 | 10 | 17 | $\mathrm{x}(10)$ | $\mathrm{x}(10)$ | 22 |
| Canada ${ }^{1,2}$ | $16^{\text {d }}$ | x (1) | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | 14 | m | m | m | m | m |
| Chile | 21 | 23 | 24 | 24 | 24 | 24 | a | m | m | m |
| Czech Republic | 19 | 12 | 12 | 12 | 12 | 12 | 21 | 12 | 22 | 22 |
| Denmark | 12 | 11 | 11 | 17 | 13 | 12 | a | 23 | 14 | 14 |
| Estonia | 13 | 10 | 13 | $17^{\text {d }}$ | $15^{\text {d }}$ | $12^{\text {d }}$ | $\mathrm{x}(4)$ | a | 15 | 15 |
| Finland | 13 | 9 | 14 | 17 | 16 | 13 | 17 | a | 14 | 14 |
| France | 19 | 15 | 9 | 13 | 10 | 13 | x (8) | $19^{\text {d }}$ | 18 | $18^{\text {d }}$ |
| Germany | 15 | 13 | 13 | 14 | 13 | 13 | 13 | 13 | 12 | 12 |
| Greece | 9 | 8 | m | 7 | m | m | m | a | 45 | 45 |
| Hungary | 11 | 11 | 12 | 15 | 12 | 12 | 14 | 15 | 15 | 15 |
| Iceland | m | m | m | m | m | m | m | m | m | m |
| Ireland ${ }^{3}$ | 16 | $\mathrm{x}(4)$ | $14^{\text {d }}$ | m | $14^{\text {d }}$ | $14^{\text {d }}$ | m | $\mathrm{x}(10)$ | $\mathrm{x}(10)$ | 20 |
| Israel ${ }^{3}$ | 15 | 12 | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | 11 | 11 | m | m | m | m |
| Italy | 12 | 12 | 13 | 12 | 12 | 12 | m | a | 19 | 19 |
| Japan | 17 | 14 | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | $12^{\text {d }}$ | $13^{\text {d }}$ | $x(3,4)$ | m | m | m |
| Korea | 17 | 17 | 15 | 12 | 15 | 15 | m | 29 | 19 | 21 |
| Latvia ${ }^{4}$ | 11 | 8 | 8 | 18 | 10 | 9 | 16 | 23 | $18^{\text {d }}$ | 19 |
| Luxembourg | 9 | 11 | 8 | 9 | 9 | 10 | m | 9 | m | m |
| Mexico | 27 | 33 | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | 21 | 27 | a | 18 | 15 | 16 |
| Netherlands ${ }^{3}$ | 17 | 16 | 16 | 21 | 19 | 17 | 21 | 16 | 16 | 16 |
| New Zealand | 16 | 16 | 12 | 19 | 13 | 15 | 21 | 17 | 17 | 17 |
| Norway | 10 | 10 | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | $10^{\text {d }}$ | $10^{\text {d }}$ | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | 10 | 10 |
| Poland | 11 | 10 | 13 | 10 | 11 | 11 | 15 | 8 | 15 | 15 |
| Portugal | 14 | 10 | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | $9^{\text {d }}$ | $10^{\text {d }}$ | $\mathrm{x}(5)$ | a | $14^{\text {d }}$ | $14^{\text {d }}$ |
| Slovak Republic | 17 | 12 | 14 |  | 14 |  | 13 | 9 |  | 14 |
| Slovenia | 16 | 8 | 13 | 14 | 14 | 11 | a | 22 | 16 | 17 |
| Spain | 14 | 12 | 12 | 10 | 11 | 12 | a | 11 | 13 | 13 |
| Sweden | 13 | 12 | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | 14 | 13 | 11 | 10 | 11 | 11 |
| Switzerland ${ }^{3}$ | 15 | 12 | 11 | m | m | m | m | m | m | m |
| Turkey | 19 | 18 | 16 | 14 | 15 | 17 | a | 48 | 17 | 20 |
| United Kingdom | 20 | 15 | 15 | 21 | 16 | 16 | a | 18 | 17 | 17 |
| United States | 15 | 15 | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | 15 | 15 | $\mathrm{x}(10)$ | $\mathrm{x}(10)$ | $\mathrm{x}(10)$ | $15^{\text {d }}$ |
| OECD average | 15 | 13 | 13 | 14 | 13 | 13 | m | m | 17 | 17 |
| EU22 average | 14 | 11 | 12 | 14 | 13 | 12 | m | m | 17 | 17 |
|  | m | m | m | m | m | m | m | m | m | m |
|  | 21 | 18 | 17 | 8 | 15 | 17 | 19 | 50 | 25 | 25 |
|  | 16 | 13 | 15 | 20 | 17 | 14 | $\mathrm{x}(8)$ | $22^{\text {d }}$ | 19 | $20^{\text {d }}$ |
|  | 24 | 26 | $\mathrm{x}(5)$ | $\mathrm{x}(5)$ | 22 | 25 | m | m | m | m |
| Costa Rica | m | m | m | m | m | m | a | a | m | m |
| India |  |  |  |  | m | m | m | a | m | m |
| Indonesia | 21 | 18 | 16 | 28 | 20 | 19 | a | $\mathrm{x}(10)$ | $\mathrm{x}(10)$ | 28 |
| Lithuania | 10 | 7 | 8 | 9 | 8 | 8 | 14 | a | 16 | 16 |
| Russian Federation | 20 | $9^{\text {d }}$ | $\mathrm{x}(2)$ | $x(7,8)$ | $\mathrm{x}(2,7,8)$ | 9 | $23^{\text {d }}$ | $11^{\text {d }}$ | 11 | $11^{\text {d }}$ |
| Saudi Arabia | m | m | m | m | m | m | m | $\mathrm{x}(10)$ | $\mathrm{x}(10)$ | 21 |
| South Africa | m | $26^{\text {d }}$ | $\mathrm{x}(2)$ | m | m | m | m | m | m | m |
| G20 average | 18 | 17 | 14 | 15 | 15 | 15 | m | m | 17 | 18 |

