

EDUCATIONAL EXPENDITURE PER STUDENT

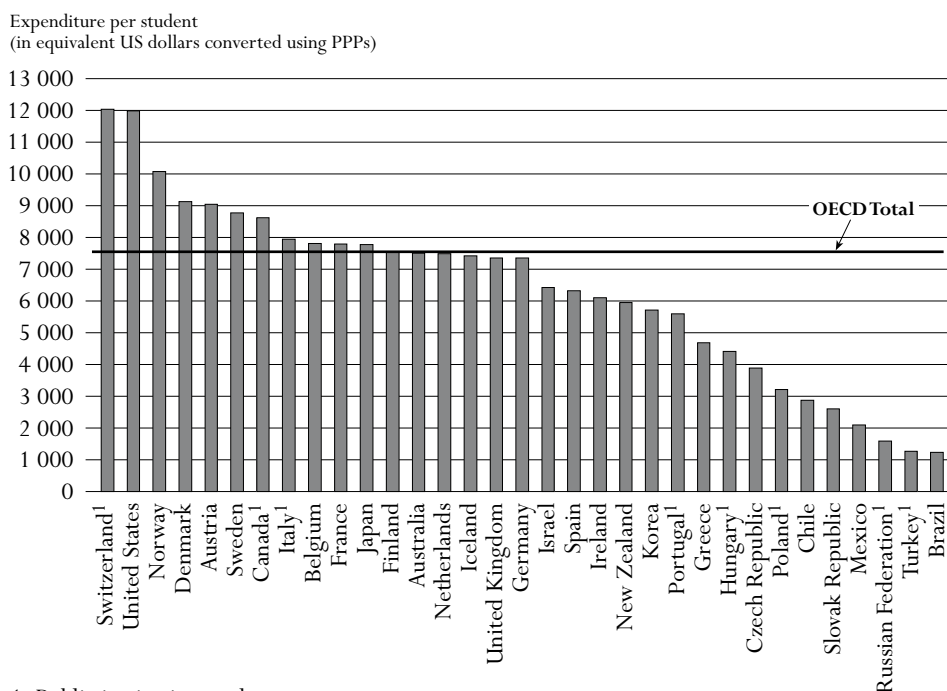
This indicator provides an assessment of the investment made in each student. Expenditure per student is largely influenced by teacher salaries (see Indicators B6 and D3), pension systems, teaching materials and facilities, the programme orientation provided to pupils/students (see Indicator C2) and the number of students enrolled in the education system (see Indicator C1). Policies put in place to attract new teachers or to reduce average class size or staffing patterns (see Indicator D2) have also contributed to changes in expenditure per student.

Key results

Chart B1.1. Annual expenditure on educational institutions per student in primary through tertiary education (2003)

Expenditure on educational institutions per student gives a measure of unit costs in formal education. This chart expresses annual expenditure on educational institutions per student in equivalent US dollars converted using purchasing power parities, based on full-time equivalents

OECD countries as a whole spend USD 7 471 per student annually between primary and tertiary education, USD 5 055 per primary student, USD 6 936 per secondary student and USD 14 598 per tertiary student, but these averages mask a broad range of expenditure across countries. As represented by the simple average across all OECD countries, countries spend twice as much per student at the tertiary level than at the primary level.



1. Public institutions only.

Countries are ranked in descending order of expenditure on educational institutions per student.

Source: OECD, Table B1.1a. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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Other highlights of this indicator

- Excluding R&D activities and ancillary services, expenditure on educational core services in tertiary institutions represents on average USD 7 774 and ranges from USD 4 500 or below in Greece, Poland, the Slovak Republic and Turkey to more than USD 9 000 in Canada, Denmark, Norway, Switzerland, the United Kingdom and the United States.
- The programme orientation provided to students at secondary level influences the level of expenditure per student in most of the OECD and partner countries. The 14 OECD countries for which data are available spend on average USD 1 130 more per student in upper secondary vocational programmes than in general programmes.
- OECD countries spend on average USD 77 204 per student over the theoretical duration of primary and secondary studies. The cumulative expenditure for each primary and secondary student ranges from less than USD 40 000 in Mexico, Poland, the Slovak Republic and Turkey, and the partner countries Brazil, Chile and the Russian Federation, to USD 100 000 or more in Austria, Denmark, Iceland, Italy, Luxembourg, Norway, Switzerland and the United States.
- Lower unit expenditure does not necessarily lead to lower achievement and it would be misleading to equate lower unit expenditure generally with lower quality of educational services. For example, the cumulative expenditure per student between primary and secondary education of Korea and the Netherlands are below the OECD average and yet both were among the best-performing countries in the PISA 2003 survey.
- In some OECD countries, low annual expenditure per student at the tertiary level still translates into high overall costs per tertiary student because students participate in tertiary studies over a long period of time.
- Countries with low levels of expenditure per student can nevertheless show distributions of investment relative to GDP per capita similar to those countries with high levels of spending per student. For example, Hungary, Korea, Poland and Portugal – countries with expenditure per student and GDP per capita below the OECD average at primary, secondary and post-secondary non-tertiary level of education – spend a higher proportion of money per student relative to GDP per capita than the OECD average.
- Expenditure on education tends to rise over time in real terms, as teachers' pay (the main component of costs) rises in line with general earnings. However the rate of the rise may indicate the extent to which countries contain costs and raise productivity. This differs considerably across educational sectors. Expenditure per student at primary, secondary and post-secondary non-tertiary levels increased by 30% or more between 1995 and 2003 in Australia, Greece, Hungary, Ireland, Mexico, the Netherlands, Poland, Portugal, the Slovak Republic and Turkey, and in the partner country Chile. At the tertiary level, however, spending per student has in some cases fallen, as expenditure does not keep up with expanding student numbers.

Policy context

B1

Annual and cumulative expenditure on education per student in absolute terms and relative to GDP per capita

Effective schools require the right combination of trained and talented personnel, adequate facilities, state-of-the-art equipment and motivated students ready to learn. The demand for high-quality education, which can translate into higher costs per student, must be balanced against placing undue burden on taxpayers.

As a result, the question of whether the resources devoted to education yield adequate returns to the investments made figures prominently in the public debate. Although it is difficult to assess the optimal volume of resources required to prepare each student for life and work in modern societies, international comparisons of spending on education per student can provide a starting point for evaluating the effectiveness of different models of educational provision.

Trends in the development of expenditure on education per student

Policy makers must balance the importance of improving the quality of educational services with the desirability of expanding access to educational opportunities, notably at the tertiary level. The comparative review of how trends in educational expenditure per student have evolved shows that in many OECD countries the expansion of enrolments, particularly in tertiary education, has not always been paralleled by changes in educational investment.

Finally, decisions on the allocation of funds among the various levels of education are also important. For example, some OECD countries emphasise broad access to higher education while others invest in near-universal education for children as young as three or four years of age.

Evidence and explanations

What this indicator covers and what it does not cover

The indicator shows direct public and private expenditure on educational institutions in relation to the number of full-time equivalent students enrolled in these institutions.

Public subsidies for students' living expenses have been excluded to ensure international comparability of the data. Expenditure data for students in private educational institutions are not available for certain OECD countries, and some other countries do not provide complete data on independent private institutions. Where this is the case, only the expenditure on public and government-dependent private institutions has been taken into account. Note that variation in expenditure on education per student may reflect not only variation in the material resources provided to students (*e.g.* variations in the ratio of students to teaching staff) but also variation in relative salary and price levels.

At the primary and secondary levels, educational expenditure is dominated by spending on instructional services; at the tertiary level, other services – particularly those related to R&D activities or ancillary services – can account for a significant proportion of educational spending. Indicator B6 provides further information on how spending is distributed by different types of services provided.

Expenditure on education per student in equivalent US dollars

Annual expenditure per student on educational institutions from primary through tertiary education provides an assessment of the investment made in each student. OECD countries as a whole spend on average USD 7 471 per student annually for students enrolled in primary through tertiary education. In 10 out of 33 OECD and partner countries, spending on education falls between USD 7 000 and 8 000 per student. Spending on education at these levels ranges from USD 4 000 per student or less in the Czech Republic, Mexico, Poland, the Slovak Republic and Turkey, and the partner countries Brazil, Chile and the Russian Federation, to more than USD 9 000 per student in Austria, Denmark, Norway, Switzerland and the United States (Table B1.1a). The drivers of expenditure per student vary across countries: among the five countries with the highest expenditure per student enrolled in primary through tertiary education, Switzerland and the United States are two of the countries with the highest teachers' salaries at the secondary level (see Indicator D3), whereas Austria, Denmark and Norway are among the countries with the lowest student to teaching staff ratio (see Indicator D2).

Even if overall spending per student is similar in some OECD countries, the ways in which resources are allocated across the different levels of education vary widely. OECD countries as a whole spend USD 5 055 per student at the primary level, USD 6 936 per student at the secondary level and USD 14 598 per student at the tertiary level. At the tertiary level, these totals are influenced by high expenditure in a few large OECD countries, most notably Canada and the United States. Spending on education per student in a typical OECD country (as represented by the simple mean across all OECD countries) amounts to USD 5 450 at the primary level, USD 6 962 at the secondary level and USD 11 254 at the tertiary level (Table B1.1a and Chart B1.2).

These averages mask a broad range of expenditure on education per student across OECD and partner countries. At the primary level, expenditure on educational institutions ranges from less than USD 1 000 per student in Turkey and the partner country Brazil to USD 11 481 per student in Luxembourg. Differences among OECD countries are even greater at the secondary level, where spending on education per student varies by a factor of 15, from USD 1 121 in Brazil to USD 17 078 in Luxembourg. Expenditure on education per tertiary student ranges from USD 2 451 in the Russian Federation to more than USD 24 000 in Switzerland and the United States (Table B1.1a).

