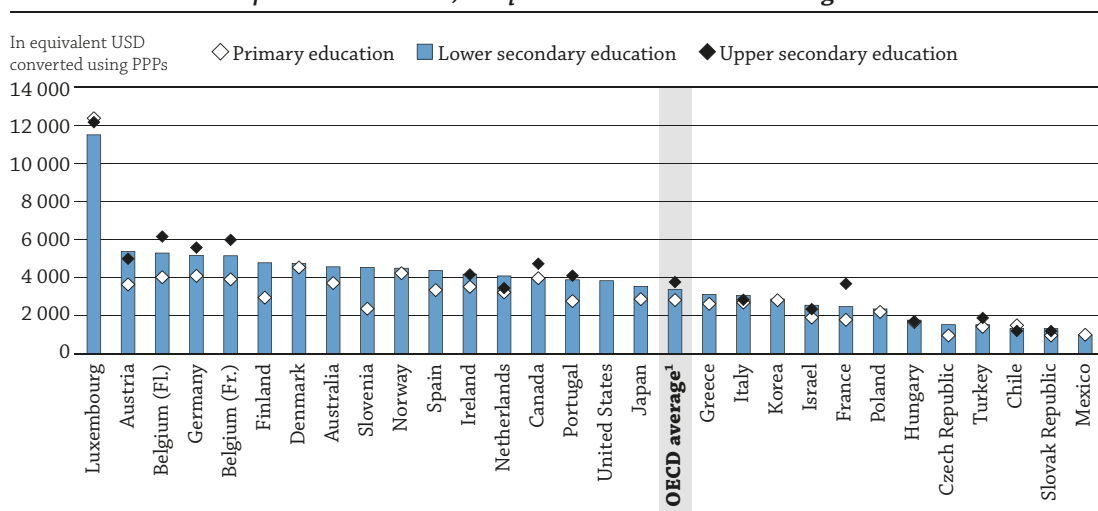


## WHICH FACTORS INFLUENCE THE LEVEL OF EXPENDITURE ON EDUCATION?

- Four main factors influence the salary cost of teachers per student: instruction time of students, teaching time of teachers, teachers' salaries and estimated class size. Specific levels of the salary cost of teachers per student may result from different combinations of these four factors.
- On average across OECD countries, the salary cost of teachers per student increases with the level of education. This general increase is partly due to increases in teachers' salaries and to increased instruction time of students at higher educational levels.
- Between 2010 and 2014, the salary cost of teachers per student increased in a majority of countries at both primary and lower secondary levels of education.

**Figure B7.1. Teachers' salary cost per student, by level of education (2014)**  
In public institutions, in equivalent USD converted using PPPs



1. The OECD average for salary costs is calculated as the average salary for OECD countries divided by the average student-teacher ratio. It only includes countries with data on salary and student-teacher ratio for 2014.

Countries are ranked in descending order of the salary cost of teachers per student in lower secondary education.

Source: OECD, Table B7.1. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

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### Context

Governments have become increasingly interested in the relationship between the amount of resources devoted to education and student learning outcomes. They seek to provide more and better education for their population while, at the same time, ensuring that public funding is used efficiently, particularly when public budgets are tight. Teachers' compensation is usually the largest part of expenditure on education and thus of expenditure per student (see Indicator B6). The salary cost of teachers is a function of the instruction time of students, the teaching time of teachers, teachers' salaries and the number of teachers needed to teach students (which depends on estimated class size) (Box B7.1).

Differences among countries in these four factors may explain differences in the level of expenditure per student. Similarly, a given level of expenditure may be associated with different combinations of these factors. This indicator examines the choices countries make when investing their resources in primary and secondary education and explores how changes in policy choices between 2010 and 2014 related to these four factors affected the salary cost of teachers. Some of these choices do not reflect policy decisions, but rather demographic changes that led to a change in the number of students. For example, in countries where enrolments have been declining in recent years, class size would also shrink (assuming all other factors remain constant), unless there was a simultaneous drop in the number of teachers as well.

### ■ Other findings

- Similar levels of expenditure among countries can mask a variety of contrasting policy choices. This helps to explain why there is no simple relationship between overall spending on education and the level of student performance. For example, at the upper secondary level of education, Ireland and Portugal had similar levels of salary cost of teachers per student in 2014, above the OECD average. In Ireland, this was the result of the combination of above-average teachers' salaries, instruction time and teaching time, and below-average estimated class size. In Portugal, teachers' salaries and instruction time are below average, but the salary cost per student is pushed up by the small estimated class size and the below-average teaching time.
- The ranking of countries regarding the salary cost of teachers per student changes considerably when comparing the value in USD to the value as a percentage of GDP per capita. While Luxembourg has by far the highest salary cost in lower secondary education (at USD 11 506, it is over double that of the second highest), when differences in countries' wealth are taken into account, it is only the seventh highest (11.5%).
- In terms of the value in USD, teachers' salaries are most often the primary factor influencing the difference in the average salary cost of teachers per student at each level of education, and estimated class size is the second factor. However, when taking into account countries' GDP, teachers' salaries are less often the primary factor.

### ■ Trends

Between 2010 and 2014, the salary cost of teachers per student in primary and lower secondary education increased in the majority of OECD countries. On average across countries with data for both years, it increased by 5.1% (from USD 2 686 to USD 2 822) at the primary level and by 3.7% (from USD 3 313 to USD 3 436) at the lower secondary level. The most notable exception is Portugal, where the salary cost of teachers per student decreased by about 30% at both the primary and lower secondary levels. This decrease is the result of a considerable increase in the estimated class size combined with a decrease in teachers' salaries at both educational levels between 2010 and 2014. A similar pattern occurred in lower secondary education in Spain during the same period: a 13% decrease in teachers' salary and a 26% increase in estimated class size led to a 30% decrease in the salary cost of teachers per student.

The increase in the salary cost of teachers per student between 2010 and 2014 was mostly influenced by changes in two factors: teachers' salaries and estimated class size. During this period, among countries with available data for both years, teachers' salaries increased by 0.8% at the primary level and 0.6% at the lower secondary level, while estimated class size decreased by 1.8% at the primary level and by 2.3% at the lower secondary level. Variations in the other two factors, instruction time and teaching time, are usually smaller in most countries, but the average is influenced by large variations in some countries.

## Analysis

### Variation in the salary cost of teachers per student, by level of education

B7

Per-student expenditure reflects the structural and institutional factors that relate to the organisation of schools and curricula. Current expenditure on educational institutions can be broken down into compensation of staff and other expenditures (i.e. maintenance of school buildings, students' meals or the rental of school buildings and other facilities). Teacher compensation usually constitutes the largest part of current expenditure, and therefore of expenditure on education (see Indicator B6). As a result, the level of teacher compensation divided by the number of students (referred to here as "salary cost of teachers per student") is the largest share of expenditure per student.

#### **Box B7.1. Relationship between salary cost of teachers per student and instruction time of students, teaching time of teachers, teachers' salaries and class size**

One way to analyse the factors that have an impact on expenditure per student and to measure the extent of their effects is to compare the differences between national figures and the OECD average. This analysis computes the differences in expenditure per student among countries and the OECD average, and then calculates the contribution of these different factors to the variation from the OECD average.

This exercise is based on a mathematical relationship between the different factors and follows the method presented in the Canadian publication *Education Statistics Bulletin* (Quebec Ministry of Education, Recreation and Sports, 2003) (see explanations in Annex 3). Educational expenditure is mathematically linked to factors related to a country's school context (number of hours of instruction time for students, number of teaching hours for teachers, estimated class size) and one factor relating to teachers (statutory salary).

Expenditure is broken down into compensation of teachers and other expenditure (defined as all expenditure other than compensation of teachers). Compensation of teachers divided by the number of students, or "the salary cost of teachers per student" (CCS), is estimated through the following calculation:

$$CCS = SAL \times instT \times \frac{1}{teachT} \times \frac{1}{ClassSize} = \frac{SAL}{Ratiostud/teacher}$$

*SAL*: teachers' salaries (estimated by statutory salary after 15 years of experience)

*instT*: instruction time of students (estimated as the annual intended instruction time, in hours, for students)

*teachT*: teaching time of teachers (estimated as the annual number of teaching hours for teachers)

*ClassSize*: a proxy for class size

*Ratiostud/teacher*: the ratio of students to teaching staff

With the exception of estimated class size, values for the different variables can be obtained from the indicators published in *Education at a Glance* (Chapter D). For the purpose of the analysis in this indicator, an "estimated" class size or proxy class size is computed based on the ratio of students to teaching staff and the number of teaching hours and instruction hours (see Box D2.1). As a proxy, this estimated class size should be interpreted with caution.

Using this mathematical relationship and comparing a country's values for the four factors to the OECD averages makes it possible to measure both the direct and indirect contribution of each of these four factors to the variation in salary cost per student between that country and the OECD average (for more details, see Annex 3). For example, in the case where only two factors interact, if a worker receives a 10% increase in the hourly wage and increases the number of hours of work by 20%, his/her earnings will increase by 32% as a result of the direct contribution of each of these variations (0.1 + 0.2) and the indirect contribution of these variations due to the combination of the two factors (0.1 \* 0.2). To account for differences in countries' level of wealth, salary cost per student, as well as teachers' salaries, can be divided by GDP per capita (on the assumption that GDP per capita is an estimate of countries' level of wealth). This makes it possible to compare countries' "relative" salary cost per student (Table B7.1 and Figure B7.2).

