Indicator C1. How much is spent per student on educational institutions?

Highlights

- On average, OECD countries spend 1.7 times more per student at the tertiary level than in non-tertiary education (primary, secondary and post-secondary non-tertiary levels). OECD countries spend on average USD 10 500 per student on primary to tertiary educational institutions. This represents about USD 9 400 per student at primary, secondary and post-secondary non-tertiary level, and USD 15 600 at tertiary level.
- In non-tertiary education, spending on core educational services represents 93% of institutions' expenditure per student. At the tertiary level, a much lower share of institutional expenditure goes to core services (67%), while roughly 30% of total educational expenditure per student goes on research and development (R&D).
- The cumulative expenditure per student from the age of 6 to 15 amounts to about USD 93 000 on average across OECD countries.

Figure C1.1. Total expenditure on educational institutions per full-time equivalent student, by level of education (2016)

In equivalent USD converted using PPPs



1. Primary education includes pre-primary programmes. Post-secondary non-tertiary figures are treated as negligible.

2. Year of reference 2017.

Countries are ranked in descending order of the total expenditure per student on tertiary education.

Source: OECD/UIS/Eurostat (2019), Table C1.1. See Source section for more information and Annex 3 for notes (<u>https://doi.org/10.1787/f8d7880d-</u>en).

StatLink ms https://doi.org/10.1787/888933978797

Context

The willingness of policy makers to expand access to educational opportunities and to provide high-quality education can translate into higher costs per student and must be balanced against other demands on public expenditure and the overall tax burden. As a result, the question of whether the resources devoted to education yield adequate returns features prominently in public debate. Although it is difficult to assess the optimal volume of resources needed to prepare each student for life and work in modern societies, international comparisons of spending on educational institutions per student can provide useful reference points (see *Definitions* and *Methodology* sections).

This indicator provides an assessment of the investment in each student. Expenditure per student on educational institutions is influenced by teachers' salaries (see Indicators C7 and D3), pension systems, instructional and teaching hours (see Indicators C7, D1 and D4), the cost of teaching materials and facilities (see Indicator C6), the programme provided (e.g. general or vocational) and the number of students enrolled in the education system (see Indicator B1). Policies to attract new teachers, reduce average class sizes or change staffing patterns (see Indicator D2) have also affected per-student expenditure. Ancillary services and R&D activities also influence the level of expenditure per student.

At primary and secondary levels, educational expenditure is dominated by spending on instructional services. At the tertiary level, other services, particularly those related to ancillary services or R&D activities, can account for a significant proportion of educational spending.

Other findings

- On average, total expenditure per student is higher in private institutions than in public ones. Total expenditure in primary to tertiary public institutions amounts to over USD 10 300 per student, compared to USD 10 800 in private ones (Table C1.5, available on line).
- From 2010 to 2016, expenditure on non-tertiary educational institutions increased by 5% on average across OECD countries, while the number of students remained stable over this period. This resulted in an increase of 5% in expenditure per student over the same period.
- Annual expenditure per student on educational institutions as a share of gross domestic product (GDP) per capita amounts to 23% at primary, secondary and post-secondary non-tertiary levels on average across OECD countries. The figure is much higher at tertiary level, where countries spend on average 38% of GDP per capita on funding short-cycle, bachelor's, master's and doctoral students.

Analysis

Expenditure per student on educational institutions at different levels of education

Annual expenditure per student on educational institutions between primary and tertiary education provides an assessment of the investment made in each student. In 2016, annual spending per student from primary to tertiary education ranged from around USD 3 600 or slightly more in Colombia and Mexico to more than USD 15 000 in Austria, Norway and the United States and nearly USD 22 000 in Luxembourg (Table C1.1 and Figure C1.1). Across the OECD, countries spend on average USD 10 500 per student on primary to tertiary educations.

The way resources are allocated across the different levels of education vary widely and largely reflect the mode of educational provision. Education still essentially takes place in settings with generally similar organisation, curricula, teaching style and management. These shared features have tended to result in similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. In recent decades, however, greater use of private funds for tertiary education has modified the allocation of expenditure at this level compared to lower ones (see Indicator C3, and Table C1.5, available on line). In 2016, OECD countries on average spent around USD 9 400 per student at the primary, secondary and post-secondary non-tertiary levels and USD 15 600 at the tertiary level, although at this level, the average is affected by high expenditure in a few countries, most notably Canada, Luxembourg, Norway, Sweden, the United Kingdom and the United States (Table C1.1 and Figure C1.1). These differences lead to large differences in the cumulative expenditure per student over the theoretical duration of studies (Table C1.6, available on line). Significant differences are also observed at the subnational level (Box C1.1).

Box C1.1. Subnational variation in annual expenditure per student on educational institutions

Annual expenditure per student can be quite heterogeneous across countries with large differences across regions. Among the three countries with available data at subnational level, Canada has the highest variation in annual expenditure per student on educational institutions at primary and secondary levels combined: the region with the highest value (USD 23 000) spends almost three times as much per student as the region with the lowest value (USD 8 000). Regional differences were the smallest in Belgium and Germany (OECD, 2019_[1]).

An examination of regional differences in spending on primary and secondary education presents contrasting patterns. In Germany, 8 of the 12 *Länder* that spent less than the national average per student were located in the western part of the country. This may be explained by the sharp demographic downturn in the eastern *Länder* that led to a reduction in the number of students enrolled (OECD, 2019^[1]).

To ensure comparability across countries, expenditure figures were converted into common currency (USD) using national purchasing power parities (PPPs). However, differences in the cost of living within countries were not taken into account.