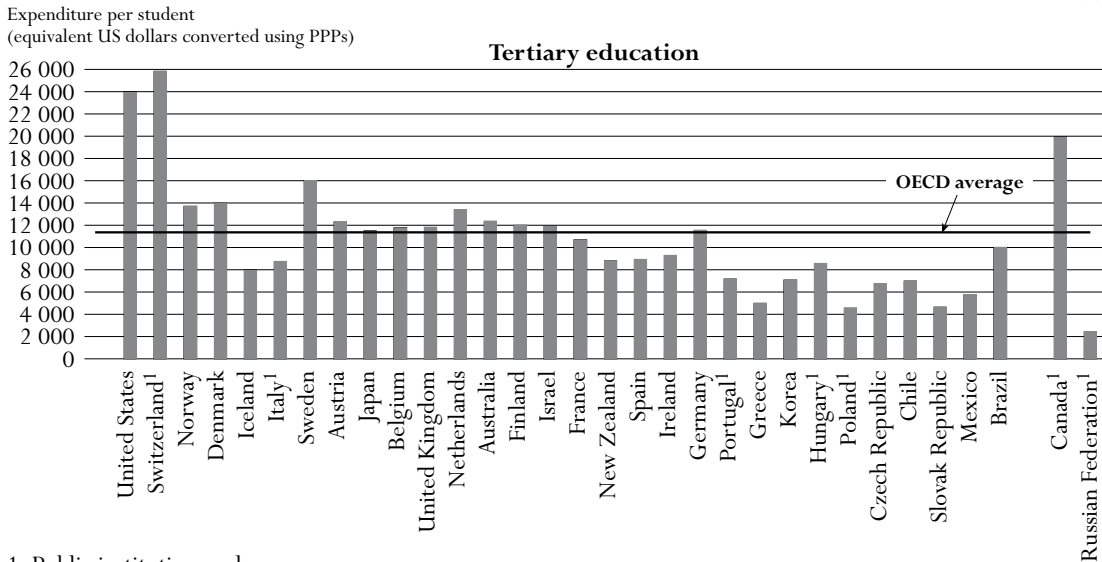
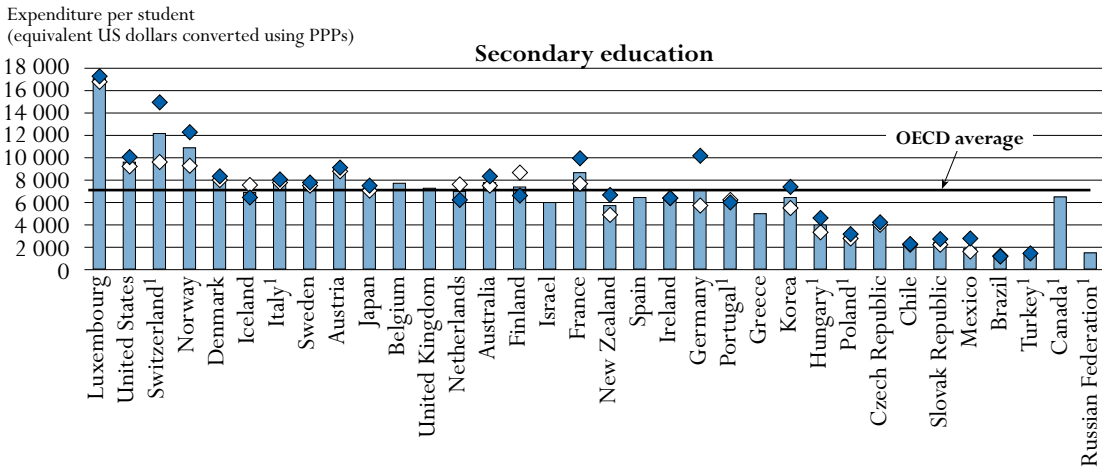
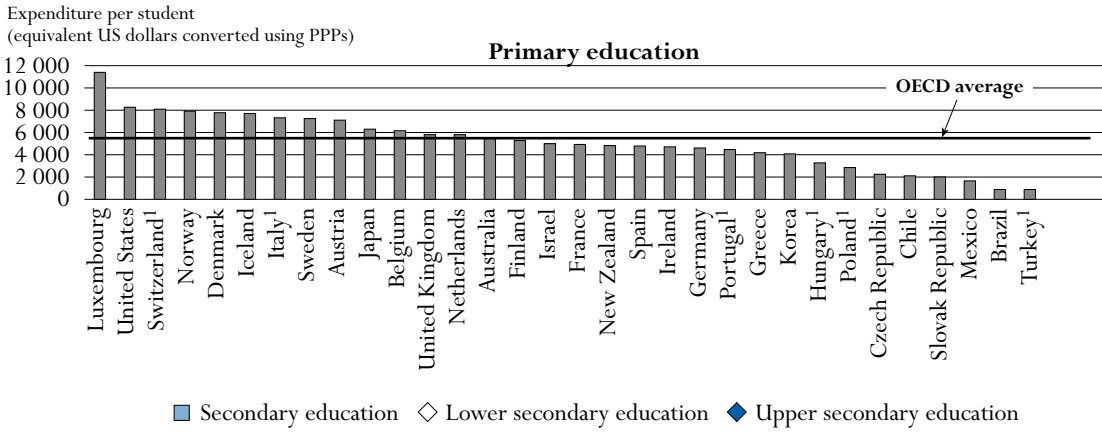
These comparisons are based on purchasing power parities for GDP, not on market exchange rates. They therefore reflect the amount of a national currency required to produce the same basket of goods and services in a given country as that produced by the US dollar in the United States.

Differences in educational expenditure per student between general and vocational programmes

The programme orientation provided to students at the secondary level influences the level of expenditure per student in most of the OECD and partner countries. In the 14 OECD countries for which data are available, expenditure per student in upper secondary vocational programmes represents USD 1 130 more than in general programmes. Only Austria, the Czech Republic, Luxembourg and Mexico show less than 15 % difference between expenditure per student in upper secondary general and vocational programmes (Table B1.1b).

Chart B1.2. Annual expenditure on educational institutions per student for all services, by level of education (2003)

In equivalent US dollars converted using PPPs, based on full-time equivalents



1. Public institutions only.

Countries are ranked in descending order of expenditure per student in primary education.

Source: OECD, Table B1.1a. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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The countries with large dual-system apprenticeship programmes (*e.g.* Austria, Germany, Luxembourg, the Netherlands and Switzerland) at upper secondary level tend to be those with the higher difference between expenditure per student enrolled in general and vocational programmes. Austria, Germany and Switzerland spend respectively USD 929, 6 782 and 5 310 more per student in vocational programmes than in general programmes. Exceptions to this pattern are Luxembourg, with approximately the same expenditure per student between the two types of programme, and the Netherlands, where expenditure per student enrolled in general programmes is higher than that for apprenticeship programmes. The latter is partly explained by the underestimation of the expenditures of private enterprises on dual vocational programmes in Luxembourg and the Netherlands. Among the four other countries – Australia, the Czech Republic, Finland and the Slovak Republic – with 60% or more of upper secondary students enrolled in vocational programmes, Australia is the only country that spends more per student enrolled in general programmes than in vocational programmes (Table B1.1b and Table C2.5).

Expenditure on educational core services per student

On average, OECD countries for which data are available spend USD 5 332 on core educational services at primary, secondary and post secondary non-tertiary levels, which corresponds to 85% of the total expenditure per student at these levels. In 14 out of the 24 OECD and partner countries with available data, ancillary services provided by primary, secondary and post-secondary non-tertiary institutions account for less than 5% of the total expenditure per student. This proportion exceeds 10% of the total expenditure per student in a small group of countries including Finland, France, Hungary and the Slovak Republic.

More differences in expenditure per student on core educational services compared to total expenditure are observed at the tertiary level. Naturally, OECD countries in which most R&D is performed by tertiary educational institutions tend to report higher expenditure per tertiary student than countries in which a large part of R&D is performed in other public institutions or by industry. Excluding R&D activities and ancillary services, expenditure on core educational services in tertiary institutions represents on average USD 7 774 and ranges from USD 4 500 or below in Greece, Poland, the Slovak Republic and Turkey to more than USD 9 000 in Canada, Denmark, Norway, Switzerland, the United Kingdom and the United States (Table B1.1c).

On average, expenditure on R&D and ancillary services at the tertiary level represents respectively 29 and 4% of all tertiary expenditure per student. In 8 out of 25 OECD countries for which tertiary expenditure is available for every service category – Australia, Finland, France, Germany, Italy, the Netherlands, Sweden and Switzerland – R&D expenditure and ancillary services in tertiary institutions represents 35% or more of total tertiary expenditure per student. On a per student basis this can translate into significant amounts, as in Australia, Finland, Germany, the Netherlands, Norway, Sweden, Switzerland and the United States expenditure for R&D and ancillary services in tertiary institutions amounts to more than USD 4 500 per student (Chart B1.3 and Tables B1.1c).

Differences in educational expenditure per student between levels of education

Expenditure on education per student exhibits a common pattern throughout OECD countries: in each OECD country, spending rises sharply from primary to tertiary education. This pattern can be understood by looking at the main determinants of expenditure, particularly the location and mode of educational provision. The vast majority of education still takes place in traditional

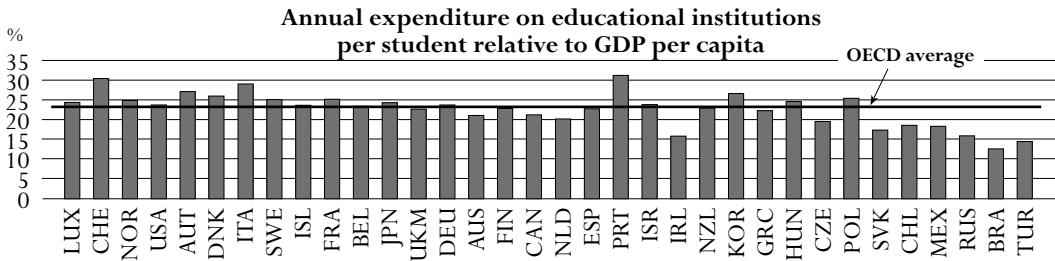
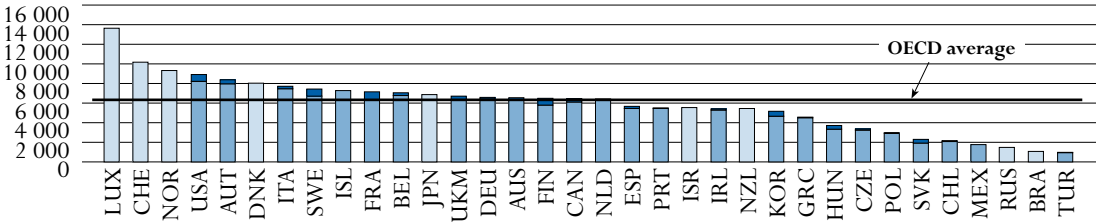
Chart B1.3. Annual expenditure on educational institutions per student relative to GDP per capita, by service category and level of education (2003)

B1

- Total expenditure per student
- Research and development in tertiary institutions
- Ancillary services (transport, meals, housing provided by institutions)
- Education core services