The salary cost of teachers per student is estimated based on theoretical values: statutory salaries of teachers after 15 years of experience, theoretical instruction time of students, statutory teaching time of teachers and estimated class size. As a consequence, this measure may differ from the actual salary cost of teachers resulting from the combination of actual average values for these four factors. This also explains part of the differences between this indicator and Indicators B1, B2, B3 and B6, which are based on actual expenditure and student population at each level of education.

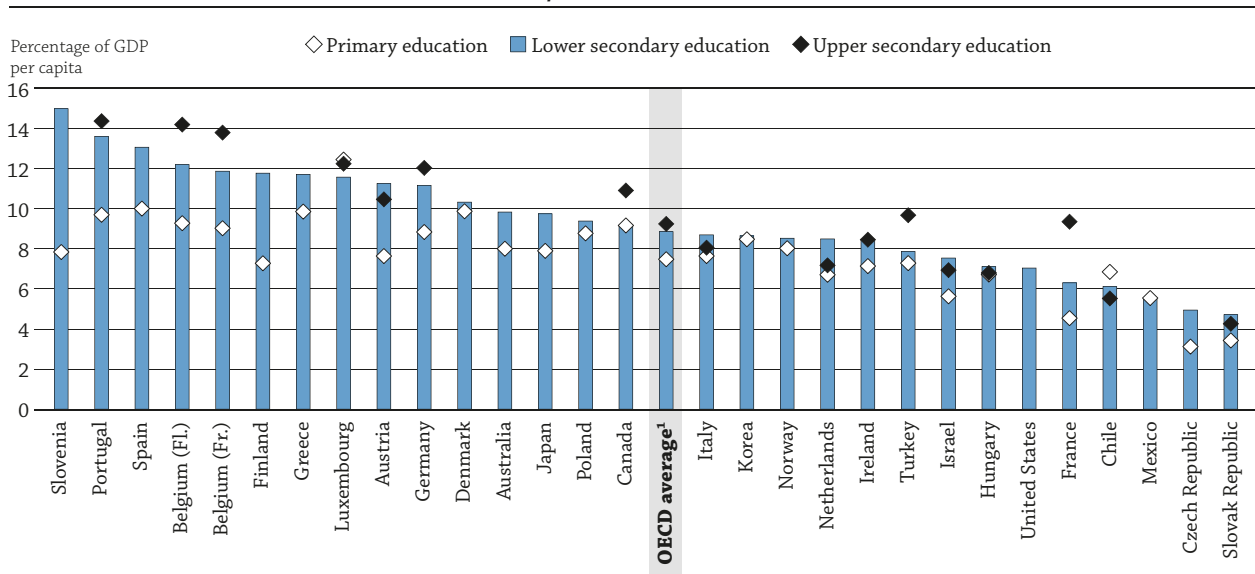
The salary cost of teachers per student is based on the instruction time of students, the teaching time of teachers, teachers' salaries and the number of teachers needed to teach students (which depends on estimated class size) (Box B7.1). As a consequence, differences in these four factors among countries and educational levels may explain differences in expenditure.

Salary costs of teachers per student show a common pattern across OECD countries: they usually rise between primary and lower secondary education (Figure B7.1). The only exceptions are Chile, Luxembourg and Mexico, where the higher salary cost per student at the primary level is at least in part due to smaller estimated class sizes at that level. On average across OECD countries, the salary cost increases from USD 2 832 per primary student to USD 3 389 per lower secondary student. Although the average salary cost per student also increases in upper secondary education, to USD 3 776, this is only true in half of the countries with available data.

The general increase in the salary cost of teachers per student with the level of education is partly the result of increases in teachers' salaries and in the instruction time of students at higher educational levels. In 2014, the OECD average salary varied from USD 42 675 at the primary level to USD 44 407 at the lower secondary level and USD 46 379 at the upper secondary level. Meanwhile, the OECD average annual instruction time varied from 788 hours at the primary level to 902 hours at the lower secondary level and 929 hours at the upper secondary level. The increase is also related to the fact that teaching time generally decreases as the level of education increases, implying that more teachers are necessary to teach a given number of pupils (the OECD average annual teaching time in 2014 decreases from 771 hours at the primary level to 692 hours at the lower secondary level and 641 hours at the upper secondary level). Higher levels of education also tend to have larger classes, which reduces the salary cost per student (the OECD average estimated class size increases from 15 students at primary level to 17 students at lower secondary and 19 students at upper secondary), but this decrease is generally offset by the increase caused by the other three factors (Tables B7.2a, B7.2b and B7.2c).

In some countries there is only a minimal variation in the salary cost of teachers per student between levels of education. In 2014, for example, there was a difference of less than USD 100 in Canada, Hungary, Korea and Mexico between primary and lower secondary education. The difference between those levels was over USD 1 800 in Finland and Slovenia (Table B7.1).

**Figure B7.2. Teachers' salary cost per student as a percentage of GDP per capita, by level of education (2014)**  
*In public institutions*



1. The OECD average for salary costs is calculated as the average salary for OECD countries divided by the average student-teacher ratio. It only includes countries with data on salary and student-teacher ratio for 2014.

Countries are ranked in descending order of the salary cost of teachers per student as a percentage of GDP per capita in lower secondary education.

Source: OECD, Table B7.1. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

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### Variation in the salary cost of teachers per student after accounting for countries' wealth

The level of teachers' salaries and, in turn, the level of the salary cost of teachers per student depend on a country's relative wealth. To control for differences in wealth among countries, the levels of teachers' salaries (and salary cost per student) relative to GDP per capita were analysed. On average across countries with available information, the salary cost of teachers per student represents 7.5% of GDP per capita at the primary level, 8.8% at the lower secondary level and 9.2% at the upper secondary level.

Comparing the relative salary cost of teachers per student using this analysis affects the ranking of a few countries when compared to measuring in USD. For example, because of Luxembourg's high USD salaries, it has by far the highest salary cost in lower secondary education: at USD 11 506, it is over double that of the second highest. However, when differences in countries' wealth are taken into account, Luxembourg only has the seventh highest salary cost, at 11.5% of GDP per capita.

### Variations in salary costs of teachers per student between 2010 and 2014

The salary cost of teachers per student also varies over time in a given level of education. These changes are only analysed at the primary and lower secondary levels of education because trend data are not available at the upper secondary level. This analysis is also limited to countries with all data available for both 2010 and 2014, (23 in primary education and 22 in lower secondary education).

Between 2010 and 2014, the salary cost of teachers per student increased by 5% at the primary level (from USD 2 686 to USD 2 822) and by 4% at the lower secondary level (from USD 3 313 to USD 3 436), on average across the countries with available data for both years (Tables B7.2a and b). Indeed, the salary cost of teachers per student at both levels of education increased in most countries in that period. The increase exceeded 35% in Israel at the primary level and 30% in Poland at the lower secondary level (Figure B7.3).

However, the salary cost of teachers per student also fell between 2010 and 2014 in a considerable number of countries, most notably in Portugal (by about 30% at both levels) and Spain (by around 16% at the primary level and 30% at the lower secondary level). Decreases of more than 10% in the salary cost of teachers per student were also observed at the primary level in Italy, and at the lower secondary level in Belgium (French and Flemish Communities) and Slovenia.

### Variations in the factors influencing the salary cost of teachers between 2010 and 2014

Of the four factors that determine the level of the salary cost of teachers, two are largely responsible for the wide variations in this cost: teachers' salaries and class size. These two factors have opposing effects: an increase in salaries and a decrease in class size both push up the salary cost of teachers. Between 2010 and 2014, among countries with available data for this period, average teachers' salaries (expressed in constant prices) increased by less than 1% at the primary and lower secondary levels, while estimated class size decreased by about 2% at the primary and lower secondary levels (Figure B7.3). Combined, these two effects contributed to an increase in the average salary cost of teachers per student at both levels during that period.