The distribution of expenditure at different levels of education reflects governments' priorities and the relative costs of education provision. Expenditure per student on educational institutions rises with the level of education in almost all countries, but the range varies markedly across countries (Table C1.1). OECD countries spend on average 18% more per secondary student than they do per primary student. This percentage is 50% or above in Canada, the Czech Republic, France and the Netherlands, but countries invest more per primary student than they do per secondary student in Chile, Colombia, Iceland, Israel, Lithuania, the Slovak Republic, Slovenia and the United Kingdom, despite the fact that teacher's salaries tend to increase with higher levels of education. Similarly, educational institutions in OECD countries spend an average of 31% more on each tertiary student (excluding R&D) than on each primary student. Turkey and the United States spend twice as much on a tertiary student (excluding R&D) than on a primary student (Table C1.1).

Expenditure per student on core education services, ancillary services and R&D

On average across OECD countries, expenditure on core education services (such as teaching costs and other expenditure related to education) represents 87% of total expenditure per student from primary to tertiary educational institutions and it exceeds 90% in Chile, Latvia and Poland. In about a third of OECD and partner countries with available data, annual expenditure on research and development (R&D) and ancillary services per student accounts for around 15% or more of the total annual expenditure per student on primary to tertiary to tertiary institutions. In the Slovak Republic and Sweden, this reaches 20%.

Figure C1.2. Total expenditure on educational institutions per full-time equivalent student, by type of service (2016)

In equivalent USD converted using PPPs



1. Primary education includes pre-primary programmes. Post-secondary non-tertiary figures are treated as negligible.

2. Year of reference 2017.

Countries are ranked in descending order of total expenditure on educational institutions per full-time equivalent student. **Source**: OECD/UIS/Eurostat (2019), Table C1.2. See Source section for more information and Annex 3 for notes (<u>https://doi.org/10.1787/f8d7880d-en</u>).

StatLink as https://doi.org/10.1787/888933978816

However, this overall picture masks large variations across levels of education (Table C1.2 and Figure C1.2). At non-tertiary levels (primary, secondary and post-secondary non-tertiary), expenditure is dominated by spending on core education services. On average, OECD countries spend 93% of their total per-student expenditure (about USD 8 700) on core educational services at this level. However, in Finland, France, the Slovak Republic and Sweden, ancillary services account for 10% or slightly more of the expenditure per student (Table C1.2).

The share of total expenditure on educational institutions per student devoted to core services differs more across countries at tertiary level, as R&D expenditure can account for a significant proportion of educational spending (Table C1.2). On average across OECD countries, 67% of total expenditure on educational institutions at tertiary level goes to core services, while around 30% is spent on research and development. OECD countries in which R&D is mostly conducted in tertiary education institutions tend to report higher levels of expenditure per student than those where a large proportion of R&D is performed in other public institutions or in industry. Excluding R&D activities, average expenditure per student on average across OECD countries amounts to over USD 11 000, ranging from less than USD 6 000 in Lithuania and Mexico to more than USD 25 000 in Luxembourg and the United States.

On average across OECD countries, expenditure on R&D and ancillary services at the tertiary level represents 33% of all tertiary expenditure on educational institutions per student. In five of the OECD and partner countries for which data are available, expenditure on R&D and ancillary services in tertiary institutions is at least 40% of total expenditure on educational institutions per student, with Sweden (54%) the country with the highest share. However, the share of expenditure on ancillary services tends to be lower in tertiary education than at lower levels of education. On average, only 5% of expenditure on tertiary institutions goes towards ancillary services, and the amount is negligible (below USD 100 per student) in Austria, Chile, the Czech Republic, Estonia, Finland, Israel, Korea, Poland and Sweden. The United Kingdom and the United States spend the most in ancillary services per student at tertiary level among OECD countries, over USD 2 000 per student.

Figure C1.3. Cumulative expenditure on educational institutions per full-time equivalent student between the age of 6 and 15 (2016)

In equivalent USD converted using PPPs



1. Year of reference 2017.

Countries are ranked in descending order of the total expenditure on educational institutions per student over the theoretical duration of primary and secondary studies between the age of 6 and 15.

Source: OECD/UIS/Eurostat (2019), Table C1.6, available on line. See Source section for more information and Annex 3 for notes (https://doi.org/10.1787/f8d7880d-en).

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Policy makers are interested in the relationship between the resources devoted to education and the outcomes of their education systems (Box B1.1 in *Education at a Glance 2017* (OECD, 2017_[2])). The cost of education across countries depends not only on the annual expenditure per student, but also on the total duration of studies at each level and the level of enrolment. High expenditure per student, for example, might be offset by short programmes or limited access to education at certain levels. On the other hand, a seemingly inexpensive education system in per student terms can prove to be costly overall, if enrolment is high and students spend more time in school.

Primary and secondary education are usually compulsory across the OECD, and the cumulative expenditure per student between the ages of 6 and 15 at these levels shows how much it costs to teach a student on average during the course of current compulsory education (Figure C1.3 and Table C1.6, available on line). On average across OECD countries, the total cumulative expenditure per student from the age of 6 to 15 amounts to around USD 92 700 per student. Theoretical cumulative expenditure on educational institutions per student varies considerably among countries. Austria, Iceland, Luxembourg, Norway, Sweden and the United States spend over USD 120 000 per student over this period, while the figure is below USD 50 000 in Colombia and Turkey.