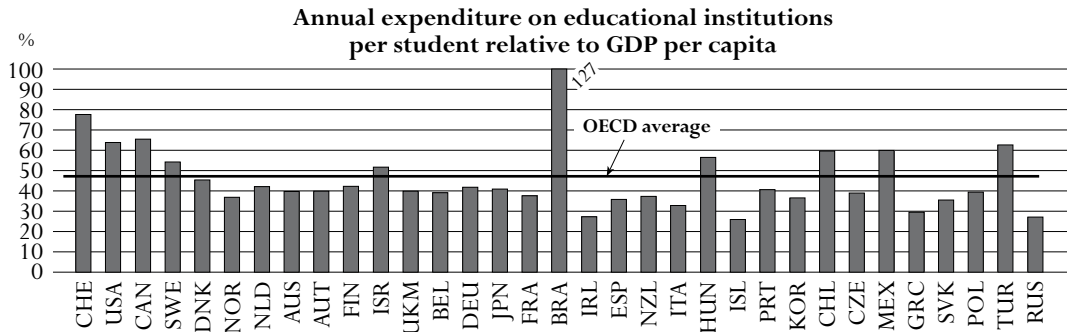
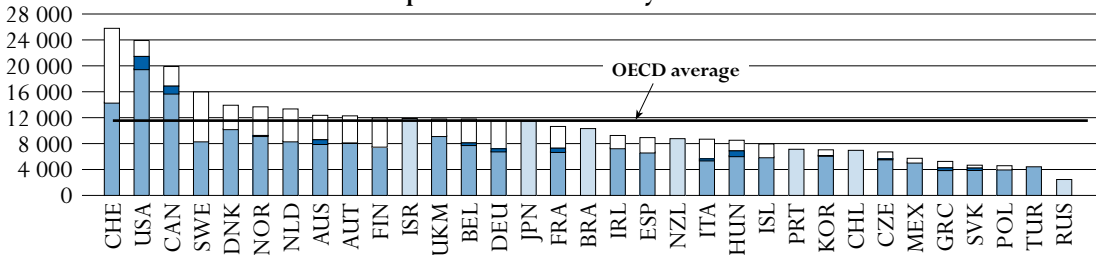
Equivalent US dollars converted using PPPs

Annual expenditure on educational institutions per student in primary, secondary and post-secondary non-tertiary education



Equivalent US dollars converted using PPPs

Annual expenditure on educational institutions per student in tertiary education



Countries are ranked in descending order of expenditure per student for all services.
 Source: OECD. Tables B1.1c and B1.4. See Annex 3 for notes (www.oecd.org/edu/eag2006).
 Please refer to the Reader's Guide for the list of country codes used in this chart.

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school settings with (generally) similar organisation, curriculum, teaching style and management. These shared features are likely to lead to similar patterns of unit expenditure.

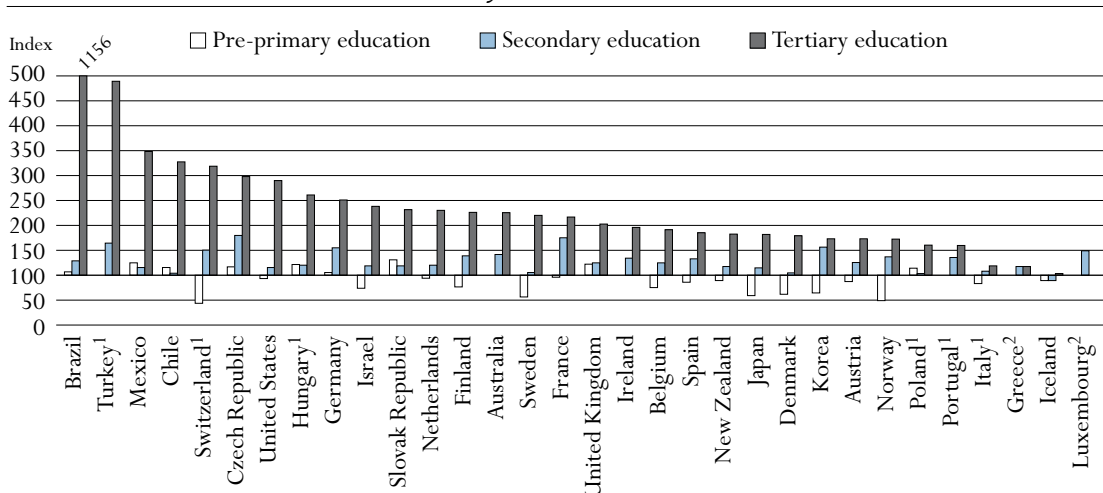
Comparisons of the distribution of expenditure between levels of education indicate the relative emphasis placed on education at different levels in various OECD countries, as well as of the relative costs of providing education at those levels.

Although expenditure on education per student rises with the level of education (from primary to tertiary) in almost all OECD and partner countries, the relative sizes of the differentials vary markedly among countries (Chart B1.4). At the secondary level, expenditure on education per student is, on average, 1.3 times that at the primary level, although the difference ranges from less than 1.0 in Iceland to 1.6 or more in the Czech Republic, France, Germany, Korea and Turkey: four OECD countries (except Germany) that have significantly increased the proportion of the population attaining upper secondary education during the last four decades (see Indicator A1).

Although OECD countries spend, on average, 2.1 times as much on education per student at the tertiary level than at the primary level, spending patterns vary widely among countries. For example, whereas Greece, Iceland, and Italy only spend between 1.1 and 1.5 times as much on a student in tertiary education as on a student in primary education, Mexico, Switzerland and Turkey, and the partner countries Brazil and Chile, spend more than 3.0 times on a student at the tertiary level (Chart B1.4).

Chart B1.4. Annual expenditure on educational institutions per student at various levels of education for all services relative to primary education (2003)

Primary education = 100



Note: A ratio of 300 for tertiary education means that expenditure on educational institutions per tertiary student is three times the expenditure on educational institutions per primary student. A ratio of 50 for pre-primary education means that expenditure on educational institutions per pre-primary student is half the expenditure on educational institutions per primary student.

1. Public institutions only.

2. Primary includes pre-primary education.

Countries are ranked in descending order of expenditure on educational institutions per student in tertiary education relative to primary education.

Source: OECD, Table B1.1a. See Annex 3 for notes (www.oecd.org/edu/eqq2006).

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Distribution of expenditure on educational institutions relative to number of students enrolled

The money invested in the education system of OECD countries can be compared to the proportion of students enrolled at each level of education. Table B1.2 shows the relationship between the two and analyses the different strategies put in place by countries to allocate the expenditure between the levels of education.

On average among the 28 OECD countries for which data are available, 66% of all expenditure on educational institutions is allocated to primary, secondary and post-secondary non-tertiary education while 74% of students are enrolled at this level of education. The difference between the two figures exceeds 10 percentage points in Australia, Canada, Hungary, Japan, Mexico, the Slovak Republic, Switzerland, Turkey and the United States, and the partner countries Brazil, Chile and Israel (Table B1.2).

Compared to primary, secondary and post-secondary non-tertiary education, there are significant differences between the proportion of money invested and the proportion of students enrolled in tertiary education. On average among the 28 OECD countries for which data are available, 25% of all expenditure on educational institutions is allocated to tertiary education, whereas only 15% of students are enrolled in tertiary education. The difference between the two proportions in tertiary education ranges from below 7 percentage points in Austria, France, Greece, Iceland, Italy, Korea, Norway, Poland and Portugal to more than 15 percentage points in Canada, Switzerland, Turkey, the United States, and the partner countries Brazil and Chile (Table B1.2).

Educational expenditure per student over the theoretical duration of primary and secondary education

OECD countries spend on average USD 77 204 per student over the theoretical duration of primary and secondary studies. Although the theoretical duration of primary and secondary studies is quite similar – between 12 and 13 years in 30 out of 34 OECD and partner countries – the cumulative expenditure per student varies considerably. The cumulative expenditure for each primary and secondary student ranges from less than USD 40 000 in Mexico, Poland, the Slovak Republic and Turkey, and the partner countries Brazil, Chile and the Russian Federation, to USD 100 000 or more in Austria, Denmark, Iceland, Italy, Luxembourg, Norway, Switzerland and the United States (Table B1.3a and Chart B1.5a).

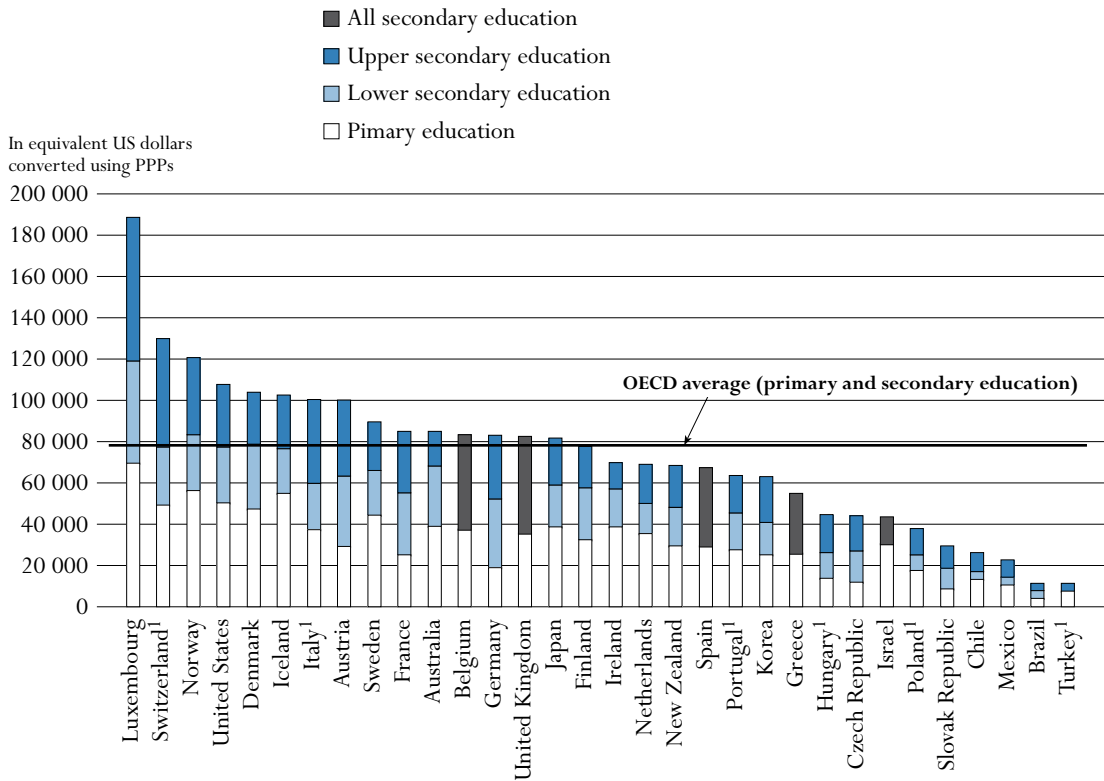
Lower unit expenditure does not necessarily produce lower achievement and it would be misleading to equate lower unit expenditure generally with lower quality of educational services. Cumulative spending per student between primary and secondary education is moderate in Korea and the Netherlands, and both were among the best-performing countries in the PISA 2003 survey. By contrast, spending per student exceeds USD 100 000 in Italy and the United States, while both performed below the OECD average in the PISA 2003 survey.