1. Year of reference 2013
2. Primary includes pre-primary.
3. Public institutions only. For Israel, public institutions only for upper secondary education
4. Bachelor's, master's and doctoral programmes includes teachers from government-dependent institutions in short-cycle tertiary education.

Source: OECD. Argentina, China, Colombia, Costa Rica, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Lithuania: Eurostat. See 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 ⿹्ञात्रा http://dx.doi.org/10.1787/888933398882

Table D2.3. Ratio of students to teaching staff, by type of institution (2014) By level of education, calculations based on full-time equivalents

|  | Lower secondary education |  |  |  | Upper secondary education |  |  |  | All secondary programmes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Private institutions |  |  |  | Private institutions |  |  |  | Private institutions |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| $\begin{aligned} & \text { Q Australia }{ }^{1} \\ & \text { OUstria } \end{aligned}$ | $\begin{gathered} x(5) \\ 9 \end{gathered}$ | $\begin{gathered} \mathrm{x}(6) \\ 10 \end{gathered}$ | $\begin{aligned} & x(7) \\ & x(2) \end{aligned}$ | $\begin{gathered} a \\ x(2) \end{gathered}$ | $\begin{aligned} & 13^{\mathrm{d}} \\ & 10 \end{aligned}$ | $\begin{gathered} 12^{\mathrm{d}} \\ 9 \end{gathered}$ | $\begin{gathered} 12^{\mathrm{d}} \\ \mathrm{x}(6) \end{gathered}$ | $\begin{gathered} a \\ x(6) \end{gathered}$ | $\begin{array}{r} 13 \\ 9 \end{array}$ | $\begin{aligned} & 12 \\ & 10 \end{aligned}$ | $\begin{gathered} 12 \\ x(10) \end{gathered}$ | $\begin{gathered} a \\ x(10) \end{gathered}$ |
| Belgium <br> Canada ${ }^{2}$ | $\begin{gathered} 9 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 9 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 9 \\ \mathrm{~m} \end{gathered}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & 10 \\ & 14 \end{aligned}$ | $\begin{aligned} & 10 \\ & 12 \end{aligned}$ | $\begin{gathered} 10 \\ x(6) \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{x}(6) \end{gathered}$ | $\begin{gathered} 10 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 10 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 10 \\ \mathrm{~m} \end{gathered}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ |
| Chile <br> Czech Republic | $\begin{aligned} & 20 \\ & 12 \end{aligned}$ | $\begin{aligned} & 26 \\ & 10 \end{aligned}$ | $\begin{aligned} & 27 \\ & 10 \end{aligned}$ | $\begin{array}{r} 21 \\ \text { a } \end{array}$ | $\begin{aligned} & 23 \\ & 11 \end{aligned}$ | $\begin{aligned} & 25 \\ & 13 \end{aligned}$ | $\begin{aligned} & 27 \\ & 13 \end{aligned}$ | $\begin{array}{r} 16 \\ \text { a } \end{array}$ | $\begin{aligned} & 21 \\ & 12 \end{aligned}$ | $\begin{aligned} & 25 \\ & 12 \end{aligned}$ | $\begin{aligned} & 27 \\ & 12 \end{aligned}$ | $\begin{array}{r} 17 \\ \mathrm{a} \end{array}$ |