Expenditure per student on educational institutions relative to per capita GDP

Expenditure on educational institutions per student relative to gross domestic product (GDP) per capita is a measure of spending that takes into account the relative wealth of OECD countries. Since access to education in most OECD countries is universal (and usually compulsory) at lower levels of schooling, the amount spent per student as a share of per capita GDP can indicate whether the resources spent per student are proportionate to the country's ability to pay. At higher levels of education, where student enrolment varies sharply among countries, the link is less clear. At tertiary level, for example, OECD countries may rank relatively high on this measure, even when a large proportion of their wealth is spent on educating a relatively small number of students.

In OECD countries, overall expenditure per student on educational institutions from primary to tertiary levels averages 26% of per capita GDP, which can be broken down into 23% at primary, secondary and post-secondary non-tertiary levels and 38% at the tertiary level (Table C1.4, available on line). Countries with low levels of expenditure per student may still be investing relatively large amounts as a share of per capita GDP. For example, although Portugal's expenditure per student for all educational levels and its per capita GDP are both below the OECD average, it spends an above-average share of its per capita GDP per student at each educational level.

The relationship between per capita GDP and expenditure per student on educational institutions is difficult to interpret. However, there is a clear positive relationship between the two at non-tertiary educational levels. In other words, less wealthy countries tend to spend less per student than richer countries. Although the relationship is generally positive at these levels, there are variations even between countries with similar levels of per capita GDP, especially among countries where per capita GDP exceeds USD 30 000. Austria and the Netherlands, for example, have similar levels of per capita GDP (around USD 50 000; see Table X2.1 in Annex 2) but they allocate very different shares of their wealth to primary, secondary and post-secondary non-tertiary education. Austria spends 28% of per capita GDP on non-tertiary institutions (above the OECD average of 23%) while the Netherlands spends 22% (Table C1.4, available on line).

At tertiary level, there is more variation in spending and in the relationship between countries' relative wealth and their level of tertiary expenditure. Spending on tertiary institutions in Canada, the United Kingdom and the United States represents more than 50% of per capita GDP for each student (Table C1.4, available on line). The high share for the United Kingdom is mostly the result of its high expenditure on R&D, which accounts for about one-fourth of total expenditure per student at this level (Table C1.2).

Changes in expenditure per student on educational institutions between 2010 and 2016

Changes in expenditure on educational institutions largely reflect changes in the size of the school-age population and in teachers' salaries. Teachers' salaries, the main component of educational costs, have increased in the

majority of countries over the past decade (see Indicator D3). The size of the school-age population influences both enrolment levels and the amount of resources and organisational effort a country must invest in its education system. The larger this population, the greater the potential demand for education services. Changes in expenditure per student over the years may also vary between levels of education within countries, as both enrolment and expenditure may follow different trends at different levels of education.

At non-tertiary levels, the number of students has remained fairly stable on average across OECD countries between 2010 and 2016. During the same period, expenditure by non-tertiary educational institutions increased by an average of 5% (Table C1.3). As a result, expenditure per student at these levels increased by 5% in 2016 compared to its 2010 level. Most OECD countries spent more per student in 2016 than they did in 2010, with the exception of some countries that were heavily hit by the economic crisis of 2008 such as Australia, Estonia, Ireland, Italy, Slovenia and Spain. Expenditure per student increased by over 20% in Chile, Israel, and Latvia. In Chile, Latvia, Poland and the Slovak Republic, decreases in enrolments of more than 5% coincided with significant increases in spending on educational institutions per student between 2010 and 2016. In contrast, the increase in number of students enrolled was accompanied by a reduction in spending on educational institutions per student in Ireland, Slovenia and Spain.

Expenditure at tertiary level increased at a higher rate than at lower levels of education, rising on average by 9% between 2010 and 2016. It also increased more than the number of students enrolled over this period (3%). As a result, OECD countries recorded an average increase of 8% in expenditure per student over this period. However, there are stark differences across countries. Among OECD and partner countries with available data, Australia, Finland, France, Germany, Italy, Lithuania, Mexico, Portugal and Spain recorded a decrease in expenditure on tertiary education per student. In most of these countries, the decline was mainly the result of a rapid increase in the number of tertiary students. In contrast, expenditure per tertiary student increased in Estonia, Iceland and the Slovak Republic due to an increase in total expenditure and a reduction in the number of students at tertiary level (Table C1.3). Changes in expenditure on tertiary educational institutions can affect the allocation of resources across types of service, and in particular, the investment in core educational goods and services (Box C1.2).

Box C1.2. Change in spending on educational core goods and services in tertiary institutions

Spending on educational core goods and services provides educational institutions with the necessary resources to accomplish their main mission, developing the skills of students. Comparing the change in expenditure on core services with the change in expenditure on all services provides a better understanding of how changes in total expenditure on institutions affect the funds available for core educational goods and services. This is particularly relevant at tertiary levels of education, where a greater share of total spending is allocated to services other than core educational goods and services, such as ancillary services or research and development (R&D). While there may be reasons to prioritise spending in these areas, a reduction in investment in educational core services might affect the quality of learning and the material conditions under which instruction takes place, particularly in countries where enrolment in tertiary education has increased significantly.

Between 2012 and 2016, the rate of change of expenditure on core educational services and total expenditure on tertiary educational institutions has varied significantly across countries (Figure C1.a). Total expenditure on tertiary institutions increased in two-thirds of OECD and partner countries during this period. In most of these, spending on core educational goods and services also increased, although to differing extents. Spending on core educational goods and services increased by at least 24 percentage points more than total spending on tertiary institutions in Estonia and the Slovak Republic. In contrast, spending on core educational goods and services on tertiary institutions in Belgium, Finland, Chile, Ireland, Israel, Lithuania, the Russian Federation, Sweden, the United Kingdom, and the United States. Luxembourg is the only country to witness both an increase in total spending at tertiary level (+34%) and a

decrease in spending on core educational services (-24%). This difference suggests increased investment in ancillary services or R&D over this period at the expense of core educational service and is indicative of a research based higher education policy system.