Educational expenditure per student over the average duration of tertiary studies

Both the typical duration and the intensity of tertiary education vary among OECD countries. Therefore, the differences among countries in annual expenditure on educational services per student (as shown in Chart B1.2) do not necessarily reflect the variation in the total cost of educating the typical tertiary student.

Chart B1.5a. Cumulative expenditure on educational institutions per student over the theoretical duration of primary and secondary studies (2003)

Annual expenditure on educational institutions per student multiplied by the theoretical duration of studies, in equivalent US dollars converted using PPPs



1. Public institutions only.

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

Source: OECD, Table B1.3a. See Annex 3 for notes (www.oecd.org/edu/eag2006).

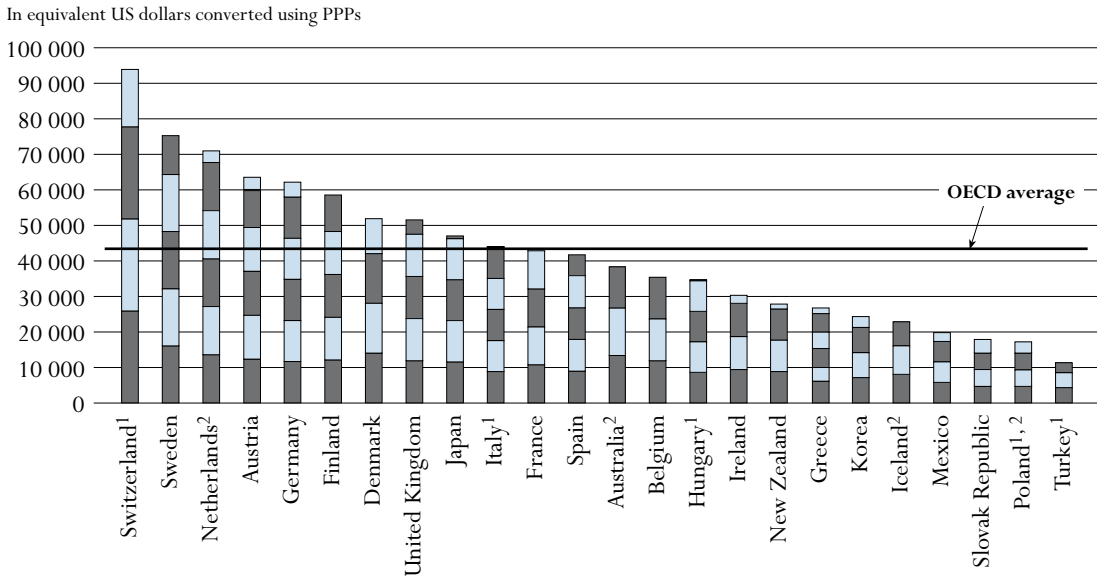
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Today, students can choose from a range of institutions and enrolment options to find the best fit for their degree objectives, abilities and personal interests. Many students enrol on a part-time basis while others work while studying or attend more than one institution before graduating. These varying enrolment patterns can affect the interpretation of expenditure on education per student.

In particular, comparatively low annual expenditure on education per student can result in comparatively high overall costs of tertiary education if the typical duration of tertiary studies is long. Chart B1.5b shows the average expenditure incurred per student throughout the course of tertiary studies. The figures account for all students for whom expenditure is incurred, including those who do not finish their studies. Although the calculations are based on a number of simplified assumptions (see Annex 3 at www.oecd.org/edu/eag2006) and therefore should be treated with some caution, some striking shifts in the rank order of OECD and partner countries between the annual and aggregate expenditure can be noted.

Chart B1.5b. Cumulative expenditure on educational institutions per student over the average duration of tertiary studies (2003)

Annual expenditure on educational institutions per student multiplied by the average duration of studies, in equivalent US dollars converted using PPPs



Note: Each segment of the bar represents the annual expenditure on educational institutions per student. The number of segments represents the number of years a student remains on average in tertiary education.

1. Public institutions only.

2. Tertiary-type A and advanced research programmes only.

Countries are ranked in descending order of the total expenditure on educational institutions per student over the average duration of tertiary studies.

Source: OECD, Table B1.3b. See Annex 3 for notes (www.oecd.org/edu/eag2006).

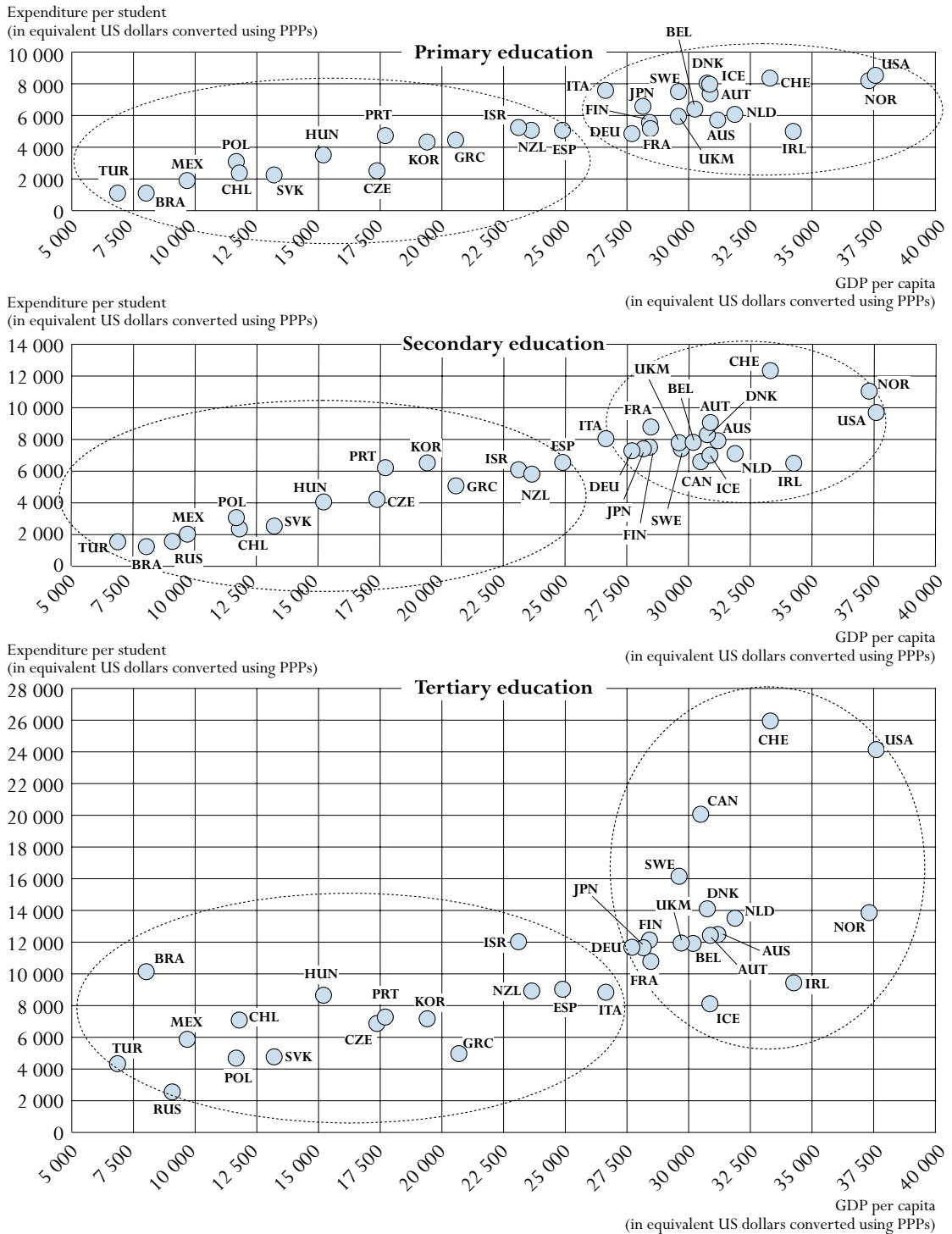
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For example, annual spending per tertiary student in Japan is about the same as in Germany: USD 11 556 in Japan compared with USD 11 594 in Germany (Table B1.1a). But because of differences in the tertiary degree structure (see Indicator A2), the average duration of tertiary studies is a little bit more than one year longer in Germany than in Japan (5.4 years in Germany, compared with 4.1 years in Japan). As a consequence, the cumulative expenditure for each tertiary student is almost USD 15 000 lower in Japan than in Germany (USD 47 031 compared with USD 62 187) (Chart B1.5b and Table B1.3b).

The total cost of tertiary-type A studies in Switzerland (USD 150 942) is more than twice as high as in the other reporting countries, except Germany (Table B1.3b). These differences must, of course, be interpreted in light of differences in national degree structures as well as possible differences among OECD countries in the academic level of the qualifications of students leaving university. While similar trends are observed in tertiary-type B studies, the total cost of these studies tends to be much lower than those of tertiary type-A programmes, largely because of their shorter duration.

Chart B1.6. Annual expenditure on educational institutions per student relative to GDP per capita (2003)

In equivalent US dollars converted using PPPs, by level of education



Note: Please refer to the Reader's Guide for the list of country codes used in this chart.
 Source: OECD. Tables B1.1a, B1.4 and Annex 2. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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Educational expenditure per student in relation to GDP per capita

Expenditure on education per student relative to GDP per capita is a spending measure that takes OECD countries' relative wealth into account. Since education is universal at lower levels, spending on education per student at the lower levels of education relative to GDP per capita can be interpreted as the resources spent on young people relative to a country's ability to pay. At higher levels of education, this measure is affected by a combination of national income, spending and enrolment rates. At the tertiary level, for example, OECD countries can be relatively high on this measure if a large proportion of their wealth is spent on educating a relatively small number of students.