| Denmark <br> Estonia ${ }^{3}$ | $\begin{aligned} & 11 \\ & 10 \end{aligned}$ | $\begin{array}{r} 11 \\ 8 \end{array}$ | $\begin{array}{r} 11 \\ a \end{array}$ | $3$ | $13$ | $\begin{gathered} 7 \\ 12^{\mathrm{d}} \end{gathered}$ | $6$ | $\begin{aligned} & 28 \\ & 12^{\mathrm{d}} \end{aligned}$ | $\begin{aligned} & 12 \\ & 12^{\mathrm{d}} \end{aligned}$ | $\begin{aligned} & 10 \\ & 10^{\mathrm{d}} \end{aligned}$ | $\begin{array}{r} 11 \\ a \end{array}$ | $\begin{gathered} 4 \\ 10^{\mathrm{d}} \end{gathered}$ |
| Finland <br> France | $\begin{array}{r} 9 \\ 15 \end{array}$ | $\begin{gathered} 9 \\ m \end{gathered}$ | $\begin{array}{r} 9 \\ 18 \end{array}$ | $\begin{gathered} \mathrm{a} \\ \mathrm{~m} \end{gathered}$ | $\begin{aligned} & 16 \\ & 10 \end{aligned}$ | $\begin{array}{r} 17 \\ \mathrm{~m} \end{array}$ | $\begin{aligned} & 17 \\ & 12 \end{aligned}$ | $\begin{gathered} \mathrm{a} \\ \mathrm{~m} \end{gathered}$ | $\begin{aligned} & 12 \\ & 12 \end{aligned}$ | $\begin{gathered} 16 \\ \mathrm{~m} \end{gathered}$ | $\begin{aligned} & 16 \\ & 15 \end{aligned}$ | $\begin{gathered} \mathrm{a} \\ \mathrm{~m} \end{gathered}$ |
| Germany <br> Greece | $\begin{array}{r} 13 \\ 8 \end{array}$ | $\begin{array}{r} 13 \\ 7 \end{array}$ | $\begin{gathered} \mathrm{x}(2) \\ \mathrm{a} \end{gathered}$ | $\begin{gathered} x(2) \\ 7 \end{gathered}$ | $\begin{gathered} 13 \\ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} 12 \\ 8 \end{array}$ | $\begin{gathered} \mathrm{x}(6) \\ \mathrm{a} \end{gathered}$ | $\begin{gathered} x(6) \\ 8 \end{gathered}$ | $\begin{gathered} 13 \\ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} 13 \\ 7 \end{array}$ | $\begin{gathered} x(10) \\ a \end{gathered}$ | $\begin{gathered} x(10) \\ 7 \end{gathered}$ |
| Hungary Iceland | $\begin{gathered} 11 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 11 \\ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} 12 \\ \mathrm{~m} \end{array}$ | $\begin{gathered} 8 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 12 \\ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} 13 \\ \mathrm{~m} \end{array}$ | $\begin{array}{r} 12 \\ \mathrm{~m} \end{array}$ | $\begin{gathered} 14 \\ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} 12 \\ \mathrm{~m} \end{array}$ | $\begin{gathered} 12 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 12 \\ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} 13 \\ \mathrm{~m} \end{array}$ |
| Ireland <br> Israel | $\begin{gathered} x(5) \\ 12 \end{gathered}$ | $\begin{gathered} m \\ 8 \end{gathered}$ | $\begin{aligned} & a \\ & 8 \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{a} \end{aligned}$ | $\begin{aligned} & 14^{\mathrm{d}} \\ & 11 \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{gathered} \mathrm{a} \\ \mathrm{~m} \end{gathered}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{a} \end{aligned}$ | $\begin{aligned} & 14 \\ & 11 \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{gathered} \mathrm{a} \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{a} \end{gathered}$ |