The other third of countries saw their total investments on tertiary institutions decline between 2012 and 2016. However, Hungary and Portugal managed to increase total spending on core educational goods and services in spite of these budget cuts by reallocating funds from ancillary services or R&D. In contrast, spending on core educational goods and services fell in the Czech Republic, Italy, Latvia and Slovenia although to a lesser extent than total spending on tertiary institutions.

Figure C1.a. Growth of core and total expenditure on tertiary educational institutions between 2012 and 2016



Note: Core educational expenditure has been obtained by subtracting expenditure devoted on ancillary services and R&D from the total expenditure on educational institutions. A positive figure refers to a higher growth rate of the expenditure on core educational services compared to the growth rate of total expenditure on all services. See *Definitions* and *Methodology* sections for more information.

1. Reference period 2012-2015.

2. Reference period 2013-2016.

Countries are ranked in descending order of the percentage-point difference.

Source: OECD/UIS/Eurostat (2019), Education at a Glance Database <u>http://stats.oecd.org/</u>. See *Source* section for more information and Annex 3 for notes (<u>https://doi.org/10.1787/f8d7880d-en</u>).

StatLink ms https://doi.org/10.1787/888933978854

Definitions

Ancillary services are services provided by educational institutions that are peripheral to their main educational mission. The main component of ancillary services is student welfare. In primary, secondary and post-secondary non-tertiary education, student welfare services include meals, school health services and transportation to and from school. At the tertiary level, they include residence halls (dormitories), dining halls and health care.

Core educational services include all expenditure that is directly related to instruction in educational institutions, including teachers' salaries, construction and maintenance of school buildings, teaching materials, books, and school administration.

Research and development includes research performed at universities and other tertiary educational institutions, regardless of whether the research is financed from general institutional funds or through separate grants or contracts from public or private sponsors.

Methodology

Expenditure per student on educational institutions at a particular level of education is calculated by dividing total expenditure on educational institutions at that level by the corresponding full-time equivalent enrolment. Only educational institutions and programmes for which both enrolment and expenditure data are available are taken into account. Expenditure in national currencies is converted into equivalent USD by dividing the national currency figure by the purchasing power parity (PPP) index for GDP. The PPP conversion factor is used because the market exchange rate is affected by many factors (interest rates, trade policies, expectations of economic growth, etc.) that have little to do with current relative domestic purchasing power in different OECD countries (see Annex 2 for further details).

Data on subnational regions on how much is spent per student are adjusted using national purchasing power parities (PPPs). Future work on the cost of living at subnational level is required to fully adjust expenditure per student used in this section.

Expenditure per student on educational institutions relative to per capita GDP is calculated by dividing expenditure per student on educational institutions by the per capita GDP. In cases where the educational expenditure data and the GDP data pertain to different reference periods, the expenditure data are adjusted to the same reference period as the GDP data, using inflation rates for the OECD country in question (see Annex 2).

Full-time equivalent student: The ranking of OECD countries by annual expenditure on educational services per student is affected by differences in how countries define full-time, part-time and full-time equivalent enrolment. Some OECD countries count every participant at the tertiary level as a full-time student, while others determine students' intensity of participation by the credits that they obtain for the successful completion of specific course units during a specified reference period. OECD countries that can accurately account for part-time enrolment have higher apparent expenditure per full-time equivalent student on educational institutions than OECD countries that cannot differentiate between the different types of student attendance.

For more information please see the OECD Handbook for Internationally Comparative Education Statistics 2018 (OECD, 2018_[3]) and Annex 3 for country-specific notes (<u>https://doi.org/10.1787/f8d7880d-en</u>).

Source

Data refer to the financial year 2016 (unless otherwise specified) and are based on the UNESCO, OECD and Eurostat (UOE) data collection on education statistics administered by the OECD in 2017 (for details see Annex 3 at https://doi.org/10.1787/f8d7880d-en). Data from Argentina, the People's Republic of China, India, Indonesia, Saudi Arabia and South Africa are from the UNESCO Institute of Statistics (UIS).

The data on expenditure for 2005, 2011 to 2016 were updated based on a survey in 2018-19, and expenditure figures for 2005 to 2015 were adjusted to the methods and definitions used in the current UOE data collection.

Data on subnational regions are currently available for three countries: Belgium, Canada and Germany. Subnational estimates were provided by countries using national data sources. Subnational data are based on a special survey administrated by the OECD in 2019.