The relationship between GDP per capita and expenditure per student is multifaceted and complex. Chart B1.6 shows the co-existence of two different relationships between two distinct groups of countries (see ovals in Chart B1.6). Countries with a GDP per capita equivalent to less than USD 25 000 demonstrate a clear positive relationship between spending on education per student and GDP per capita at primary and secondary levels of education (the Czech Republic, Greece, Hungary, Korea, Mexico, New Zealand, Poland, Portugal, the Slovak Republic, Spain and Turkey, and the partner countries Brazil, Chile, Israel and the Russian Federation). Poorer OECD countries tend to spend less per student than richer OECD countries.

By contrast, there is a considerable variation in spending on education per student among OECD countries with a GDP per capita greater than USD 25 000 (see the ovals in Chart B1.6). Finland, France and Japan, for example, are countries with similar levels of GDP per capita that spend very different proportions of their GDP per capita on both the secondary and tertiary levels of education. Thus, the proportion of GDP per capita spent per secondary student in Finland and Japan at 26 % is at the level of the OECD average, while for France (at 30%) the proportion is above average. However, France spends 38% of GDP per capita per tertiary student, whereas Finland and Japan spent 43 and 41% respectively (Table B1.4 and Chart B1.3).

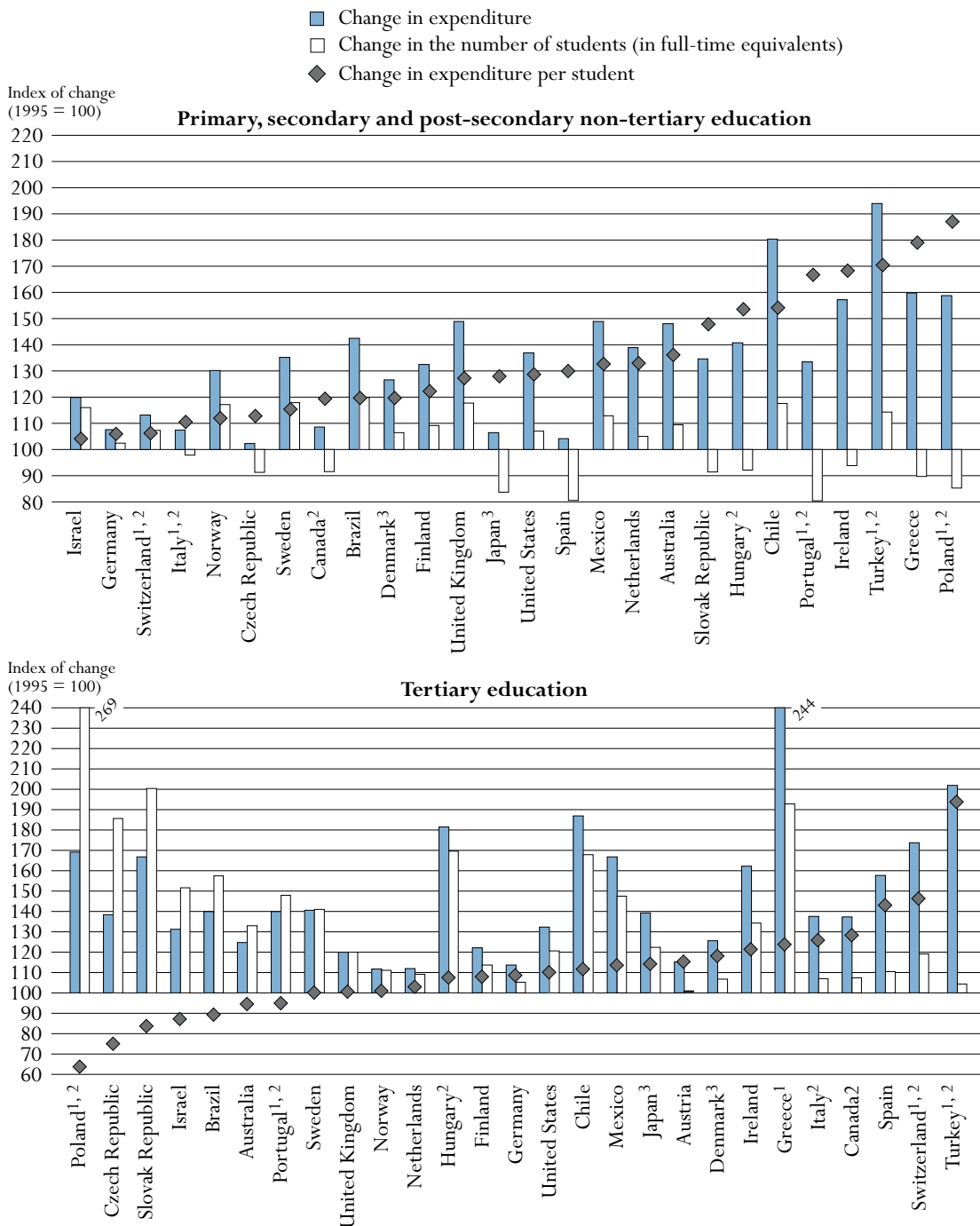
Expenditure on education per student averages 20% of GDP per capita at the primary level, 26% at the secondary level and 43% at the tertiary level (Table B1.4). Countries with low levels of expenditure per student can nevertheless show distributions of investment relative to GDP per capita which are similar to countries with a high level of spending per student. For example, Hungary, Korea, Poland and Portugal – countries with expenditure per student and GDP per capita below the OECD average at primary, secondary and post-secondary non-tertiary level of education – spend more per student relative to GDP per capita than the OECD average. Similarly, Hungary, Mexico and Turkey and the partner country Chile spend more than 56% of GDP per capita on each tertiary-level student, which is among the highest proportions after Canada, Switzerland and the United States which spend respectively 66, 78 and 64 % of GDP per capita on each tertiary-level student. Brazil has the highest proportion, with 127% of GDP per capita spent per each tertiary-level student. However, this high level of expenditure is allocated to a small number of students because only 2% of the students enrolled in all levels of education combined are enrolled at the tertiary level in Brazil (Tables B1.2 and B1.4 and Chart B1.3).

Change in expenditure on education per student between 1995 and 2003

The number of young people in a population influences both the enrolment rate and the amount of resources and organisational effort which a country must invest in its education system.

Chart B1.7. Changes in the number of students as well as changes in expenditure on educational institutions per student, by level of education (1995, 2003)

Index of change between 1995 and 2003 (1995=100, 2003 constant prices)



1. Public expenditure only.

2. Public institutions only.

3. Post-secondary non-tertiary included in both upper secondary and tertiary education.

Countries are ranked in ascending order of change in expenditure on educational institutions per student.

 Source: OECD, Table B1.5. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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Thus, the size of the youth population in a given country shapes the potential demand for initial education and training. The higher the number of young people, the greater the potential demand for educational services. Table B1.5 and Chart B1.7 show, in absolute terms and at 2003 constant prices, the effects of changes in enrolment and total expenditure between 1995 and 2003 on educational expenditure per student.

Expenditure per primary, secondary and post-secondary non-tertiary student increased in every country between 1995 and 2003. In 16 out of the 26 OECD and partner countries for which data are available, changes exceed 20% between 1995 and 2003 and this increase is of 30% or more in Australia, Greece, Hungary, Ireland, Mexico, the Netherlands, Poland, Portugal, the Slovak Republic, and Turkey, and the partner country Chile. The only countries where the increase in expenditure on education per primary, secondary and post-secondary non-tertiary student is 10% or below for the same period are Germany, Italy and Switzerland, and the partner country Israel. (Table B1.5 and Chart B1.7).

Although institutional arrangements are often slow in adapting to changing demographic conditions, changes in enrolments do not seem to have been the main factor driving changes in expenditure per primary, secondary and post-secondary non-tertiary student. Japan, Poland, Portugal and Spain are exceptions to this pattern, where a drop of more than 10% in enrolments combined with a slight rise in expenditure on education for Japan and Spain, and a sharp spending increase for Poland and Portugal have led to a significant increase in spending on education per student. By contrast, in Greece, Hungary, Ireland, and the Slovak Republic, an increase of more than 30% in education budgets, coupled with a slight decrease in enrolments, has emphasised the increase in spending per primary, secondary and post-secondary non-tertiary student (Table B1.5 and Chart B1.7).

Other exceptions are Mexico, Norway, Sweden, Turkey and the United Kingdom, and the partner countries Brazil, Chile and Israel: the eight OECD and partner countries with the highest increase in the aggregate number of primary, secondary and post-secondary non-tertiary students between 1995 and 2003. In Mexico, Norway, Turkey and the United Kingdom, and partner countries Brazil and Chile, increases in expenditure outpaced rising enrolments, leading to an increase in expenditure per student whereas in partner country Israel, an increase in student numbers was counterbalanced by a similar increase in educational spending (Table B1.5 and Chart B1.7).

The pattern is different at the tertiary level of education. In 7 out of 27 OECD and partner countries for which data are available – Australia, the Czech Republic, Poland, Portugal and the Slovak Republic, and in the partner countries Brazil and Israel – expenditure on tertiary education per student declined between 1995 and 2003. In all of these countries, this decline was mainly the result of a rapid increase (more than 30%) in the number of tertiary students during the same period (Chart B1.7). On the other hand, expenditure per student at the tertiary level rose significantly in Greece, Hungary, Ireland and Mexico, and in the partner country Chile despite a growth in enrolment of 93, 70, 34, 48 and 68%, respectively. Among the 27 OECD and partner countries, Austria, Canada, Denmark, Germany, Italy, the Netherlands and Turkey were the only countries in which the number of tertiary students increased by less than 10% (Table B1.5 and Chart B1.7).

Definitions and methodologies

Data refer to the financial year 2003 and are based on the UOE data collection on education statistics administered by the OECD in 2005 (for details see Annex 3 at www.oecd.org/edu/eq2006). Expenditure on education per student at a particular level of education is calculated by dividing the

total expenditure on educational institutions at that level by the corresponding full-time equivalent enrolment. Only those educational institutions and programmes for which both enrolment and expenditure data are available are taken into account. Expenditure in national currency is converted into equivalent US dollars by dividing the national currency figure by the purchasing power parity (PPP) index for GDP. The PPP exchange rate 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 (Annex 2 gives further details).

The OECD average is calculated as the simple average over all OECD countries for which data are available. The OECD total reflects the value of the indicator if the OECD region is considered as a whole (see the Reader's Guide for details).