| Italy <br> Japan ${ }^{3}$ | $\begin{aligned} & 12 \\ & 14 \end{aligned}$ | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ | a | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ | $\begin{aligned} & 13 \\ & 11^{\mathrm{d}} \end{aligned}$ | $\begin{gathered} 7 \\ 14^{\mathrm{d}} \end{gathered}$ | a | $\begin{gathered} 7 \\ 14^{\mathrm{d}} \end{gathered}$ | $\begin{aligned} & 12 \\ & 13^{\mathrm{d}} \end{aligned}$ | $\begin{gathered} 8 \\ 14^{\text {d }} \end{gathered}$ | a | $\begin{gathered} 8 \\ 14^{\mathrm{d}} \end{gathered}$ |
| Korea <br> Latvia | $\begin{array}{r} 16 \\ 8 \end{array}$ | $\begin{array}{r} 17 \\ 5 \end{array}$ | $17$ | $\begin{aligned} & a \\ & 5 \end{aligned}$ | $\begin{aligned} & 14 \\ & 10 \end{aligned}$ | $\begin{array}{r} 16 \\ 8 \end{array}$ | $16$ | $\begin{aligned} & a \\ & 8 \end{aligned}$ | $\begin{array}{r} 15 \\ 9 \end{array}$ | $\begin{array}{r} 16 \\ 7 \end{array}$ | $\begin{array}{r} 16 \\ a \end{array}$ | $\begin{aligned} & \mathrm{a} \\ & 7 \end{aligned}$ |
| Luxembourg <br> Mexico | $\begin{aligned} & 10 \\ & 36 \end{aligned}$ | $\begin{aligned} & 22 \\ & 18 \end{aligned}$ | $\begin{array}{r} 11 \\ \text { a } \end{array}$ | $\begin{array}{r} \text { a } \\ 18 \end{array}$ | $\begin{array}{r} 9 \\ 23 \end{array}$ | $\begin{array}{r} 8 \\ 15 \end{array}$ | $9$ | $\begin{array}{r} 7 \\ 15 \end{array}$ | $\begin{array}{r} 9 \\ 30 \end{array}$ | $\begin{aligned} & 11 \\ & 16 \end{aligned}$ | $\begin{array}{r} 10 \\ \mathrm{a} \end{array}$ | $\begin{aligned} & 12 \\ & 16 \end{aligned}$ |
| Netherlands <br> New Zealand | $\begin{aligned} & 16 \\ & 16 \end{aligned}$ | $\begin{array}{r} \mathrm{m} \\ 13 \end{array}$ | a | $\begin{array}{r} m \\ 13 \end{array}$ | $\begin{aligned} & 19 \\ & 13 \end{aligned}$ | $\begin{array}{r} \mathrm{m} \\ 11 \end{array}$ | $\begin{array}{r} \text { a } \\ 12 \end{array}$ | $\begin{gathered} \mathrm{m} \\ 11 \end{gathered}$ | $\begin{aligned} & 17 \\ & 15 \end{aligned}$ | $\begin{array}{r} \mathrm{m} \\ 12 \end{array}$ | $\begin{array}{r} \text { a } \\ 12 \end{array}$ | $\begin{array}{r} \mathrm{m} \\ 12 \end{array}$ |
| Norway ${ }^{3}$ <br> Poland |  | $\begin{aligned} & 9 \\ & 9 \end{aligned}$ | $\begin{gathered} x(2) \\ 11 \end{gathered}$ | $\begin{gathered} \mathrm{x}(2) \\ 8 \end{gathered}$ | $\begin{aligned} & 10^{\mathrm{d}} \\ & 11 \end{aligned}$ | $\begin{aligned} & 14^{\mathrm{d}} \\ & 13 \end{aligned}$ | $\begin{gathered} x(6) \\ 12 \end{gathered}$ | $\begin{gathered} x(6) \\ 13 \end{gathered}$ | $\begin{aligned} & 10^{\mathrm{d}} \\ & 11 \end{aligned}$ | $\begin{aligned} & 13^{\mathrm{d}} \\ & 11 \end{aligned}$ | $\begin{gathered} x(10) \\ 12 \end{gathered}$ | $\begin{gathered} \mathrm{x}(10) \\ 11 \end{gathered}$ |