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 (2019), OECD Regional Statistics Database, http://stats.oecd.org/Index.aspx?DataSetCode=REGION_DEMOGR.	[1]
OECD (2018), OECD Handbook for Internationally Comparative Education Statistics 2018: Concepts, Standards, Definitions and Classifications, OECD Publishing, Paris, <u>https://doi.org/10.1787/9789264304444-en</u> .	[3]
OECD (2017), <i>Education at a Glance 2017: OECD Indicators</i> , OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2017-en.	[2]

Indicator C1 Tables

- Table C1.1
 Total expenditure on educational institutions per full-time equivalent student (2016)
- Table C1.2
 Total expenditure on educational institutions per full-time equivalent student for core educational services, ancillary services and R&D (2016)
- Table C1.3Index of change in total expenditure on educational institutions per full-time equivalent student
(2005, 2011 and 2016)
- **WEB Table C1.4** Total expenditure on educational institutions per full-time equivalent student relative to GDP per capita (2016)
- WEB Table C1.5 Total expenditure on educational institutions per full-time equivalent student, by type of institution (2016)
- WEB Table C1.6 Cumulative expenditure on educational institutions per full-time equivalent student between the age of 6 and 15 (2016)

Cut-off date for the data: 19 July 2019. Any updates on data can be found on line at <u>http://dx.doi.org/10.1787/eag-data-en</u>. More breakdowns can be found at <u>http://stats.oecd.org/</u>, Education at a Glance Database.

StatLink: https://doi.org/10.1787/888933981058

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Table C1.1. Total expenditure on educational institutions per full-time equivalent student (2016)

In equivalent USD converted using PPPs for GDP, direct expenditure within educational institutions, by level of education, based on fulltime equivalents

			Secondary					Č,	È		Tert				
				Upp	er second	iary		-tertia	and tertia						
		Primary	Lower secondary	General programmes	Vocational programmes	All programmes	All secondary	Post-secondary non	Primary, secondary post-secondary non	Short-cycle tertiary	Long-cycle tertiary	All tertiary	All tertiary (excluding R&D)	Primary to tertiary	Primary to tertiary (excluding R&D)
_		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
5	Countries	40.040	10.001	40.540	4 500	40.400	11.054	1 770	40.500	7 000	00.050	10 170	40.704	44.007	10.571
В	Australia	10 013	12 684	13 543	4 529	10 199	11 651	4778	10 506	1 200	20 650	16 1/0	10 /91	11 867	10 5/4
	Austria	12 299	10 202	12 451 4	12 0014	10 301	10 313	2430	14 079	1/ 03/	10 424	10 332	13 390	12 446	14 340
	Canadal	0 2074	13 409	13431- v(5)	13 001- v(5)	13 956	13,856	X(3, 4, 3, 0)	10 681 4	18 228	26.606	23 700	16 907	13 6824	12 233
	Chile ²	5 207	5 556	5.031	5.432	5 142	5 278		5 324	4 928	11 683	9 769	9 271	6.613	6.468
	Colombia ²	3,323	3 091	x(5)	x(5)	3 0014	3.0664	x(5.6)	3 184	x(11)	x(11)	5 787	m	3 661	00+00 m
	Czech Republic	5 104	8 598	7 236	8 629	8 257	8 4 2 5	2 759	6 980	16 908	9,990	10 009	6.389	7 612	6 857
	Denmark	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Estonia	6872	7 047	6 548	7 031	6742	6 887	7 719	6914	a	12 909	12 909	9 237	8 2 4 3	7 429
	Finland	9 4 47	15 041	8 4 4 1	8 270 ª	8 315 ^d	10 427 4	x(4, 5, 6)	10 045	a	17 541	17 541	10 314	11 531	10 099