Table B1.5 shows the changes in expenditure on educational institutions per student between the financial years 1995 and 2003. OECD countries were asked to collect the 1995 data according to the definitions and the coverage of UOE 2005 data collection. All expenditure data, as well as the GDP for 1995, are adjusted to 2003 prices using the GDP price deflator.

Expenditure on education per student relative to GDP per capita is calculated by expressing expenditure on education per student in units of national currency as a percentage of GDP per capita, also in national currency. 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).

Expected expenditure over the average duration of tertiary studies (Table B1.3b) is calculated by multiplying current annual expenditure by the typical duration of tertiary studies. The methodology used for the estimation of the typical duration of tertiary studies is described in Annex 3 (www.oecd.org/edu/eag2006). For the estimation of the duration of tertiary education, data are based on a special survey carried out in OECD countries in 2005.

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 a student's intensity of participation by the credits which he or she obtains for successful completion of specific course units during a specified reference period. OECD countries that can accurately account for part-time enrolment will have higher expenditure per full-time equivalent student than OECD countries that cannot differentiate between different modes of student attendance.

Note that data appearing in earlier editions of this publication may not always be comparable to data shown in the 2006 edition due to changes in definitions and coverage that were made as a result of the OECD expenditure comparability study (see Annex 3 at www.oecd.org/edu/eag2006 for details on changes).

Further references

The following additional material relevant to this indicator is available on the Web at <http://dx.doi.org/10.1787/717773424252>

- *Table B1.1d Annual expenditure on educational institutions per student for core services (2003)*

Table B1.1a.
Annual expenditure on educational institutions per student for all services (2003)
In equivalent US dollars converted using PPPs for GDP, by level of education, based on full-time equivalents

	Pre-primary education (for children 3 years and older)	Primary education	Secondary education			Post-secondary non-tertiary education	Tertiary education (including R&D activities)			All tertiary education excluding R&D activities	Primary to tertiary education
			Lower secondary education	Upper secondary education	All secondary education		Tertiary-type B education	Tertiary-type A & advanced research programmes	All tertiary education		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD countries											
Australia	m	5 494	7 442	8 362	7 788	7 341	7 792	13 331	12 406	8 645	7 527
Austria	6 205	7 139	8 719	9 189	8 943	x(4)	10 382	12 507	12 344	8 116	9 063
Belgium	4 663	6 180	x(5)	x(5)	7 708	x(5)	x(9)	x(9)	11 824	8 139	7 831
Canada ^{1,2}	x(5)	x(5)	x(5)	x(5)	6 482	x(7)	23 780	18 567	19 992	16 937	8 641
Czech Republic	2 660	2 273	3 939	4 241	4 088	2 051	3 339	7 185	6 774	5 698	3 898
Denmark	4 824	7 814	7 958	8 401	8 183	x(4, 9)	x(9)	x(9)	14 014	10 190	9 154
Finland	4 069	5 321	8 608	6 654	7 402	x(5)	3 985	12 060	12 047	7 506	7 578
France	4 744	4 939	7 603	9 992	8 653	5 195	8 925	11 303	10 704	7 330	7 807
Germany	4 865	4 624	5 627	10 232	7 173	10 097	6 299	12 457	11 594	7 282	7 368
Greece	x(2)	4 218	x(5)	x(5)	4 954	4 181	2 602	6 071	4 924	3 757	4 686
Hungary ¹	3 985	3 286	3 269	4 620	3 948	x(4)	8 427	8 583	8 576	6 885	4 427
Iceland	6 781	7 752	7 475	6 459	6 898	x(4, 9)	m	8 023	8 023	5 809	7 438
Ireland	m	4 760	6 329	6 428	6 374	5 759	x(9)	x(9)	9 341	7 223	6 118
Italy ¹	6 116	7 366	7 688	8 108	7 938	m	7 443	8 777	8 764	5 658	7 963
Japan	3 766	6 350	6 991	7 552	7 283	x(4, 9)	7 638	12 913	11 556	m	7 789
Korea	2 628	4 098	5 425	7 442	6 410	a	4 021	9 138	7 089	6 213	5 733
Luxembourg	x(2)	11 481	16 754	17 364	17 078	m	m	m	m	m	m
Mexico	2 069	1 656	1 495	2 790	1 918	a	x(9)	x(9)	5 774	4 998	2 095
Netherlands	5 497	5 836	7 566	6 271	6 996	5 723	m	13 537	13 444	8 338	7 501
New Zealand	4 325	4 841	4 803	6 730	5 693	8 016	6 064	9 738	8 832	m	5 963
Norway	3 895	7 977	9 208	12 380	10 919	x(5)	x(9)	x(9)	13 772	9 310	10 105
Poland ¹	3 269	2 859	2 693	3 184	2 951	6 866	m	4 653	4 589	3 960	3 221
Portugal ¹	4 489	4 503	6 158	6 022	6 094	a	x(9)	x(9)	7 200	m	5 611
Slovak Republic	2 641	2 020	2 106	2 737	2 401	x(4)	x(4)	4 678	4 678	4 299	2 602
Spain	4 151	4 829	x(5)	x(5)	6 418	x(5)	7 997	9 131	8 943	6 563	6 346
Sweden	4 091	7 291	7 446	7 848	7 662	2 867	x(9)	x(9)	16 073	8 278	8 792
Switzerland ¹	3 558	8 131	9 538	15 014	12 209	8 485	7 579	27 682	25 900	14 335	12 071
Turkey ¹	m	869	a	1 428	1 428	a	x(9)	x(9)	m	4 248	1 266
United Kingdom	7 153	5 851	x(5)	x(5)	7 290	x(5)	x(9)	x(9)	11 866	9 130	7 376
United States	7 755	8 305	9 156	10 105	9 590	m	x(9)	x(9)	24 074	21 566	12 023
<i>OECD average</i>	<i>4 508</i>	<i>5 450</i>	<i>6 560</i>	<i>7 582</i>	<i>6 962</i>	<i>4 439</i>	~	~	<i>11 254</i>	<i>8 093</i>	<i>6 827</i>
<i>OECD total</i>	<i>4 959</i>	<i>5 055</i>	~	~	<i>6 936</i>	~	~	~	<i>14 598</i>	<i>12 208</i>	<i>7 471</i>
<i>EU19 average</i>	<i>4 589</i>	<i>5 399</i>	<i>6 831</i>	<i>7 419</i>	<i>6 961</i>	<i>4 749</i>	~	~	<i>9 872</i>	<i>6 962</i>	<i>6 519</i>
Partner countries											
Brazil ²	926	870	1 105	1 152	1 121	a	x(9)	x(9)	10 054	m	1 242
Chile ³	2 470	2 139	2 124	2 281	2 225	a	3 128	8 382	7 011	m	2 876
Israel	3 718	5 017	x(5)	x(5)	5 959	3 723	8 372	12 941	11 945	m	6 436
Russian Federation ¹	m	x(5)	x(5)	x(5)	1 436	x(5)	1 733	2 741	2 451	m	1 600

1. Public institutions only.

2. Year of reference 2002.

3. Year of reference 2004.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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

StatLink: <http://dx.doi.org/10.1787/717773424252>

Table B1.1b.

Annual expenditure on educational institutions per student for all services, by type of programme (2003)*In equivalent US dollars converted using PPPs for GDP, by level of education, based on full-time equivalents*

	Secondary education									Post-secondary non-tertiary education		
	Lower secondary education			Upper secondary education			All secondary education			All programmes	General programmes	Vocational programmes
	All programmes	General programmes	Vocational programmes	All programmes	General programmes	Vocational programmes	All programmes	General programmes	Vocational programmes			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD countries												
Australia	7 442	7 474	7 094	8 362	8 814	7 343	7 788	7 894	7 265	7 341	a	7 341
Austria	8 719	8 719	a	9 189	8 243	9 172	8 943	8 623	9 172	m	m	m
Belgium	x(7)	x(7)	x(7)	x(7)	x(7)	x(7)	7 708	x(7)	x(7)	x(7)	x(7)	x(7)
Canada ^{1,2}	x(7)	x(7)	x(7)	x(7)	x(7)	x(7)	6 482	x(7)	x(7)	m	m	m
Czech Republic	3 939	3 924	7 634	4 241	3 795	4 357	4 088	3 903	4 374	2 051	2 986	1 961
Denmark	7 958	7 958	a	8 401	x(4)	x(4)	8 183	x(7)	x(7)	m	m	m
Finland	8 608	8 608	a	6 654	4 975	7 729	7 402	7 204	7 729	x(7)	a	x(9)
France	7 603	7 603	a	9 992	x(4)	x(4)	8 653	x(7)	x(7)	5 195	x(10)	x(10)
Germany	5 627	5 627	x(6)	10 232	5 962	12 744	7 173	5 680	12 744	10 097	6 430	10 727
Greece	x(7)	x(7)	x(7)	x(7)	x(7)	x(7)	4 954	x(7)	x(7)	4 181	m	m
Hungary ¹	3 269	x(1)	x(1)	4 620	3 642	5 590	3 948	3 321	5 752	x(7)	x(7)	x(7)
Iceland	7 475	m	a	6 459	m	m	6 898	m	a	a	a	a
Ireland	6 329	6 329	a	6 428	x(4)	x(4)	6 374	x(7)	x(7)	5 759	x(10)	x(10)
Italy ¹	7 688	7 688	a	8 108	x(4)	x(4)	7 938	x(7)	x(7)	m	m	m
Japan	6 991	6 991	a	7 552	x(4)	x(4)	7 283	x(7)	x(7)	x(7)	m	m
Korea	5 425	m	m	7 442	x(4)	x(4)	6 410	x(7)	x(7)	m	m	m
Luxembourg	16 754	16 754	a	17 364	17 780	17 172	17 078	17 025	17 172	m	m	m
Mexico	1 495	1 779	m	2 790	2 760	3 046	1 918	2 116	823	a	a	a
Netherlands	7 566	7 191	8 164	6 271	7 600	5 676	6 996	7 307	6 709	5 723	a	5 723
New Zealand	4 803	m	m	6 730	x(4)	x(4)	5 693	x(7)	x(7)	8 016	m	m
Norway	9 208	9 208	a	12 380	x(4)	x(4)	10 919	x(7)	x(7)	x(4)	x(4)	x(4)
Poland ¹	2 693	2 693	a	3 184	x(4)	x(4)	2 951	x(7)	x(7)	6 866	m	m
Portugal ¹	6 158	m	m	6 022	x(4)	x(4)	6 094	x(7)	x(7)	m	m	m
Slovak Republic	2 106	2 106	a	2 737	1 893	3 061	2 401	2 064	3 073	x(7)	x(8)	x(9)
Spain	x(7)	x(7)	x(7)	x(7)	x(7)	x(7)	6 418	x(7)	x(7)	a	a	a
Sweden	7 446	7 446	a	7 848	7 029	8 632	7 662	7 296	8 632	2 867	7 378	1 497
Switzerland ¹	9 538	9 538	a	15 014	11 530	16 840	12 209	10 029	16 840	8 485	5 519	10 139
Turkey ¹	a	a	a	1 428	1 168	1 811	1 428	1 168	1 811	a	a	a
United Kingdom	x(7)	x(7)	x(7)	x(7)	x(7)	x(7)	7 290	x(7)	x(7)	m	m	m
United States	9 156	9 156	a	10 105	10 105	a	9 590	9 590	a	m	a	m
OECD average	6 560	6 840	5 765	7 582	6 807	7 936	6 962	6 659	7 854	6 053	5 578	6 231
Partner countries												
Brazil ²	1 105	x(1)	x(1)	1 152	x(4)	x(4)	1 121	x(7)	x(7)	a	a	a
Chile ³	2 124	2 124	a	2 281	2 450	1 983	2 225	2 297	1 983	a	a	a
Israel	x(7)	x(7)	x(7)	x(7)	x(7)	x(7)	5 959	x(7)	x(7)	3 723	3 723	a
Russian Federation ¹	x(7)	x(7)	x(7)	x(7)	x(7)	x(7)	1 436	1 383	1 911	x(7)	x(8)	x(9)