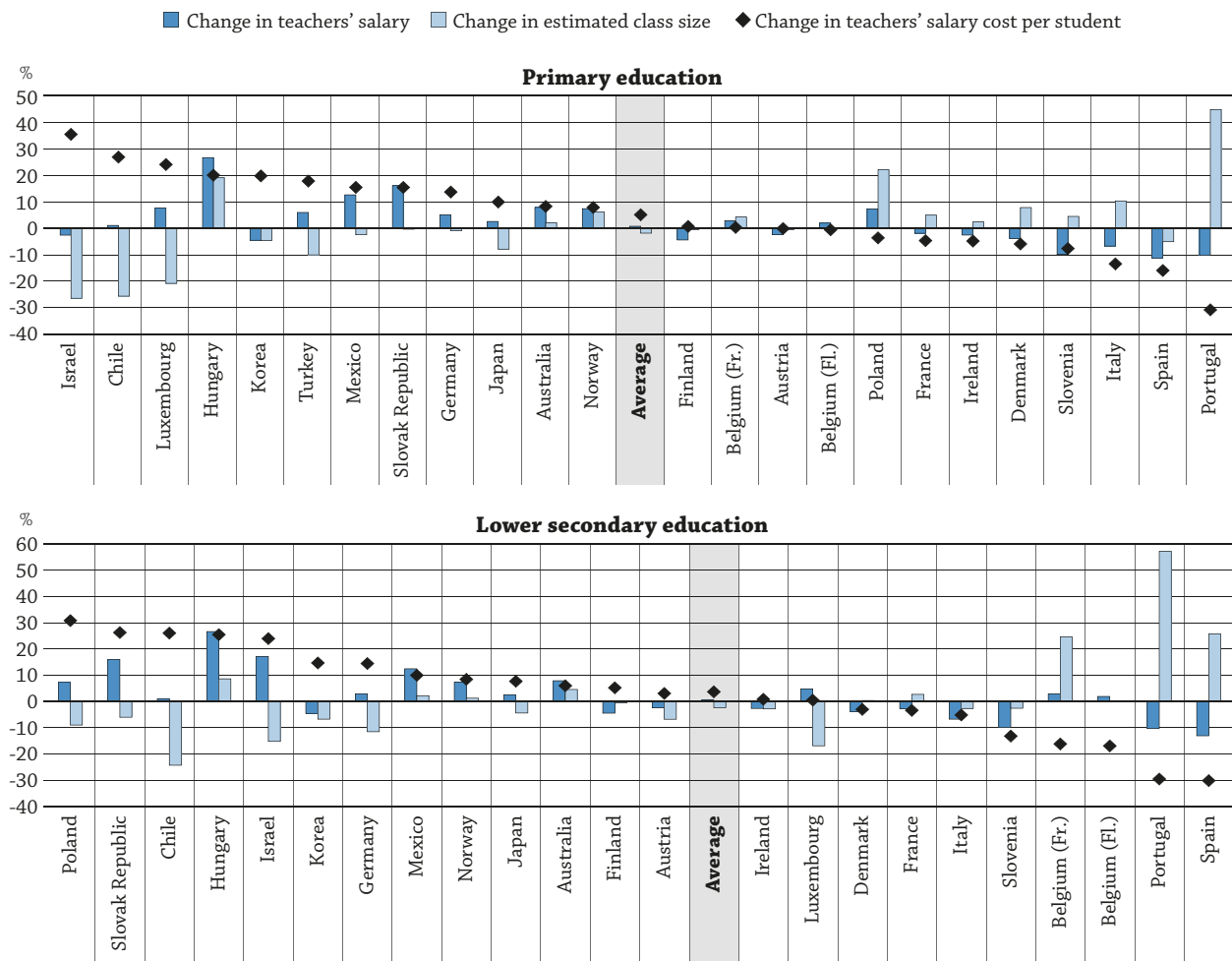
Teachers' salaries decreased most notably (by 10% or more) in Greece, Portugal, Slovenia and Spain at both the primary and lower secondary levels. During the same period, Portugal also experienced an increase in the estimated class size at both levels, which together with the lower salaries, led to a considerable decrease in the salary cost of teachers per student (Figure B7.3).

Among countries with data for both 2010 and 2014, the decrease in average estimated class size at the primary and lower secondary levels also resulted from decreases and increases in a similar number of countries. At the primary and lower secondary levels, the largest reductions were observed in countries that had relatively large estimated classes in 2010 (Chile and Israel at the primary level, and Chile and Estonia at the lower secondary level). The smaller classes led to an increase in the salary cost of teachers in both Chile and Israel, despite the decrease in primary teachers' salary in Israel.

Changes in instruction time and teaching time, the two other factors influencing the salary cost of teachers, tend to be smaller, with teaching time varying the least of all factors. In the majority of countries, teaching time varied by less than 1% between 2010 and 2014 at both levels of education. The fact that these factors tend to vary less over time may reflect the political sensitivity of implementing reforms in these areas (see Table B7.5 in OECD, 2012).

**Figure B7.3. Change in teachers' salary cost per student, teachers' salaries and estimated class size (2010 and 2014)**

*Change in percentage, between 2010 and 2014,  
in public institutions, primary and lower secondary education*



Countries are ranked in descending order of the change in the salary cost of teachers per student between 2010 and 2014.

Sources: OECD, Tables B7.2a and B7.2b. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

StatLink <http://dx.doi.org/10.1787/888933398173>

Nevertheless, in a small number of countries, instruction time and/or teaching time did change significantly. For example in Norway, Poland and Portugal, reforms have been introduced to increase instruction time in reading and mathematics. Between 2010 and 2014, instruction time in those three countries increased by 6%-7% at the primary level and continued to increase by above-average rates at the lower secondary level. During the same period, teaching time changed most significantly in Korea with a decrease from 807 to 656 hours at the primary level, and in Luxembourg with an increase from 634 to 739 hours at the lower secondary level.

### Relationship between expenditure on education and policy choices

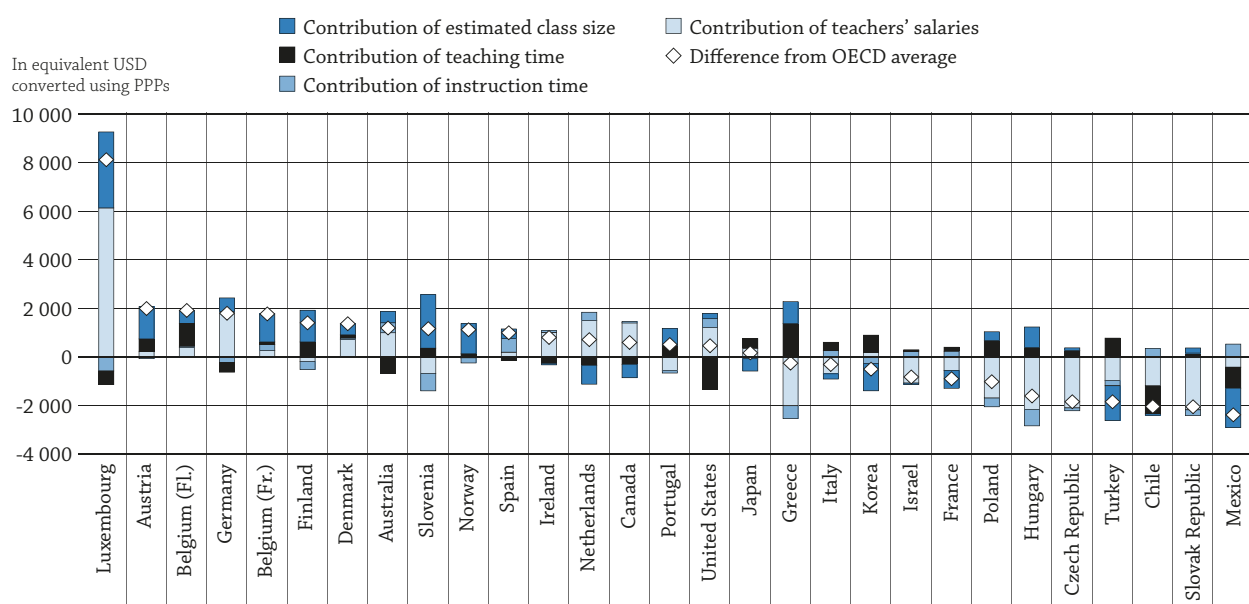
Higher levels of expenditure on education cannot automatically be equated with better performance by education systems. This is not surprising, as countries spending similar amounts on education do not necessarily have similar education policies and practices. For example, at the upper secondary level, Ireland and Portugal had very similar levels of salary costs of teachers per student in 2014, both above the OECD average. In Ireland, this was the result of the combination of teachers' salaries, instruction time and teaching time that were above the OECD average and estimated class size that was below the OECD average. In Portugal, below-average teachers' salaries and instruction time are more than offset by a small estimated class size and below-average teaching time.



In addition, even though countries may make similar policy choices, those choices can result in different levels of salary cost of teachers per student. For example, in lower secondary education, both Finland and Hungary have above-average teaching time and estimated class sizes and below-average teachers' salaries and instruction time. However, the salary cost of teachers per student resulting from this combination is very different for those countries: USD 1 399 above the OECD average in Finland and USD 1 613 below the OECD average in Hungary (Table B7.4 and Figure B7.4).

**Figure B7.4. Contribution of various factors to salary cost of teachers per student in public institutions, lower secondary education (2014)**

*In USD*



#### How to read this figure

This figure shows the contribution (in USD) of the factors influencing the difference between salary cost of teachers per student in the country and the OECD average. For example, in Hungary, the salary cost of teachers per student is USD 1 613 lower than the OECD average. This is because Hungary has lower teachers' salaries (- USD 2 168) than the OECD average, below-average instruction time for students (- USD 674), above-average teaching time for teachers (+ USD 384), and above-average estimated class size (+ USD 845).

Countries are ranked in descending order of the difference between the salary cost of teachers per student and the OECD average.

Source: OECD, Table B7.4. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

StatLink <http://dx.doi.org/10.1787/888933398187>

### Main factors influencing the salary cost of teachers per student, by level of education

Comparing the salary cost of teachers per student to the OECD average and how the four factors contribute to this difference allows for an analysis of the extent of each factor's impact on the differences in salary cost of teachers per student. At each level of education, teachers' salaries are most often the primary factor (i.e. the factor with the largest impact) influencing the difference (from the OECD average) of the average salary cost of teachers per student. Among countries with available data in 2014, teachers' salaries were the primary factor in 21 of 28 countries at the primary level, in 15 of 28 countries at the lower secondary level, and in 12 of 16 countries at the upper secondary level.