	France	7 603	10 599	13 431	15 392	14 132	12 100	9 389	10 186	14 502	16 697	16 173	11 031	11 364	10 352
	Germany	8 960	11 159	11 893	16 323	14 094	12 268	11 211	11 294	10 783	17 429	17 429	9 863	12 583	10 994
	Greece	5973	6 859	58364	8 930 4	6704ª	6779*	m	m	а	m	m	m	m	m
	Hungary	5 4 5 4	5 788	7 312	12 783	8 508	7 174	12 605	6 899	7 206	11 470	11 288	9 541	7 639	7 345
	Iceland	11 757	13 501	8 878	14 043	10 360	11 578	15 653	11 707	10 015	14 688	14 551	m	12 250	m
	Ireland	8 468	9814	x(5)	x(5)	10 094	9 948	7 771	9 0 2 0	x(11)	x(11)	13 237	9 102	9 7 3 6	9 0 3 4
	Israel	8 4 9 8	x(3, 4, 5)	6 286 ª	16 115 ^d	8 330 d	8 3 3 0	1 186	8 365	5 231	14 132	11 153	7 050	8 891	8 117
	Italy	7 991	8 893	x(5)	x(5)	9 377 4	9 193 4	x(5, 6)	8736	6 318	11 616	11 589	7 577	9 2 9 8	8 507
	Japan	8978	10 546	x(5)	x(5)	11 863 ª	11 219ª	x(5, 6, 9, 10, 11)	10 143	14 124 ª	20 537 °	19 191ª	m	12 096	m
	Korea	11 029	11 4/7	X(5)	X(5)	13 113	12 370	8	11 762	5770	11 781	10 486	8 385	11 318	10 586
	Latvia	6 453	6 504	6 816	1 295	/ 006	6 /61	/ 816	6 6 2 5	9 322	7 143	7 449	6 110	6 814	6 508
	Lithuania	17 012	21 720	20.672	21 597	21 221	21 464	0 093	10 770	22,009	F1 019	/ /01	27.055	0 240	20 222
	Luxembourg	2061	21739	20073	21 00/	ZI Z31 4 407	21404	1700	2,062	23 090	51910	40 40/	£ 900	21700	20 323
	Netherlande	8,600	12 831	10 503	14 530	4 107	13,006	a	11 121	10.815	10,552	10 513	12 517	12 026	11 422
	New Zealand	8 287	9 362	11 157	13 035	11 765	10.467	0.885	9.487	10 557	15 956	14 933	11 910	10 530	9.951
	Norway	12619	13 532	16 242	15 565	15 901	14,860	17.381	13 758	17 361	22 135	21 993	14 050	15 459	13,819
	Poland	6.808	7 136	6 158	7 863	7 114	7 124	3 964	6.892	24 012	8974	8 977	7 270	7 356	6.976
	Portugal	7 689	10 382	x(5)	x(5)	9 628 4	9 999 4	x(5, 6, 9, 10, 11, 12)	8 945	8 954 d	11 064 4	11 0144	8 380 4	9 346	8 835
	Slovak Republic	6 922	6 4 2 6	5 890	7 148	6 698	6 551	7 377	6 686	6 827	11 493	11 413	8 816	7 530	7 067
	Slovenia	8 6 2 1	10 481	7 586	7 069	7 236	8 4 8 7	8	8 550	2 707	12 507	11 257	8 974	9 080	8 633
	Spain	7 653	9 0 5 6	9 108	11 772 4	9 946 ª	9 502 ª	x(4, 5, 6)	8 5 9 4	9 339	13 4 22	12 6 1 4	9 4 1 6	9 4 6 4	8 772
	Sweden	11 338	12 020	10 664	13 670	11 790	11 892	5717	11 549	6723	25766	24 341	11 137	13 693	11 480
	Switzerland	m	m	x(5)	x(5)	18 990 d	m	x(5)	m	m	m	m	m	m	m
	Turkey	4 168	4 063	4 896	5 573	5213	4 659	а	4 505	x(11)	x(11)	10 519	8 6 2 6	5 633	5 278
	United Kingdom	11 188	10 921	12 263	9 4 37	10 992	10 963	а	11 061	23 769	23772	23 771	18 405	13 038	12 203
	United States	12 184	13 153	x(5)	x(5)	14 566	13 845	14 496	13 0 19	x(11)	x(11)	30 165	26 550	16 987	16 151
	OECD average	8470	9 884	9 397	10 922	10 368	9 968	m	9 357	11 745	16756	15 556	11 056	10 502	9732
	EU23 average	8 548	10 302	9671	11 320	10 308	10 205	m	9 649	12 468	16 388	15 863	10 635	10 688	9 772
2	Argentina	m	m	m	а	m	m	а	m	m	m	m	m	m	m
the	Brazil ³	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Par	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Costa Rica ²	m	m	m	m	m	m	a	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia*	m	m	m	m	m	m	a	m	m	m	m	m	m	m
	Russian Federation	x(8)	X(8)	x(8)	X(8)	x(8)	x(8)	x(8)	4 247	5 289	9516	84/9	/ 693	5 210	5 031
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa ²	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Note: See Definitions and Methodology sections for more information. Data and more breakdowns available at http://stats.oecd.org/, Education at a Glance Database.