1. Public institutions only.

2. Year of reference 2002.

3. Year of reference 2004.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eqg2006).

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

StatLink: <http://dx.doi.org/10.1787/717773424252>

Table B1.1c.

Annual expenditure per student on core services, ancillary services and R&D (2003)*In equivalent US dollars converted using PPPs for GDP, by level of education and type of service, based on full-time equivalents*

	Primary, secondary and post-secondary non-tertiary education			Tertiary education			
	Educational core services	Ancillary services (transport, meals, housing provided by institutions)	Total	Educational core services	Ancillary services (transport, meals, housing provided by institutions)	Research & development	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
OECD countries							
Australia	6 292	292	6 584	7 904	741	3 761	12 406
Austria	8 009	390	8 399	8 045	71	4 228	12 344
Belgium	6 810	262	7 072	7 722	417	3 686	11 824
Canada ^{1,2,3}	6 142	341	6 482	15 689	1 248	3 054	19 992
Czech Republic	3 253	144	3 397	5 479	219	1 076	6 774
Denmark ¹	x(3)	x(3)	8 011	10 190	a	3 824	14 014
Finland	5 811	691	6 501	7 506	n	4 540	12 047
France	6 278	902	7 181	6 708	621	3 374	10 704
Germany	6 451	143	6 594	6 718	564	4 311	11 594
Greece	4 525	63	4 587	3 302	455	1 167	4 924
Hungary ³	3 353	387	3 740	5 994	891	1 691	8 576
Iceland ¹	7 319	a	7 319	5 809	x(4)	2 214	8 023
Ireland	5 323	124	5 446	7 223	x(7)	2 118	9 341
Italy ³	7 483	271	7 754	5 375	283	3 106	8 764
Japan ¹	x(3)	x(3)	6 842	x(7)	x(7)	x(7)	11 556
Korea	4 679	496	5 174	6 098	115	876	7 089
Luxembourg	x(3)	x(3)	13 621	m	m	m	m
Mexico ⁴	1 763	m	1 763	4 998	m	776	5 774
Netherlands	6 351	88	6 439	8 335	3	5 106	13 444
New Zealand	x(3)	x(3)	5 419	x(7)	x(7)	x(7)	8 832
Norway	x(3)	x(3)	9 300	9 105	205	4 462	13 772
Poland ³	2 950	9	2 959	3 957	3	628	4 589
Portugal ³	5 481	38	5 519	x(7)	x(7)	x(7)	7 200
Slovak Republic ¹	1 936	358	2 293	3 872	427	380	4 678
Spain	5 483	200	5 682	6 563	m	2 379	8 943
Sweden	6 724	729	7 453	8 278	n	7 795	16 073
Switzerland ³	x(3)	x(3)	10 150	14 335	x(4)	11 565	25 900
Turkey ³	946	39	986	4 248	x(4)	m	m
United Kingdom	6 363	378	6 741	9 130	m	2 735	11 866
United States	8 257	678	8 935	19 538	2 028	2 508	24 074
OECD average	5 332	305	6 278	7 774	436	3 254	11 254
EU19 average	5 446	304	6 284	6 729	282	3 067	9 872
Partner countries							
Brazil ²	x(3)	x(3)	1 009	x(7)	x(7)	x(7)	10 054
Chile ⁵	2 099	82	2 182	x(7)	x(7)	x(7)	7 011
Israel	x(3)	x(3)	5 505	x(7)	x(7)	x(7)	11 945
Russian Federation	x(3)	x(3)	1 436	x(7)	x(7)	x(7)	2 451

1. Some levels of education are included with others. Refer to "x" code in Table B1.1a for details.

2. Year of reference 2002.

3. Public institutions only.

4. Research and development expenditure and thus total expenditure is underestimated.

5. Year of reference 2004.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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

StatLink: <http://dx.doi.org/10.1787/717773424252>

Table B1.2.

Distribution of expenditure (as a percentage) on educational institutions compared to number of students enrolled at each level of education (2003)

The table shows the distribution of educational expenditure and of students across levels of education. The number of students is adjusted to the financial year. E.g. when reading the first and second columns, in the Czech Republic, 9 % of all expenditure on educational institutions is allocated to pre-primary education whereas 13 % of pupils/students are enrolled at this level of education.

	Pre-primary education (for children 3 years and older)		Primary, secondary and post-secondary non-tertiary education		All tertiary education		Not allocated by level		All levels of education	
	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on full-time equivalents	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on full-time equivalents	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on full-time equivalents	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on full-time equivalents	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on full-time equivalents
	(1)	(2)	(2)	(2)	(3)	(3)	(4)	(4)	(5)	(5)
OECD countries										
Australia	1.7	2.8	71.3	81.3	26.8	15.7	0.1	0.1	100	100
Austria	9.5	13.2	69.3	72.2	20.7	14.6	n	n	100	100
Belgium	9.7	15.6	66.9	70.9	21.3	13.5	2.1	n	100	100
Canada ^{1, 2}	x(2)	4.9	60.9	76.3	39.1	16.9	n	n	100	98
Czech Republic	9.2	13.3	65.3	73.9	22.7	12.9	2.8	n	100	100
Denmark	11.7	20.6	60.6	64.3	24.9	15.1	2.7	n	100	100
Finland	6.2	11.0	64.8	71.7	28.9	17.3	n	n	100	100
France	11.1	17.1	66.9	68.2	21.6	14.7	0.5	n	100	100
Germany	9.7	13.6	65.6	72.9	22.6	13.4	2.2	0.1	100	100
Greece	x(2)	6.7	67.1	65.9	29.9	27.3	3.1	n	100	100
Hungary ¹	14.5	16.5	59.2	71.6	22.5	11.9	3.8	n	100	100
Iceland	11.4	13.0	65.8	73.7	13.5	13.3	9.3	n	100	100
Ireland	m	m	m	m	m	m	m	m	m	m
Italy ¹	9.1	11.5	70.2	70.2	20.7	18.3	n	n	100	100
Japan	3.9	8.3	62.2	72.3	26.4	18.2	7.5	1.2	100	100
Korea	2.1	4.7	58.3	67.5	34.4	27.8	5.2	n	100	100
Luxembourg	m	m	m	m	m	m	m	m	m	m
Mexico	11.4	11.8	66.3	80.9	19.6	7.3	2.7	n	100	100
Netherlands	7.4	9.8	67.4	76.5	25.2	13.7	n	n	100	100
New Zealand	4.3	5.9	71.9	79.2	22.2	15.0	1.6	n	100	100
Norway	4.5	11.2	70.4	72.3	22.9	16.0	2.1	n	100	100
Poland ¹	9.3	9.2	69.9	76.2	20.8	14.6	n	n	100	100
Portugal	7.2	11.3	70.2	70.5	19.2	18.1	3.4	n	100	100
Slovak Republic	12.0	12.3	64.8	76.3	19.7	11.4	3.5	n	100	100
Spain	11.1	16.0	63.4	66.9	25.5	17.1	n	n	100	100
Sweden	7.4	14.6	66.3	72.1	26.3	13.3	n	n	100	100
Switzerland ¹	3.8	10.8	66.9	78.3	27.8	10.9	1.6	n	100	100
Turkey ¹	m	2.0	71.2	89.5	28.8	8.4	n	n	100	100
United Kingdom	6.1	6.2	75.2	82.1	18.7	11.6	a	a	100	100
United States	5.6	8.4	55.9	72.9	38.6	18.7	a	n	100	100
OECD average	8.0	10.8	66.1	73.8	24.8	15.2	1.9	n	100	100
Partner countries										
Brazil ²	7	10	73	88	19	2	n	n	100	100
Chile ³	8	9	60	78	32	13	n	n	100	100
Israel	10	18	57	68	23	13	10	2	100	100
Russian Federation ¹	15	m	56	m	18	m	11	m	100	m

1. Public institutions only.

2. Year of reference 2002.

3. Year of reference 2004.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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

StatLink: <http://dx.doi.org/10.1787/717773424252>

Table B1.3a.