Estimated class size is the second most influential factor responsible for the difference in salary cost of teachers per student at each level of education (for 4 of 28 countries at the primary level, 11 of 29 countries at the lower secondary level, and 2 of 16 countries at the upper secondary level).

When taking into account differences in countries' wealth (i.e. analysing salaries over GDP per capita), teachers' salaries are less often the primary factor influencing the difference from the average salary cost of teachers per student. Nevertheless, teachers' salaries and estimated class size continue to be the main factors influencing variations from the average salary cost of teachers per student at each level of education (Box B7.2 continued, available on line).


**Box B7.2. Main factors influencing salary cost of teacher per student, by level of education (2014)**

	Primary education	Lower secondary education	Upper secondary education
<b>Salary</b>	<b>21 countries</b> AUS (+), BFL (+), BFR (+), CAN (+), CHL (-), CZE (-), DNK (+), FRA (-), DEU (+), GRC (-), HUN (-), IRL (+), ISR (-), ITA (-), JPN (+), LUX (+), NLD (+), POL (-), PRT (-), SVK (-), TUR (-)	<b>15 countries</b> AUS (+), CAN (+), CHL (-), CZE (-), DNK (+), DEU (+), GRC (-), HUN (-), IRL (+), ISR (-), ITA (-), LUX (+), NLD (+), POL (-), SVK (-)	<b>12 countries</b> CAN (+), CHL (-), FRA (-), DEU (+), HUN (-), IRL (+), ISR (-), ITA (-), LUX (+), NLD (+), SVK (-), TUR (-)
<b>Instruction time</b>	<b>2 countries</b> FIN (-), KOR (-)	<b>1 country</b> ESP (+)	<b>0 country</b>
<b>Teaching time</b>	<b>1 country</b> SVN (+)	<b>2 countries</b> BEL (+), USA (-)	<b>2 countries</b> AUT (+), BFL (+)
<b>Estimated class size</b>	<b>4 countries</b> AUT (+), MEX (-), NOR (+), ESP (+)	<b>11 countries</b> AUT (+), BFR (+), FIN (+), FRA (-), JPN (-), KOR (-), MEX (-), NOR (+), PRT (+), SVN (+), TUR (-)	<b>2 countries</b> BFR (+) PRT (+)

**Note:** For each level of education, countries are included in the cell corresponding to the factor which has the largest impact (measured in equivalent USD converted using PPPs) on the salary cost of teachers' per student. The positive or negative signs show whether the factor increases or decreases the salary cost of teacher per student.

**Sources:** OECD. Tables B7.3, B7.4 and B7.5. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

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

**StatLink**  <http://dx.doi.org/10.1787/888933399940>

## Methodology

Data referring to the 2014 school year, as well as 2010 data relating to salaries of teachers and teaching time are based on the UOE data collection on education statistics and on the Survey on Teachers and the Curriculum, which were both administered by the OECD in 2014. Teachers' salary refers to the statutory salary of teachers after 15 years of experience, converted to USD using PPPs for private consumption. Other data referring to 2010 school year are based on the UOE data collection on education statistics, and on the Survey on Teachers and the Curriculum, which were both administered by the OECD and published in the 2007 and 2012 editions of *Education at a Glance* (data on ratio of student to teaching staff and instruction time). Data for 2014 instruction time refer to 2014 data from the 2014 edition of *Education at a Glance*. The consistency of 2010 and 2014 data has been validated (for details, see Annex 3 at [www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

**Salary cost of teachers per student** is calculated based on teachers' salaries, the number of hours of instruction for students, the number of hours of teaching for teachers, and the estimated class size (a proxy of the class size; see Box D2.2). In most cases, the values for these variables are derived from *Education at a Glance* (see above). At upper secondary level, teachers' salaries and teaching time refer to general programmes. Teachers' salaries in national currencies are converted into equivalent USD by dividing the national currency figure by the purchasing power parity (PPP) index for private consumption, following the methodology used in Indicator D3 on teachers' salaries, which results in the salary cost per student expressed in equivalent USD. Further details on the analysis of these factors are available in Annex 3 at [www.oecd.org/education/education-at-a-glance-19991487.htm](http://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 (2012), *Education at a Glance 2012: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2012-en>.

Quebec Ministry of Education, Recreation and Sports (2003), “Le coût salarial des enseignants par élève pour l’enseignement primaire et secondaire en 2000-2001”, *Education Statistics Bulletin*, No. 29, *Ministère de l’Éducation, du Loisir et du Sport, Direction de la recherche, des statistiques et de l’information*, Québec, [www.education.gouv.qc.ca/fileadmin/site\\_web/documents/PSG/statistiques\\_info\\_decisionnelle/bulletin\\_29.pdf](http://www.education.gouv.qc.ca/fileadmin/site_web/documents/PSG/statistiques_info_decisionnelle/bulletin_29.pdf).

## Indicator B7 Tables

StatLink  <http://dx.doi.org/10.1787/888933398071>

### Table B7.1 Salary cost of teachers per student, by level of education (2014)

Table B7.2a Factors used to compute the salary cost of teachers per student in public institutions, in primary education (2010 and 2014)

Table B7.2b Factors used to compute the salary cost of teachers per student in public institutions, in lower secondary education (2010 and 2014)

Table B7.2c Factors used to compute the salary cost of teachers per student in public institutions, in upper secondary education (2014)

Table B7.3 Contribution of various factors to salary cost of teachers per student in primary education (2014)

Table B7.4 Contribution of various factors to salary cost of teachers per student in lower secondary education (2014)

Table B7.5 Contribution of various factors to salary cost of teachers per student in upper secondary education (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 B7.1. **Salary cost of teachers per student, by level of education (2014)**

Salary cost of teachers per student in public institutions, in equivalent USD, converted using PPPs for private consumption, and in percentage of per capita GDP

	Salary cost of teachers per student (in USD)			Salary cost of teachers per student (in percentage of GDP per capita)		
	Primary	Lower secondary	Upper secondary	Primary	Lower secondary	Upper secondary
	(1)	(2)	(3)	(4)	(5)	(6)
<b>OECD</b>						
Australia	3 725	4 576	m	8.0	9.8	m
Austria	3 650	5 379	5 002	7.6	11.2	10.4
Belgium (Fl.)	4 030	5 300	6 166	9.3	12.2	14.2
Belgium (Fr.)	3 920	5 156	5 993	9.0	11.8	13.8
Canada	3 981	3 981	4 739	9.1	9.1	10.9
Chile	1 503	1 343	1 212	6.8	6.1	5.5
Czech Republic	973	1 540	m	3.1	4.9	m
Denmark	4 542	4 752	m	9.8	10.3	m
England (UK)	m	m	m	m	m	m
Estonia	m	m	m	m	m	m
Finland	2 960	4 788	m	7.3	11.7	m
France	1 792	2 487	3 690	4.5	6.3	9.3
Germany	4 101	5 181	5 586	8.8	11.1	12.0
Greece	2 632	3 128	m	9.8	11.7	m
Hungary	1 677	1 776	1 697	6.7	7.1	6.8
Iceland	m	m	m	m	m	m
Ireland	3 526	4 186	4 175	7.1	8.5	8.4
Israel	1 912	2 560	2 355	5.6	7.5	6.9
Italy	2 700	3 073	2 847	7.6	8.7	8.0
Japan	2 878	3 552	m	7.9	9.7	m
Korea	2 824	2 882	m	8.5	8.6	m
Latvia	m	m	m	m	m	m
Luxembourg	12 377	11 506	12 172	12.4	11.5	12.2
Mexico	1 009	1 000	m	5.5	5.5	m
Netherlands	3 235	4 097	3 461	6.7	8.5	7.2
New Zealand	m	m	m	m	m	m
Norway	4 240	4 504	m	8.0	8.5	m
Poland	2 210	2 365	m	8.7	9.4	m
Portugal	2 775	3 894	4 112	9.7	13.6	14.3
Scotland (UK)	m	m	m	m	m	m
Slovak Republic	969	1 333	1 205	3.4	4.7	4.3
Slovenia	2 379	4 548	m	7.8	15.0	m
Spain	3 354	4 380	m	10.0	13.0	m
Sweden	m	m	m	m	m	m
Switzerland	m	m	m	m	m	m
Turkey	1 424	1 538	1 892	7.3	7.8	9.7
United States	m	3 846	m	m	7.0	m
<b>OECD average<sup>1</sup></b>	<b>2 832</b>	<b>3 389</b>	<b>3 776</b>	<b>7.5</b>	<b>8.8</b>	<b>9.2</b>

1. The OECD average for salary costs is calculated as the average teachers' salary for OECD countries divided by the average student-teacher ratio. It only includes countries with information for all factors used to calculate salary cost and does not correspond to the average of the salary costs presented in the table.

Source: OECD. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://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.