1. Primary education includes pre-primary programmes. Post-secondary non-tertiary figures are treated as negligible.

2. Year of reference 2017.

3. Data on expenditure on public vs. private educational institutions are displayed in Table C1.5 available on line.

Source: OECD/UIS/Eurostat (2019). See Source section for more information and Annex 3 for notes (https://doi.org/10.1787/f8d7880d-en).

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

StatLink and https://doi.org/10.1787/888933978740

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Table C1.2. Total expenditure on educational institutions per full-time equivalent student for core educational services, ancillary services and R&D (2016)

In equivalent USD converted using PPPs for GDP, direct expenditure within educational institutions, by level of education, based on fulltime equivalents

	Primary, seco	secondary ndary non-te	and post- ertiary			Tertiary			Primary to tertiary						
	Core services	Ancillary services	All services	Core services	Ancillary services	R&D	All services	All services excluding R&D	Core services	Ancillary services	R&D	All services	All services excluding R&D		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
Countries															
e Australia	10 298	208	10 506	10 031	760	5 3 7 9	16 170	10 791	10 234	340	1 293	11 867	10 574		
Austria	14 000	679	14 679	13 424	171	4736	18 332	13 596	13 823	523	1 460	15 806	14 345		
Belgium	11 891	433	12 324	10 839	1 0 0 9	6 321	18 169	11 848	11 689	544	1213	13 446	12 233		
Canada ¹	x(3)	x(3)	10 681	15 720	1 187	6 793	23 700	16 907	x(12)	x(12)	1 566	13 682 4	12 116 d		
Chile ²	4 931	393	5 324	9 205	66	498	9 769	9 271	6 170	298	144	6613	6 4 6 8		
Colombia ²	x(3)	x(3)	3 184	x(7)	x(7)	x(7)	5 787	m	x(12)	x(12)	x(12)	3 661	m		
Czech Republic	6 508	472	6 980	6 307	81	3 6 2 1	10 009	6 389	6 466	391	756	7 612	6 857		
Denmark	m	m	m	m	m	m	m	m	m	m	m	m	m		
Estonia	6 810	104	6914	9 236	1	3 672	12 909	9 237	7 347	81	814	8 243	7 429		
Finland	9 0 3 0	1 0 1 5	10 045	10 314	0	7 226	17 541	10 3 14	9 285	814	1 4 3 3	11 531	10 099		
France	8 901	1 285	10 186	10 255	776	5 1 4 3	16 173	11 031	9 167	1 185	1 0 1 1	11 364	10 352		
Germany	10 992	302	11 294	8 866	998	7 565	17 429	9 863	10 546	448	1 589	12 583	10 994		
Greece	m	m	m	m	m	m	m	m	m	m	m	m	m		
Hungary	6 229	670	6 899	8 577	964	1 747	11 288	9 5 4 1	6 6 2 5	720	295	7 639	7 3 4 5		
Iceland	x(3)	x(3)	11 707	x(7)	x(7)	x(7)	14 551	m	x(12)	x(12)	x(12)	12 250	m		
Ireland	9 0 2 0	a	9 0 2 0	x(7)	x(7)	4 135	13 237	9 102	x(12)	x(12)	702	9736	9 0 3 4		
Israel	7 968	397	8 365	7 008	41	4 104	11 153	7 050	7 787	330	774	8 891	8 117		
Italy	8 267	468	8 7 3 6	7 160	417	4 012	11 589	7 577	8 0 4 9	458	791	9 298	8 507		
Japan	x(3,7)	x(3,7)	10 143	x(7)	x(7)	x(7)	19 191 ª	m	x(12)	x(12)	x(12)	12 096	m		
Korea	10 746	1 015	11 762	8 286	99	2 101	10 486	8 385	9 890	696	731	11 318	10 586		
Latvia	6 509	117	6 6 2 5	5974	136	1 3 3 8	7 449	6 110	6 386	121	306	6814	6 508		
Lithuania	5 507	260	5 767	5 0 7 9	781	1 841	7 701	5 860	5 4 0 1	389	455	6 245	5 790		
Luxembourg	18 542	1 228	19770	26 841	1 114	20 452	48 407	27 955	19 102	1 2 2 0	1 382	21 705	20 323		
Mexico	x(3)	x(3)	3 062	x(7)	x(7)	1 483	7 347	5 865	x(12)	x(12)	197	3 6 3 2	3 4 3 5		
Netherlands	11 121	a	11 121	12 517	a	6 9 9 6	19 513	12 517	11 422	а	1 504	12 926	11 422		
New Zealand	x(3)	x(3)	9 487	x(7)	x(7)	3 0 2 4	14 933	11 910	x(12)	x(12)	579	10 530	9 951		
Norway	13 279	479	13 758	13 681	369	7 943	21 993	14 050	13 362	457	1 640	15 459	13 819		
Poland	6 729	163	6 892	7 222	48	1 707	8 977	7 270	6 8 3 9	137	380	7 356	6 976		
Portugal	8 3 5 6	589	8 945	7 9564	424 ª	2 633 4	11 014 ª	8 380 ª	8 278	557	511	9 3 4 6	8 835		
Slovak Republic	5 733	953	6 686	7 004	1 812	2 597	11 413	8 8 16	5 960	1 107	464	7 530	7 067		
Slovenia	7 843	707	8 550	8 607	367	2 284	11 257	8 974	7 992	641	447	9 080	8 633		
Spain	7 950	645	8 594	8 891	525	3 198	12 614	9.416	8 153	619	692	9 4 6 4	8 772		
Sweden	10 356	1 192	11 549	11 137	0	13 204	24 341	11 137	10.487	992	2 213	13 693	11 480		
Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m		
Turkey	x(3)	x(3)	4 505	x(7)	x(7)	1 893	10 519	8 6 2 6	x(12)	x(12)	355	5633	5 278		
United Kingdom	10 014	1 047	11 061	16 297	2 107	5.367	23 771	18.405	10.991	1 212	835	13.038	12 203		
United States	11 975	1 044	13.019	22 474	4 076	3.616	30 165	26 550	14 405	1 746	837	16 987	16 151		
office otates	0.700	1044	0.057	10.054	4010	0010	00100	20 000	14403	1140	1001	10 501	0 700		
OECD average EU23 average	8 722 9 000	635 649	9 357 9 649	10 351 10 018	705 617	4 500 5 228	15 556 15 863	11 056 10 635	9 091 9 132	641 640	917	10 502 10 688	9732 9772		
ø Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m		
e Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m		
China	m	m	m	m	m	m	m	m	m	m	m	m	m		
Costa Rica?	111	m	m		m	m	m		m			m			
India	m	m	m	m	m	m	m	m	m	m	m	m	m		
Indonesia ²															
Russian Endoration	v(2)	v(2)	4 247	v(7)	×(7)	786	8.470	7 603	v(12)	v(12)	179	5 210	5.031		
Saudi Arabia	x(3)	x(3)	4 247	X(7)	X(7)	700	04/9	7 035	A(12)	A(12)	119	5210	5051		
South Africa?	m	m	m	m		m	m		m		m	m			
South Amca.	m	m	m	m	m	m	m	m	m	m	m	m	m		
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m		

Note: Some levels of education are included with others. Refer to "x" code in Table C1.1 for details. See Definitions and Methodology sections for more information. Data and more breakdowns available at <u>http://stats.oecd.org/</u>, Education at a Glance Database. 1. Primary education includes pre-primary programmes. Post-secondary non-tertiary figures are treated as negligible.

2. Year of reference 2017.

Source: OECD/UIS/Eurostat (2019). See Source section for more information and Annex 3 for notes (https://doi.org/10.1787/f8d7880d-en).