| Portugal ${ }^{3}$ <br> Slovak Republic | $\begin{aligned} & 10 \\ & 13 \end{aligned}$ | $\begin{aligned} & 13 \\ & 12 \end{aligned}$ | $\begin{aligned} & 13 \\ & 12 \end{aligned}$ | 12 a | $\begin{gathered} 9^{\mathrm{d}} \\ 14 \end{gathered}$ | $\begin{gathered} 8^{\mathrm{d}} \\ 12 \end{gathered}$ | $\begin{aligned} & 11^{\mathrm{d}} \\ & 12 \end{aligned}$ | $\begin{aligned} & 7^{\mathrm{d}} \\ & \mathrm{a} \end{aligned}$ | $\begin{aligned} & 10^{\mathrm{d}} \\ & 13 \end{aligned}$ | $\begin{gathered} 9^{\mathrm{d}} \\ 12 \end{gathered}$ | $\begin{aligned} & 12^{\mathrm{d}} \\ & 12 \end{aligned}$ |  |
| Slovenia <br> Spain | $\begin{array}{r} 8 \\ 11 \end{array}$ | $\begin{array}{r} 7 \\ 15 \end{array}$ | $\begin{array}{r} 7 \\ 16 \end{array}$ | $\begin{aligned} & \text { a } \\ & 9 \end{aligned}$ | $\begin{aligned} & 14 \\ & 11 \end{aligned}$ | $\begin{aligned} & 14 \\ & 14 \end{aligned}$ | $\begin{aligned} & 13 \\ & 14 \end{aligned}$ | $\begin{aligned} & 26 \\ & 13 \end{aligned}$ | $\begin{aligned} & 11 \\ & 11 \end{aligned}$ | $\begin{aligned} & 13 \\ & 14 \end{aligned}$ | $\begin{aligned} & 12 \\ & 15 \end{aligned}$ | $\begin{aligned} & 26 \\ & 12 \end{aligned}$ |
| Sweden <br> Switzerland | $\begin{aligned} & 12 \\ & 12 \end{aligned}$ | $\begin{gathered} 15 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 15 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 0 \\ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} 14 \\ \mathrm{~m} \end{array}$ | $\begin{gathered} 14 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 14 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 0 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 13 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 14 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 14 \\ \mathrm{~m} \end{gathered}$ | $\begin{gathered} 0 \\ \mathrm{~m} \end{gathered}$ |
| Turkey <br> United Kingdom | $\begin{aligned} & 19 \\ & 15 \end{aligned}$ | $\begin{array}{r} 8 \\ 15 \end{array}$ | $\begin{array}{r} \text { a } \\ 16 \end{array}$ | $\begin{array}{r} 8 \\ 10 \end{array}$ | $\begin{aligned} & 16 \\ & 15 \end{aligned}$ | $\begin{array}{r} 7 \\ 17 \end{array}$ | $\begin{array}{r} \text { a } \\ 19 \end{array}$ | $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | $\begin{aligned} & 18 \\ & 15 \end{aligned}$ | 7 16 | $\begin{array}{r} \text { a } \\ 18 \end{array}$ | 7 9 |
| United States | 16 | 11 | a | 11 | 16 | 11 | a | 11 | 16 | 11 | a | 11 |
| OECD average EU22 average | $\begin{aligned} & 13 \\ & 11 \end{aligned}$ | $\begin{aligned} & 12 \\ & 11 \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & 13 \\ & 13 \end{aligned}$ | $\begin{aligned} & 12 \\ & 11 \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & 13 \\ & 12 \end{aligned}$ | $\begin{aligned} & 12 \\ & 11 \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \mathrm{m} \\ & \mathrm{~m} \end{aligned}$ |