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Table B7.2a. [1/2] **Factors used to compute the salary cost of teachers per student in public institutions, in primary education (2010 and 2014)**

		Teachers' salary (annual, in USD, 2014 constant prices)			Instruction time (for students, hours per year)			Teaching time (for teachers, hours per year)		
		2010	2014	Variation 2010-2014 (%)	2010	2014	Variation 2010-2014 (%)	2010	2014	Variation 2010-2014 (%)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	53 076	57 246	7.9	982	1 010	2.9	868	872	0.4
	Austria	44 344	43 276	-2.4	690	705	2.2	779	779	0.0
	Belgium (Fl.)	47 821	48 757	2.0	m	821	m	752	744	-1.1
	Belgium (Fr.)	46 111	47 435	2.9	840	849	1.1	732	728	-0.5
	Canada	m	65 543	m	917	919	0.3	799	796	-0.4
	Chile	25 771	26 048	1.1	1 083	1 049	-3.2	1 105	1 146	3.7
	Czech Republic <sup>2</sup>	m	18 324	m	588	676	15.0	862	823	-4.6
	Denmark	54 558	52 481	-3.8	701	754	7.6	650	663	2.0
	England (UK)	50 317	46 390	-7.8	893	861	-3.5	684	722	5.6
	Estonia	13 857	m	m	595	661	11.0	630	619	-1.7
	Finland	41 276	39 456	-4.4	608	632	3.9	680	673	-1.1
	France	34 804	34 149	-1.9	847	864	2.0	924	924	0.0
	Germany	60 865	63 961	5.1	641	683	6.5	805	800	-0.6
	Greece	35 333	24 712	-30.1	720	783	8.8	589	569	-3.4
	Hungary	15 143	19 181	26.7	555	616	11.0	604	594	-1.6
	Iceland <sup>3</sup>	33 350	m	m	800	729	-8.9	624	624	0.0
	Ireland	59 108	57 597	-2.6	915	915	0.0	915	915	0.0
	Israel	29 035	28 281	-2.6	914	957	4.7	820	838	2.3
	Italy	35 367	32 995	-6.7	891	891	0.0	770	752	-2.3
	Japan	48 139	49 378	2.6	735	762	3.7	707	742	5.0
	Korea	49 598	47 352	-4.5	667	648	-2.9	807	656	-18.8
	Latvia	m	m	m	m	592	m	882	m	m
	Luxembourg	100 460	108 110	7.6	924	924	0.0	739	810	9.5
	Mexico	25 097	28 262	12.6	800	800	0.0	800	800	0.0
	Netherlands	m	53 544	m	940	940	0.0	930	930	0.0
	New Zealand	m	42 765	m	m	m	m	m	922	m
	Norway	41 099	44 136	7.4	701	748	6.7	741	741	0.0
	Poland	23 132	24 828	7.3	600	635	5.8	644	621	-3.5
	Portugal	42 528	38 166	-10.3	757	806	6.5	779	743	-4.6
	Scotland (UK)	47 148	43 163	-8.5	a	a	m	855	855	0.0
	Slovak Republic	14 354	16 663	16.1	695	680	-2.0	841	828	-1.6
	Slovenia	41 882	37 751	-9.9	621	664	7.0	627	627	0.0
	Spain	47 288	41 940	-11.3	875	787	-10.0	880	880	0.0
	Sweden <sup>4</sup>	m	37 391	m	741	754	1.8	m	a	m
	Switzerland	61 677	m	m	m	m	m	m	m	m
	Turkey	27 122	28 740	6.0	720	720	0.0	720	720	0.0
	United States	55 802	60 266	8.0	m	967	m	m	m	m
OECD average		42 112	42 675	1.3	773	788	2.0	774	771	-0.3
Average for countries with all data available for 2010 and 2014		41 746	42 062	0.8	772	787	1.9	780	776	-0.5

Note: Data on teachers' salaries, teaching time and ratio of students to teaching staff come from *Education at a Glance 2016* for 2014 data and from *Education at a Glance 2012* for 2010 data. Data for instruction time come from *Education at a Glance 2014* for 2014 data and *Education at a Glance 2010* for 2010 data. Please see notes on these data in those tables.

Teachers' salary refers to the statutory salary of teachers after 15 years of experience, converted to USD using PPPs for private consumption.

1. Unlike previous editions of *Education at a Glance*, the student-teacher ratio presented in this table is for public institutions only. Therefore, figures for 2010 may slightly vary when compared to previous editions which used data related to all institutions.


2. Minimum instruction time for 2014.

3. Reference year for teaching time 2013 instead of 2014.

4. Estimated number of hours of minimum instruction time by level of education based on the average number of hours per year, as the allocation of instruction time across multiple grades is flexible.

Source: OECD. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://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.

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**Table B7.2a. [2/2] Factors used to compute the salary cost of teachers per student in public institutions, in primary education (2010 and 2014)****B7**

	Ratio of students to teaching staff <sup>1</sup> (number of students per teacher)			Estimated class size (average size of classes taking into account instruction and teaching time)			Salary cost of teacher per student (in USD)		
	2010	2014	Variation 2010-2014 (%)	2010	2014	Variation 2010-2014 (%)	2010	2014	Variation 2010-2014 (%)
	(10)	(11)	(12)	(13) = (4)*(10) / (7)	(14) = (5)*(11) / (8)	(15)	(16)	(17)	(18)
<b>OECD</b>									
Australia	15	15	-0.4	17	18	2.1	3 441	3 725	8.2
Austria	12	12	-2.3	11	11	-0.2	3 654	3 650	-0.1
Belgium (Fl.)	12	12	2.5	m	13	m	4 052	4 030	-0.6
Belgium (Fr.)	12	12	2.5	14	14	4.2	3 907	3 920	0.3
Canada	18	16	-7.7	20	19	-7.1	m	3 981	m
Chile	22	17	-20.3	21	16	-25.6	1 185	1 503	26.9
Czech Republic <sup>2</sup>	19	19	0.2	13	15	20.7	m	973	m
Denmark	11	12	2.2	12	13	7.8	4 828	4 542	-5.9
England (UK)	m	m	m	m	m	m	m	m	m
Estonia	16	13	-20.4	15	14	-10.1	847	m	m
Finland	14	13	-5.1	13	13	-0.3	2 939	2 960	0.7
France	19	19	2.9	17	18	4.9	1 879	1 792	-4.7
Germany	17	16	-7.6	13	13	-0.9	3 608	4 101	13.7
Greece	m	9	m	m	13	m	m	2 632	m
Hungary	11	11	5.5	10	12	19.1	1 397	1 677	20.0
Iceland <sup>3</sup>	10	m	m	13	m	m	3 238	m	m
Ireland	16	16	2.4	16	16	2.4	3 704	3 526	-4.8
Israel	21	15	-28.1	23	17	-26.4	1 412	1 912	35.4
Italy	11	12	7.8	13	14	10.3	3 120	2 700	-13.4
Japan	18	17	-6.7	19	18	-7.9	2 618	2 878	9.9
Korea	21	17	-20.3	17	17	-4.7	2 358	2 824	19.8
Latvia	m	11	m	m	m	m	m	m	m
Luxembourg	10	9	-13.3	13	10	-20.8	9 977	12 377	24.1
Mexico	29	28	-2.5	29	28	-2.5	874	1 009	15.4
Netherlands	16	17	5.1	16	17	5.1	m	3 235	m
New Zealand	16	16	0.7	m	m	m	m	m	m
Norway	10	10	-0.4	10	11	6.2	3 931	4 240	7.9
Poland	10	11	11.4	9	11	22.1	2 293	2 210	-3.6
Portugal	11	14	29.6	10	15	44.8	4 009	2 775	-30.8
Scotland (UK)	m	m	m	m	m	m	m	m	m
Slovak Republic	17	17	0.6	14	14	0.1	840	969	15.4
Slovenia	16	16	-2.4	16	17	4.5	2 576	2 379	-7.6
Spain	12	13	5.5	12	11	-5.1	3 990	3 354	-15.9
Sweden <sup>4</sup>	12	13	13.1	m	m	m	m	m	m
Switzerland	15	15	-0.9	m	m	m	4 129	m	m
Turkey	22	20	-10.1	22	20	-10.1	1 209	1 424	17.8
United States	15	16	6.7	m	m	m	m	m	m
<b>OECD average</b>	15	15	-4.0	15	15	-1.8	2 622	2 832	8.0
<b>Average for countries with all data available for 2010 and 2014</b>	16	15	-4.1	15	15	-1.8	2 686	2 822	5.1

Note: Data on teachers' salaries, teaching time and ratio of students to teaching staff come from *Education at a Glance 2016* for 2014 data and from *Education at a Glance 2012* for 2010 data. Data for instruction time come from *Education at a Glance 2014* for 2014 data and *Education at a Glance 2010* for 2010 data. Please see notes on these data in those tables.

Teachers' salary refers to the statutory salary of teachers after 15 years of experience, converted to USD using PPPs for private consumption.

1. Unlike previous editions of *Education at a Glance*, the student-teacher ratio presented in this table is for public institutions only. Therefore, figures for 2010 may slightly vary when compared to previous editions which used data related to all institutions.