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

StatLink ang https://doi.org/10.1787/888933978759

Table C1.3. Index of change in total expenditure on educational institutions per full-time equivalent student (2005, 2011 and 2016)

GDP deflator 2010 = 100, constant prices

			Primary, secondary and post-secondary non-tertiary									Tertiary								
		Ch e (i	Change in total expenditure (2010 = 100)			Change in number of students (2010 = 100)			Change in expenditure per student (2010 = 100)			Change in total expenditure (2010 = 100)			Change in number of students (2010 = 100)			Change in expenditure per student (2010 = 100)		
		2005	2011	2016	2005	2011	2016	2005	2011	2016	2005	2011	2016	2005	2011	2016	2005	2011	2016	
0	Countries	(0)	(2)	(3)	(4)	(5)	(6)	(0)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
ö	Australia	76	QR	104	00	102	112	76	90	03	70	102	136	80	103	150	00	00	Q1	
ō	Austria	m	m	104	00	102	m	m	m	m	m	102	100	m	m	100 m		m	m	
	Balaium	88	101	106	105	100	104	84	101	103	83	102	117	90	103	114	03	00	103	
	Canada ¹	82	QR	104	m	90	102	m	90	101	83	97	QR	m	m	m	m	m	m	
	Chile	88	104	130	108	98	94	82	106	138	70	111	133	67	107	125	104	103	106	
	Colombia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Czech Republic	91	103	104	113	98	99	81	105	105	72	117	90	76	101	82	95	116	109	
	Donmark	92	02	104	05	105		07	88	100	90	102		03	0.4	m	97	100	100	
	Fetonia	92	03	95	118	QR.	97	78	05	QR	74	114	122	100	100	73	75	113	168	
	Einland	90	101	101	100	00	00	80	102	101	86	104	0.4	100	101	103	85	103	01	
	France	9.4	00	101	100	100	100	94	00	101	85	104	105	GR	101	111	86	100	05	
	Cormonu	03	100	00	106	00 QR	03	88	101	107	80	101	112	03	105	120	86	00	97	
	Greece	55	100	55	100	50	55	00	m	107		104	112	55	100	123	00	55	07	
	Hungary	m	m	m	107	90	90	m	m	m	m		m	114	107	85	m	m	m	
	Iceland	109	103	117	00	100	100	110	103	117	100	07	137	86	103	30	117	0.4	143	
	Ireland	71	100	00	03	101	111	76	103	82	73	00	82	00	100		m		140	
	leraol	76	111	142	02	102	114	83	100	125	111	148	151	84	101	123	132	146	122	
	Italu	103	06	01	0.8	101	00	105	05	02	80	102	01	102	00	02	88	103	00	
	lanan	07	100	00	104	00	05	02	101	104	03	101	00	104	100	00	88	101	100	
	Korea	01	100		109	07	90	32	101	104	32	101	00	08	101	06	00	m	100	
	Latvia	100	90	113	120	96	02	78	100	123	105	116	03	110	05	83	80	123	112	
	Lithuania	100	04	02	128	90	92	10	100	1120	79	110	9.4	102	0.9	89	76	120	05	
	Litriuania	m	94	92	120	90	02	m	100	112	10	119	04	102	90	00	10	122	90	
	Luxembourg	01	104	30	06	101	105	06	102	109	70	06	120	96	105	140	02	02	01	
	Netherlande	99	00	00	0.0	100	07	90	00	100	84	103	1120	9.0	103	143	100	101	101	
	New Zealand	00		33	30	100	31	03	33	102	04	105	112	04	100	112	100	101	101	
	New Zealand	01	05	113	08	101	103	03	0.4	100	m	07	141	0.4	103	110		0.4	120	
	Poland	82	08	106	120	GR	04	68	101	112	84	02	06	106	QR	85	70	04	113	
	Portugal	02	0.4	101	m	m	m	m	m	m	88	04	81	80	101	85	110	93	94	
	Slovak Rapublic	74	03	105	118	07	88	63	96	110	78	111	120	81	QR	87	07	113	1/10	
	Slovenia	97	QR	88	111	99	103	88	99	86	93	104	87	m	QR	80	m	106	109	
	Snain	84	98	98	95	101	107	88	96	92	79	QR.	97	90	103	114	88	95	85	
	Sweden	04	100	115	110	00	110	89	101	105	86	102	110	97	103	102	80	00	108	
	Switzerland	m	- 100 m	m	m	m	m	m	m	m		m	m	m	m	m	m	m	m	
	Turkey	m	m	m	m	110	115	m	m	m	m	m	m	m	m	m	m	m	m	
	United Kingdom	92	102	114	100	101	107	92	101	106	m	m	m	95	105	115	m	m	m	
	United States	91	QR	103	101	101	103	91	97	100	86	104	104	85	104	98	101	100	107	
	onited states		00	100	101	101	100			100		104	104	00	104	00	101	100	107	
	OECD average	90	99	105	105	100	100	87	99	105	85	105	109	93	101	103	94	105	108	
	EU23 average	90	98	101	107	99	98	85	99	103	84	105	100	96	101	97	89	105	107	
j0	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
-Per	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
art	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
۵.	Costa Rica	m	m	m	m	m	m	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	m	m	m	m	m	m	
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Russian Federation	77	104	110	m	m	m	m	m	m	43	93	85	m	94	75	m	99	114	
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	G20 average	m			m		m	175	m	m		195		m	m	1773	m		m	

Note: See *Definitions* and *Methodology* sections for more information. Data and more breakdowns available at <u>http://stats.oecd.org/</u>, Education at a Glance Database. 1. Primary education includes data from pre-primary and lower secondary education.

Source: OECD/UIS/Eurostat (2019). See Source section for more information and Annex 3 for notes (https://doi.org/10.1787/f8d7880d-en).

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StatLink ang https://doi.org/10.1787/888933978778



From: Education at a Glance 2019 OECD Indicators

Access the complete publication at: https://doi.org/10.1787/f8d7880d-en

Please cite this chapter as:

OECD (2019), "How much is spent per student on educational institutions?", in *Education at a Glance 2019:* OECD Indicators, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/0fdcbb3b-en

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