| ne Argentina Brazil | $\begin{gathered} \mathrm{m} \\ 19 \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ 12 \end{array}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{a} \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ 12 \end{array}$ | $\begin{gathered} \hline \mathrm{m} \\ 17 \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ 10 \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{a} \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ 10 \end{gathered}$ | $\begin{gathered} \mathrm{m} \\ 18 \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ 11 \end{array}$ | $\begin{gathered} \mathrm{m} \\ \mathrm{a} \end{gathered}$ | $\begin{array}{r} \mathrm{m} \\ 11 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\sim_{\sim}^{\sim}$ China | 12 | 18 | 18 | a | 16 | 19 | 19 | a | 14 | 18 | 18 | a |
| Colombia | 30 | 17 | $\mathrm{x}(2)$ | $\mathrm{x}(2)$ | 26 | 15 | x (6) | x (6) | 29 | 16 | x (10) | x (10) |
| Costa Rica | 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 | 19 | 17 | a | 17 | 18 | 22 | a | 22 | 19 | 19 | a | 19 |
| Lithuania | 7 | 9 | a | - | 8 | 6 | a | 6 | 8 | 8 | a | 8 |
| Russian Federation | $9^{\text {d }}$ | $3{ }^{\text {d }}$ | a | $3{ }^{\text {d }}$ | $\mathrm{x}(1)$ | $\mathrm{x}(2)$ | a | $\mathrm{x}(4)$ | 9 | 3 | a | 3 |
| 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 | 16 | 13 | 17 | m | 15 | 13 | 15 | m | 15 | 13 | 16 | m |

1. Includes only general programmes in lower and upper secondary education.
2. Year of reference 2013.
3. Upper secondary education includes programmes from post-secondary non-tertiary education. For Norway, upper secondary also includes short-cycle tertiary education.
Source: OECD. Argentina, China, Colombia, Costa Rica, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Lithuania: Eurostat.
See 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.


From:
Education at a Glance 2016
OECD Indicators

## Access the complete publication at:

https://doi.org/10.1787/eag-2016-en

## Please cite this chapter as:

OECD (2016), "Indicator D2 What is the Student-Teacher Ratio and How Big are Classes?", in Education at a Glance 2016: OECD Indicators, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/eag-2016-30-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.


[^0]:    1. Public institutions only.
    2. Vocational programmes include programmes from post-secondary non-tertiary education.
    3. Upper secondary general programmes include lower secondary.

    Countries are ranked in descending order of the ratio of students to teaching staff in vocational programmes in upper secondary education.
    Source: OECD. Table D2.2. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).
    