2. Minimum instruction time for 2014.

3. Reference year for teaching time 2013 instead of 2014.

4. Estimated number of hours of minimum instruction time by level of education based on the average number of hours per year, as the allocation of instruction time across multiple grades is flexible.

Source: OECD. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://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.


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Table B7.2b. [1/2] **Factors used to compute the salary cost of teachers per student in public institutions, in lower secondary education (2010 and 2014)**

		Teachers' salary (annual, in USD, 2014 constant prices)			Instruction time (for students, hours per year)			Teaching time (for teachers, hours per year)		
		2010	2014	Variation 2010-2014 (%)	2010	2014	Variation 2010-2014 (%)	2010	2014	Variation 2010-2014 (%)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	53 076	57 293	<b>7.9</b>	997	1 015	<b>1.8</b>	819	812	<b>-0.9</b>
	Austria	47 996	46 852	<b>-2.4</b>	914	900	<b>-1.5</b>	607	607	<b>0.0</b>
	Belgium (Fl.)	47 821	48 757	<b>2.0</b>	m	928	<b>m</b>	669	549	<b>-17.9</b>
	Belgium (Fr.)	46 111	47 435	<b>2.9</b>	960	971	<b>1.1</b>	671	668	<b>-0.5</b>
	Canada	m	65 543	<b>m</b>	922	921	<b>-0.1</b>	740	743	<b>0.4</b>
	Chile	25 771	26 048	<b>1.1</b>	1 083	1 062	<b>-2.0</b>	1 105	1 146	<b>3.7</b>
	Czech Republic <sup>2</sup>	m	18 324	<b>m</b>	862	874	<b>1.3</b>	647	617	<b>-4.6</b>
	Denmark	55 344	53 226	<b>-3.8</b>	900	930	<b>3.3</b>	650	663	<b>2.0</b>
	England (UK)	50 317	46 390	<b>-7.8</b>	925	911	<b>-1.5</b>	703	745	<b>5.9</b>
	Estonia	13 857	m	<b>m</b>	802	823	<b>2.5</b>	630	619	<b>-1.7</b>
	Finland	44 578	42 613	<b>-4.4</b>	777	844	<b>8.7</b>	595	589	<b>-1.1</b>
	France	37 834	36 814	<b>-2.7</b>	971	991	<b>2.1</b>	648	648	<b>0.0</b>
	Germany	67 426	69 431	<b>3.0</b>	887	866	<b>-2.3</b>	756	750	<b>-0.8</b>
	Greece	35 333	24 712	<b>-30.1</b>	796	785	<b>-1.3</b>	415	459	<b>10.6</b>
	Hungary	15 143	19 181	<b>26.7</b>	671	710	<b>5.9</b>	604	594	<b>-1.6</b>
	Iceland <sup>3</sup>	33 350	m	<b>m</b>	969	839	<b>-13.4</b>	624	624	<b>0.0</b>
	Ireland	59 749	58 190	<b>-2.6</b>	929	935	<b>0.7</b>	735	735	<b>0.0</b>
	Israel	26 428	30 977	<b>17.2</b>	981	1 004	<b>2.3</b>	598	682	<b>14.0</b>
	Italy	38 534	35 951	<b>-6.7</b>	1 023	990	<b>-3.2</b>	630	616	<b>-2.3</b>
	Japan	48 139	49 378	<b>2.6</b>	877	895	<b>2.1</b>	602	611	<b>1.6</b>
	Korea	49 485	47 257	<b>-4.5</b>	859	842	<b>-2.0</b>	627	548	<b>-12.5</b>
	Latvia	m	m	<b>m</b>	m	794	<b>m</b>	882	m	<b>m</b>
	Luxembourg	107 575	112 760	<b>4.8</b>	908	845	<b>-6.9</b>	634	739	<b>16.7</b>
	Mexico	32 257	36 288	<b>12.5</b>	1 167	1 167	<b>0.0</b>	1 047	1 047	<b>0.0</b>
	Netherlands	m	66 366	<b>m</b>	1 000	1 000	<b>0.0</b>	750	750	<b>0.0</b>
	New Zealand	m	44 424	<b>m</b>	m	m	<b>m</b>	m	840	<b>m</b>
	Norway	41 099	44 136	<b>7.4</b>	836	868	<b>3.8</b>	654	663	<b>1.5</b>
	Poland	23 132	24 828	<b>7.3</b>	765	810	<b>5.9</b>	572	546	<b>-4.6</b>
	Portugal	42 528	38 166	<b>-10.3</b>	757	892	<b>17.8</b>	634	605	<b>-4.6</b>
	Scotland (UK)	47 148	43 163	<b>-8.5</b>	a	a	<b>m</b>	855	855	<b>0.0</b>
	Slovak Republic	14 354	16 663	<b>16.1</b>	822	828	<b>0.7</b>	652	642	<b>-1.6</b>
	Slovenia	41 882	37 751	<b>-9.9</b>	817	767	<b>-6.1</b>	627	627	<b>0.0</b>
	Spain	53 880	46 865	<b>-13.0</b>	1 050	1 061	<b>1.1</b>	713	713	<b>0.0</b>
	Sweden <sup>4</sup>	m	38 054	<b>m</b>	741	754	<b>1.8</b>	m	a	<b>m</b>
	Switzerland	70 052	m	<b>m</b>	m	m	<b>m</b>	m	m	<b>m</b>
	Turkey	28 279	29 680	<b>5.0</b>	768	840	<b>9.4</b>	504	504	<b>0.0</b>
	United States	59 163	61 918	<b>4.7</b>	m	1 011	<b>m</b>	m	981	<b>m</b>
	OECD average	43 795	44 407	<b>1.4</b>	895	902	<b>0.8</b>	685	692	<b>1.1</b>
	Average for countries with all data available for 2010 and 2014	44 197	44 459	<b>0.6</b>	907	918	<b>1.2</b>	690	693	<b>0.5</b>

Note: Data on teachers' salaries, teaching time and ratio of students to teaching staff come from *Education at a Glance 2016* for 2014 data and from *Education at a Glance 2012* for 2010 data. Data for instruction time come from *Education at a Glance 2014* for 2014 data and *Education at a Glance 2010* for 2010 data. Please see notes on these data in those tables.

Teachers' salary refers to the statutory salary of teachers after 15 years of experience, converted to USD using PPPs for private consumption.

1. Unlike previous editions of *Education at a Glance*, the student-teacher ratio presented in this table is for public institutions only. Therefore, figures for 2010 may slightly vary when compared to previous editions which used data related to all institutions.


2. Minimum instruction time for 2013.

3. Reference year for teaching time 2013 instead of 2014.

4. Estimated number of hours of minimum instruction time by level of education based on the average number of hours per year, as the allocation of instruction time across multiple grades is flexible.

Source: OECD. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

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**Table B7.2b. [2/2] Factors used to compute the salary cost of teachers per student in public institutions, in lower secondary education (2010 and 2014)****B7**

	Ratio of students to teaching staff <sup>1</sup> (number of students per teacher)			Estimated class size (average size of classes taking into account instruction and teaching time)			Salary cost of teacher per student (in USD)		
	2010	2014	Variation 2010-2014 (%)	2010	2014	Variation 2010-2014 (%)	2010	2014	Variation 2010-2014 (%)
	(10)	(11)	(12)	(13) = (4)*(10) / (7)	(14) = (5)*(11) / (8)	(15)	(16)	(17)	(18)
<b>OECD</b> Australia	12	13	<b>1.8</b>	15	16	<b>4.6</b>	4 315	4 576	<b>6.0</b>
Austria	9	9	<b>-5.3</b>	14	13	<b>-6.7</b>	5 217	5 379	<b>3.1</b>
Belgium (Fl.)	8	9	<b>22.7</b>	m	16	<b>m</b>	6 376	5 300	<b>-16.9</b>
Belgium (Fr.)	8	9	<b>22.7</b>	11	13	<b>24.6</b>	6 148	5 156	<b>-16.1</b>
Canada	18	16	<b>-7.5</b>	22	20	<b>-7.9</b>	m	3 981	<b>m</b>
Chile	24	19	<b>-19.8</b>	24	18	<b>-24.2</b>	1 065	1 343	<b>26.1</b>
Czech Republic <sup>2</sup>	11	12	<b>5.3</b>	15	17	<b>11.8</b>	m	1 540	<b>m</b>
Denmark	11	11	<b>-0.9</b>	16	16	<b>0.4</b>	4 898	4 752	<b>-3.0</b>
England (UK)	m	m	<b>m</b>	m	m	<b>m</b>	m	m	<b>m</b>
Estonia	15	10	<b>-33.3</b>	19	13	<b>-30.4</b>	924	m	<b>m</b>
Finland	10	9	<b>-9.2</b>	13	13	<b>-0.2</b>	4 549	4 788	<b>5.3</b>
France	15	15	<b>0.7</b>	22	23	<b>2.8</b>	2 574	2 487	<b>-3.4</b>
Germany	15	13	<b>-10.1</b>	17	15	<b>-11.5</b>	4 525	5 181	<b>14.5</b>
Greece	m	8	<b>m</b>	m	14	<b>m</b>	m	3 128	<b>m</b>
Hungary	11	11	<b>0.9</b>	12	13	<b>8.7</b>	1 415	1 776	<b>25.5</b>
Iceland <sup>3</sup>	10	m	<b>m</b>	16	m	<b>m</b>	3 238	m	<b>m</b>
Ireland	14	14	<b>-3.5</b>	18	18	<b>-2.8</b>	4 149	4 186	<b>0.9</b>
Israel	13	12	<b>-5.5</b>	21	18	<b>-15.2</b>	2 065	2 560	<b>24.0</b>
Italy	12	12	<b>-1.7</b>	19	19	<b>-2.6</b>	3 238	3 073	<b>-5.1</b>
Japan	15	14	<b>-4.8</b>	21	20	<b>-4.3</b>	3 297	3 552	<b>7.7</b>
Korea	20	16	<b>-16.8</b>	27	25	<b>-6.7</b>	2 512	2 882	<b>14.7</b>
Latvia	m	8	<b>m</b>	m	m	<b>m</b>	m	m	<b>m</b>
Luxembourg	9	10	<b>4.3</b>	13	11	<b>-16.8</b>	11 444	11 506	<b>0.5</b>
Mexico	36	36	<b>2.3</b>	40	40	<b>2.3</b>	909	1 000	<b>10.0</b>
Netherlands	17	16	<b>-1.8</b>	22	22	<b>-1.8</b>	m	4 097	<b>m</b>
New Zealand	17	16	<b>-0.6</b>	m	m	<b>m</b>	m	m	<b>m</b>
Norway	10	10	<b>-1.0</b>	13	13	<b>1.3</b>	4 151	4 504	<b>8.5</b>
Poland	13	11	<b>-18.0</b>	17	16	<b>-8.9</b>	1 807	2 365	<b>30.8</b>
Portugal	8	10	<b>27.3</b>	9	14	<b>57.2</b>	5 523	3 894	<b>-29.5</b>
Scotland (UK)	m	m	<b>m</b>	m	m	<b>m</b>	m	m	<b>m</b>
Slovak Republic	14	13	<b>-8.1</b>	17	16	<b>-6.0</b>	1 055	1 333	<b>26.3</b>
Slovenia	8	8	<b>3.8</b>	10	10	<b>-2.5</b>	5 235	4 548	<b>-13.1</b>
Spain	9	11	<b>24.4</b>	13	16	<b>25.7</b>	6 265	4 380	<b>-30.1</b>
Sweden <sup>4</sup>	11	12	<b>5.4</b>	m	m	<b>m</b>	m	m	<b>m</b>
Switzerland	12	12	<b>0.0</b>	m	m	<b>m</b>	5 937	m	<b>m</b>
Turkey	m	19	<b>m</b>	m	32	<b>m</b>	m	1 538	<b>m</b>
United States	14	16	<b>11.8</b>	m	17	<b>m</b>	m	3 846	<b>m</b>
<b>OECD average</b>	<b>13</b>	<b>13</b>	<b>-2.9</b>	<b>17</b>	<b>17</b>	<b>-3.1</b>	<b>3 198</b>	<b>3 389</b>	<b>6.0</b>
<b>Average for countries with all data available for 2010 and 2014</b>	<b>13</b>	<b>13</b>	<b>-3.0</b>	<b>18</b>	<b>17</b>	<b>-2.3</b>	<b>3 313</b>	<b>3 436</b>	<b>3.7</b>

Note: Data on teachers' salaries, teaching time and ratio of students to teaching staff come from *Education at a Glance 2016* for 2014 data and from *Education at a Glance 2012* for 2010 data. Data for instruction time come from *Education at a Glance 2014* for 2014 data and *Education at a Glance 2010* for 2010 data. Please see notes on these data in those tables.

Teachers' salary refers to the statutory salary of teachers after 15 years of experience, converted to USD using PPPs for private consumption.

1. Unlike previous editions of *Education at a Glance*, the student-teacher ratio presented in this table is for public institutions only. Therefore, figures for 2010 may slightly vary when compared to previous editions which used data related to all institutions.

2. Minimum instruction time for 2013.

3. Reference year for teaching time 2013 instead of 2014.

4. Estimated number of hours of minimum instruction time by level of education based on the average number of hours per year, as the allocation of instruction time across multiple grades is flexible.

Source: OECD. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://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.


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Table B7.2c. **Factors used to compute the salary cost of teachers per student in public institutions, in upper secondary education (2014)**

		Teachers' salary (annual, in USD, 2014 constant prices)	Instruction time (for students, hours per year)	Teaching time (for teachers, hours per year)	Ratio of student to teaching staff (number of students per teacher)	Estimated class size (average size of classes taking into account instruction and teaching time)
		(1)	(2)	(3)	(4)	(5) = (4)*(2)/(3)
OECD	Australia	56 427	m	804	13	m
	Austria	50 508	936	589	10	16
	Belgium (Fl.)	62 699	928	513	10	18
	Belgium (Fr.)	60 934	849	606	10	14
	Canada	65 833	908	744	14	17
	Chile	27 495	1 165	1 146	23	23
	Czech Republic	18 324	a	589	11	m
	Denmark	58 317	a	386	13	m
	England (UK)	46 390	950	745	m	m
	Estonia	m	a	568	15	m
	Finland	45 999	a	547	16	m
	France	37 103	1 036	648	10	16
	Germany <sup>1</sup>	73 632	933	714	13	17
	Greece	24 712	a	459	m	m
	Hungary	21 016	832	590	12	17
	Iceland <sup>2</sup>	m	a	544	m	m
	Ireland	58 190	935	735	14	18
	Israel	24 853	1 011	543	11	20
	Italy	36 958	904	616	13	19
	Japan	49 378	a	513	11	m
	Korea	47 257	a	550	14	m
	Latvia	m	m	m	10	m
	Luxembourg	112 760	845	739	9	11
	Mexico	51 527	a	848	23	m
	Netherlands	66 366	925	750	19	24
	New Zealand	46 082	m	760	13	m
	Norway	49 842	a	523	10	m
	Poland	24 828	a	545	11	m
	Portugal	38 166	805	605	9	12
	Scotland (UK)	43 163	a	855	m	m
	Slovak Republic	16 663	879	614	14	20
	Slovenia	37 751	a	570	14	m
	Spain	46 865	a	693	11	m
	Sweden	39 896	a	a	14	m
	Switzerland	m	m	m	m	m
	Turkey	29 680	838	504	16	26
	United States	60 884	1 038	m	16	m
	OECD average	46 379	929	641	13	19

Note: Data in this table come from *Education at a Glance 2016* or *Education at a Glance 2014* (for instruction time). Teachers' salary refers to the statutory salary of teachers after 15 years of experience, converted to USD using PPPs for private consumption.

1. Intended instruction hours in 2012 rather than instruction hours in 2013.

2. Reference year for teaching time 2013 instead of 2014.

Source: OECD. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://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.


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Table B7.3. **Contribution of various factors to salary cost of teachers per student in primary education (2014)***In equivalent USD, converted using PPPs for private consumption***B7**

			Contribution of the underlying factors to the difference from the OECD average			
			Effect (in USD) of teachers' salary below/above the 2014 OECD average of	Effect (in USD) of instruction time (for students) below/above the 2014 OECD average of	Effect (in USD) of teaching time (for teachers) below/above the 2014 OECD average of	Effect (in USD) of estimated class size below/above the 2014 OECD average of
			USD 2 832	USD 42 083	794 hours	775 hours
	Salary cost of teachers per student (2014)	Difference (in USD) from the 2014 OECD average of				
	(1)	(2) = (3)+(4)+(5)+(6)	(3)	(4)	(5)	(6)
<b>OECD</b>						
Australia	3 725	<b>893</b>	1 011	791	- 389	- 520
Austria	3 650	<b>818</b>	91	- 390	- 16	1 133
Belgium (Fl.)	4 030	<b>1 198</b>	499	114	142	442
Belgium (Fr.)	3 920	<b>1 089</b>	400	224	212	252
Canada	3 981	<b>1 149</b>	1 509	502	- 90	- 772
Chile	1 503	<b>-1 328</b>	-1 020	614	- 834	- 89
Czech Republic	973	<b>-1 859</b>	-1 427	- 293	- 109	- 31
Denmark	4 542	<b>1 711</b>	799	- 189	568	533
England (UK)	m	<b>m</b>	m	m	m	m
Estonia	m	<b>m</b>	m	m	m	m
Finland	2 960	<b>128</b>	- 188	- 667	413	571
France	1 792	<b>-1 040</b>	- 475	193	- 399	- 359
Germany	4 101	<b>1 270</b>	1 442	- 529	- 108	464
Greece	2 632	<b>- 200</b>	-1 499	- 40	874	465
Hungary	1 677	<b>-1 155</b>	-1 791	- 593	635	594
Iceland	m	<b>m</b>	m	m	m	m
Ireland	3 526	<b>694</b>	1 000	452	- 532	- 227
Israel	1 912	<b>- 920</b>	- 935	446	- 185	- 246
Italy	2 700	<b>- 131</b>	- 676	320	84	141
Japan	2 878	<b>46</b>	458	- 118	125	- 419
Korea	2 824	<b>- 8</b>	336	- 582	479	- 241
Latvia	m	<b>m</b>	m	m	m	m
Luxembourg	12 377	<b>9 546</b>	5 963	1 047	- 305	2 840
Mexico	1 009	<b>-1 822</b>	- 710	13	- 57	-1 068
Netherlands	3 235	<b>403</b>	735	515	- 557	- 289
New Zealand	m	<b>m</b>	m	m	m	m
Norway	4 240	<b>1 408</b>	168	- 214	160	1 294
Poland	2 210	<b>- 622</b>	-1 360	- 582	581	739
Portugal	2 775	<b>- 56</b>	- 274	42	122	54
Scotland (UK)	m	<b>m</b>	m	m	m	m
Slovak Republic	969	<b>-1 863</b>	-1 596	- 285	- 121	139
Slovenia	2 379	<b>- 453</b>	- 284	- 467	559	- 261
Spain	3 354	<b>523</b>	- 11	- 27	- 394	955
Sweden	m	<b>m</b>	m	m	m	m
Switzerland	m	<b>m</b>	m	m	m	m
Turkey	1 424	<b>-1 407</b>	- 780	- 204	156	- 579
United States	m	<b>m</b>	m	m	m	m

Note: The OECD averages presented in the headings of this table only take into account countries for which all variables used in the calculation of salary cost of teachers per student are available. Therefore, they may not match the OECD averages presented in Tables B7.2a.

Source: OECD. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://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.


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Table B7.4. **Contribution of various factors to salary cost of teachers per student in lower secondary education (2014)***In equivalent USD, converted using PPPs for private consumption*

	Salary cost of teachers per student (2014)	Difference (in USD) from the 2014 OECD average of <b>USD 3 389</b>	Contribution of the underlying factors to the difference from the OECD average			
			Effect (in USD) of teachers' salary below/above the 2014 OECD average of <b>USD 44 600</b>	Effect (in USD) of instruction time (for students) below/above the 2014 OECD average of <b>916 hours</b>	Effect (in USD) of teaching time (for teachers) below/above the 2014 OECD average of <b>685 hours</b>	Effect (in USD) of estimated class size below/above the 2014 OECD average of <b>18 students per class</b>
	(1)	(2)= (3)+(4)+(5)+(6)	(3)	(4)	(5)	(6)
<b>OECD</b>						
Australia	4 576	<b>1 188</b>	993	410	- 682	466
Austria	5 379	<b>1 990</b>	214	- 75	523	1 328
Belgium (Fl.)	5 300	<b>1 911</b>	382	58	939	532
Belgium (Fr.)	5 156	<b>1 767</b>	261	247	104	1 155
Canada	3 981	<b>592</b>	1 429	23	- 306	- 554
Chile	1 343	<b>-2 046</b>	-1 196	346	-1 148	- 48
Czech Republic	1 540	<b>-1 849</b>	-2 103	- 116	261	110
Denmark	4 752	<b>1 364</b>	712	63	130	459
England (UK)	m	<b>m</b>	m	m	m	m
Estonia	m	<b>m</b>	m	m	m	m
Finland	4 788	<b>1 399</b>	- 187	- 332	613	1 306
France	2 487	<b>- 901</b>	- 562	233	162	- 735
Germany	5 181	<b>1 793</b>	1 874	- 239	- 394	552
Greece	3 128	<b>- 260</b>	-2 013	- 525	1 371	906
Hungary	1 776	<b>-1 613</b>	-2 168	- 674	384	845
Iceland	m	<b>m</b>	m	m	m	m
Ireland	4 186	<b>798</b>	1 005	80	- 269	- 19
Israel	2 560	<b>- 829</b>	-1 081	275	12	- 35
Italy	3 073	<b>- 316</b>	- 699	254	345	- 216
Japan	3 552	<b>164</b>	354	- 78	394	- 507
Korea	2 882	<b>- 507</b>	184	- 268	707	-1 130
Latvia	m	<b>m</b>	m	m	m	m
Luxembourg	11 506	<b>8 118</b>	6 132	- 584	- 559	3 128
Mexico	1 000	<b>-2 389</b>	- 427	524	- 862	-1 624
Netherlands	4 097	<b>708</b>	1 501	335	- 347	- 780
New Zealand	m	<b>m</b>	m	m	m	m
Norway	4 504	<b>1 115</b>	- 41	- 211	126	1 242
Poland	2 365	<b>-1 024</b>	-1 697	- 360	671	362
Portugal	3 894	<b>506</b>	- 571	- 97	452	722
Scotland (UK)	m	<b>m</b>	m	m	m	m
Slovak Republic	1 333	<b>-2 056</b>	-2 182	- 238	155	210
Slovenia	4 548	<b>1 160</b>	- 680	- 720	356	2 204
Spain	4 380	<b>991</b>	192	570	- 157	386
Sweden	m	<b>m</b>	m	m	m	m
Switzerland	m	<b>m</b>	m	m	m	m
Turkey	1 538	<b>-1 851</b>	- 979	- 211	770	-1 431
United States	3 846	<b>457</b>	1 206	365	-1 332	218

Note: The OECD averages presented in the headings of this table only take into account countries for which all variables used in the calculation of salary cost of teachers per student are available. Therefore, they may not match the OECD averages presented in Tables B7.2b.

Source: OECD. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://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.


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Table B7.5. **Contribution of various factors to salary cost of teachers per student in upper secondary education (2014)***In equivalent USD, converted using PPPs for private consumption***B7**

	Salary cost of teacher per student (2014)	Difference (in USD) from the 2014 OECD average of USD 3 776	Contribution of the underlying factors to the difference from the OECD average			
			Effect (in USD) of teachers' salary below/above the 2014 OECD average of USD 48 929	Effect (in USD) of instruction time (for students) below/above the 2014 OECD average of 921 hours	Effect (in USD) of teaching time (for teachers) below/above the 2014 OECD average of 666 hours	Effect (in USD) of estimated class size below/above the 2014 OECD average of 18 students per class
	(1)	(2) = (3) + (4) + (5) + (6)	(3)	(4)	(5)	(6)
<b>OECD</b>						
Australia	m	m	m	m	m	m
Austria	5 002	1 226	139	73	538	477
Belgium (Fl.)	6 166	2 391	1 210	40	1 275	- 133
Belgium (Fr.)	5 993	2 217	1 054	- 392	455	1 099
Canada	4 739	963	1 262	- 60	- 475	236
Chile	1 212	-2 563	-1 311	576	-1 238	- 591
Czech Republic	m	m	m	m	m	m
Denmark	m	m	m	m	m	m
England (UK)	m	m	m	m	m	m
Estonia	m	m	m	m	m	m
Finland	m	m	m	m	m	m
France	3 690	- 85	-1 041	445	103	408
Germany	5 586	1 810	1 891	63	- 327	183
Greece	m	m	m	m	m	m
Hungary	1 697	-2 079	-2 208	- 278	335	72
Iceland	m	m	m	m	m	m
Ireland	4 175	400	690	63	- 393	40
Israel	2 355	-1 421	-2 073	295	645	- 289
Italy	2 847	- 929	- 924	- 59	261	- 207
Japan	m	m	m	m	m	m
Korea	m	m	m	m	m	m
Latvia	m	m	m	m	m	m
Luxembourg	12 172	8 396	5 997	- 670	- 818	3 886
Mexico	m	m	m	m	m	m
Netherlands	3 461	- 315	1 122	19	- 436	-1 019
New Zealand	m	m	m	m	m	m
Norway	m	m	m	m	m	m
Poland	m	m	m	m	m	m
Portugal	4 112	337	-1 000	- 541	385	1 492
Scotland (UK)	m	m	m	m	m	m
Slovak Republic	1 205	-2 571	-2 414	- 114	203	- 246
Slovenia	m	m	m	m	m	m
Spain	m	m	m	m	m	m
Sweden	m	m	m	m	m	m
Switzerland	m	m	m	m	m	m
Turkey	1 892	-1 884	-1 378	- 265	802	-1 043
United States	m	m	m	m	m	m

Note: The OECD averages presented in the headings of this table only take into account countries for which all variables used in the calculation of salary cost of teachers per student are available. Therefore, they may not match the OECD averages presented in Tables B7.2c.

Source: OECD. See Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

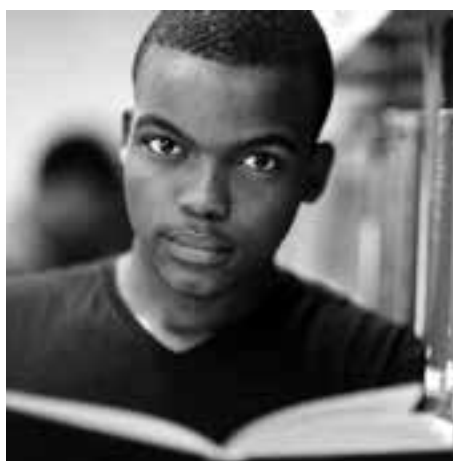
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# ACCESS TO EDUCATION, PARTICIPATION AND PROGRESSION




**Indicator C1** Who participates in education?

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**Indicator C2** How do early childhood education systems differ around the world?

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**Indicator C3** How many students are expected to enter tertiary education?

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**Indicator C4** Who studies abroad and where?

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**Indicator C5** Transition from school to work: Where are the 15-29 year-olds?

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**Indicator C6** How many adults participate in education and learning?

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