Cumulative expenditure on educational institutions per student over the theoretical duration of primary and secondary studies (2003)

In equivalent US dollars converted using PPPS for GDP, by level of education

	Average theoretical duration of primary and secondary studies (in years)				Cumulative expenditure per student over the theoretical duration of primary and secondary studies (in U.S. dollars)				
	Primary education	Lower secondary	Upper secondary education	Total primary and secondary education	Primary education	Lower secondary	Upper secondary education	All secondary education	Total primary and secondary education
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD countries									
Australia	7.0	4.0	2.0	13.0	38 455	29 766	16 724	46 490	84 945
Austria	4.0	4.0	4.0	12.0	28 558	34 875	36 757	71 632	100 190
Belgium	6.0	2.0	4.0	12.0	37 082	x(8)	x(8)	46 248	83 329
Canada ^{1,2}	6.0	3.0	3.0	12.0	x(9)	x(9)	x(9)	x(9)	77 789
Czech Republic	5.0	4.0	4.0	13.0	11 365	15 757	16 965	32 723	44 087
Denmark	6.0	4.0	3.0	13.0	46 884	31 833	25 203	57 036	103 920
Finland	6.0	3.0	3.0	12.0	31 926	25 823	19 961	45 784	77 710
France	5.0	4.0	3.0	12.0	24 697	30 410	29 976	60 387	85 084
Germany	4.0	6.0	3.0	13.0	18 498	33 764	30 696	64 557	83 055
Greece	6.0	3.0	3.0	12.0	25 309	x(8)	x(8)	29 724	55 033
Hungary ¹	4.0	4.0	4.0	12.0	13 144	13 075	18 479	31 555	44 699
Iceland	7.0	3.0	4.0	14.0	54 267	22 424	25 836	48 260	102 527
Ireland	8.0	3.0	2.0	13.0	38 078	18 987	12 856	31 843	69 921
Italy ¹	5.0	3.0	5.0	13.0	36 829	23 065	40 542	63 608	100 437
Japan	6.0	3.0	3.0	12.0	38 103	20 972	22 655	43 627	81 730
Korea	6.0	3.0	3.0	12.0	24 586	16 274	22 327	38 602	63 187
Luxembourg	6.0	3.0	4.0	13.0	68 886	50 261	69 458	119 719	188 605
Mexico	6.0	3.0	3.0	12.0	9 939	4 486	8 371	12 857	22 796
Netherlands	6.0	2.0	3.0	11.0	35 015	15 133	18 812	33 945	68 959
New Zealand	6.0	4.0	3.0	13.0	29 044	19 212	20 191	39 403	68 446
Norway	7.0	3.0	3.0	13.0	55 841	27 623	37 140	64 762	120 603
Poland ¹	6.0	3.0	4.0	13.0	17 153	8 080	12 737	20 817	37 970
Portugal ¹	6.0	3.0	3.0	12.0	27 019	18 475	18 065	36 540	63 559
Slovak Republic	4.0	5.0	4.0	13.0	8 078	10 528	10 947	21 474	29 552
Spain	6.0	4.0	2.0	12.0	28 971	x(8)	x(8)	38 508	67 479
Sweden	6.0	3.0	3.0	12.0	43 744	22 339	23 544	45 884	89 628
Switzerland ¹	6.0	3.0	3.5	12.5	48 788	28 613	52 549	81 162	129 950
Turkey ¹	8.0	a	3.0	11.0	6 949	a	4 285	4 285	11 233
United Kingdom	6.0	3.0	3.5	12.5	35 103	x(8)	x(8)	47 385	82 489
United States	6.0	3.0	3.0	12.0	49 830	27 469	30 315	57 784	107 614
OECD average	5.9	3.3	3.3	12.4	31 511	~	~	45 672	77 204
Partner countries									
Brazil ²	4.0	4.0	3.0	11.0	3 478	4 420	3 457	7 877	11 356
Chile ³	6.0	2.0	4.0	12.0	12 836	4 249	9 125	13 373	26 209
Israel	6.0	3.0	3.0	12.0	30 102	x(8)	x(8)	13 347	43 449
Russian Federation ¹	4.0	5.0	3.0	12.0	x(9)	x(9)	x(9)	x(9)	17 231

1. Public institutions only.

2. Year of reference 2002.

3. Year of reference 2004.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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

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Table B1.3b.
Cumulative expenditure on educational institutions per student over the average duration
of tertiary studies (2003)

In equivalent US dollars converted using PPPS for GDP, by type of programme

	Method ¹	Average duration of tertiary studies (in years)			Cumulative expenditure per student over the average duration of tertiary studies (in U.S. dollars)		
		Tertiary- type B education	Tertiary- type A and advanced research programmes	All tertiary education	Tertiary- type B education	Tertiary- type A and advanced research programmes	All tertiary education
		(1)	(2)	(3)	(4)	(5)	(6)
OECD countries							
Australia	CM	m	2.87	2.87	m	38 260	m
Austria	CM	2.78	5.60	5.30	28 863	70 037	65 424
Belgium	CM	2.41	3.67	2.99	x(6)	x(6)	35 392
Canada		m	m	m	m	m	m
Czech Republic		m	m	m	m	m	m
Denmark	AF	2.10	3.84	3.70	x(6)	x(6)	51 852
Finland	CM	a	4.85	4.85	a	58 489	58 489
France ²	CM	3.00	4.74	4.02	26 775	53 575	43 030
Germany	CM	2.37	6.57	5.36	14 935	81 817	62 187
Greece	CM	5.00	5.26	5.25	13 010	31 935	25 850
Hungary ³	CM	2.00	4.05	4.05	16 854	34 763	34 734
Iceland	CM	1.96	2.84	2.68	m	22 785	m
Ireland	CM	2.21	4.02	3.24	x(6)	x(6)	30 264
Italy ³	AF	m	5.14	5.01	m	45 115	43 906
Japan	CM	2.11	4.51	4.07	16 117	58 239	47 031
Korea	CM	2.07	4.22	3.43	8 324	38 561	24 316
Luxembourg		m	m	m	m	m	m
Mexico	AF	x(2)	3.42	3.42	x(6)	x(6)	19 747
Netherlands	CM	m	5.24	m	m	70 932	m
New Zealand	CM	1.87	3.68	3.05	11 339	35 836	26 938
Norway	CM	m	m	m	m	m	m
Poland ³	CM	m	3.68	m	m	17 123	m
Portugal ³		m	m	m	m	m	m
Slovak Republic	AF	2.47	3.90	3.82	x(6)	x(6)	17 870
Spain	CM	2.15	5.54	4.66	17 193	50 585	41 673
Sweden	CM	2.26	4.93	4.68	x(6)	x(6)	75 221
Switzerland ³	CM	2.19	5.45	3.62	16 573	150 942	93 869
Turkey ³	CM	2.73	2.37	2.65	x(6)	x(6)	11 275
United Kingdom ²		3.52	5.86	4.34	x(6)	x(6)	51 529
United States		m	m	m	m	m	m
OECD average		2.38	4.42	3.94	~	~	43 030

1. Either the Chain Method (CM) or an Approximation Formula (AF) was used to estimate the duration of tertiary studies.

2. Average duration of tertiary studies estimated based on national methodology.

3. Public institutions only.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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

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Table B1.4.

Annual expenditure on educational institutions per student for all services relative to GDP per capita (2003)

By level of education, based on full-time equivalents

	Pre-primary education (for children 3 years and older)	Primary education	Secondary education			Post-secondary non-tertiary education	Tertiary education (including R&D activities)			All tertiary education excluding R&D activities	Primary to tertiary education
			Lower secondary education	Upper secondary education	All secondary education		Tertiary-type B education	Tertiary-type A & advanced research programmes	All tertiary education		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD countries											
Australia	m	18	24	27	25	24	25	43	40	28	24
Austria	20	23	28	30	29	x(4)	34	41	40	26	29
Belgium	15	21	x(5)	x(5)	26	x(5)	x(9)	x(9)	39	27	26
Canada ^{1,2}	x(5)	x(5)	x(5)	x(5)	21	x(7)	78	61	66	56	28
Czech Republic	15	13	23	25	24	12	19	42	39	33	23
Denmark	16	25	26	27	27	x(4, 9)	x(9)	x(9)	46	33	30
Finland	14	19	30	23	26	x(5)	14	43	43	26	27
France	17	17	27	35	30	18	31	40	38	26	28
Germany	18	17	20	37	26	37	23	45	42	26	27
Greece	x(2)	21	x(5)	x(5)	24	20	13	30	24	18	23
Hungary ¹	26	22	22	31	26	x(4)	56	57	57	46	29
Iceland	22	25	24	21	22	x(4, 9)	m	26	26	19	24
Ireland	m	14	19	19	19	17	x(9)	x(9)	27	21	18
Italy ¹	23	28	29	31	30	m	28	33	33	21	30
Japan	13	23	25	27	26	x(4, 9)	27	46	41	m	28
Korea	14	21	28	39	33	a	21	47	37	32	30
Luxembourg	x(2)	21	x(5)	x(5)	31	x(5)	m	m	m	m	m
Mexico	22	17	16	29	20	a	x(9)	x(9)	60	52	22
Netherlands	17	18	24	20	22	18	m	43	42	26	24
New Zealand	18	21	20	29	24	34	26	41	38	m	25
Norway	10	21	25	33	29	x(5)	x(9)	x(9)	37	25	27
Poland ¹	28	25	23	27	25	59	m	40	40	34	28
Portugal ¹	25	26	35	34	35	a	x(9)	x(9)	41	m	m
Slovak Republic	20	15	16	21	18	x(4)	x(4)	x(4)	36	33	20
Spain	17	19	x(5)	x(5)	26	x(5)	32	37	36	26	26
Sweden	14	25	25	27	26	10	x(9)	x(9)	54	28	30
Switzerland ¹	11	24	29	45	37	26	23	83	78	43	36
Turkey ¹	m	13	a	21	21	a	x(9)	x(9)	m	63	19
United Kingdom	24	20	x(5)	x(5)	25	x(5)	x(9)	x(9)	40	31	25
United States	21	22	24	27	26	m	x(9)	x(9)	64	57	32
OECD average	18	20	23	28	26	18	30	44	43	33	26
EU19 average	18	19	23	28	25	17	29	41	40	32	25
Partner countries											
Brazil ²	12	11	14	15	14	a	x(9)	x(9)	127	m	16
Chile ³	21	18	18	20	19	a	27	72	60	m	25
Israel	16	22	x(5)	x(5)	26	16	36	56	52	m	28
Russian Federation ¹	m	x(5)	x(5)	x(5)	16	x(5)	19	31	27	m	18

1. Public institutions only.

2. Year of reference 2002.

3. Year of reference 2004.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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

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Table B1.5.

Change in expenditure on educational institutions for all services per student relative to different factors,
by level of education (1995, 2003)

Index of change between 1995 and 2003 (GDP deflator 1995=100, 2003 constant prices)

	Primary, secondary and post-secondary non-tertiary education				Tertiary education				
	Change in expenditure	Change in the number of students	Change in expenditure per student		Change in expenditure	Change in the number of students	Change in expenditure per student		
OECD countries	Australia	148	109	135	OECD countries	Australia	125	133	94
	Austria	108	m	m		Austria	115	101	115
	Belgium	m	m	m		Belgium	m	m	m
	Canada	109	92	119		Canada	138	107	128
	Czech Republic	102	91	112		Czech Republic	139	186	74
	Denmark ¹	127	106	119		Denmark ¹	126	107	118
	Finland	132	109	121		Finland	122	114	107
	France	m	m	m		France	m	m	m
	Germany	108	102	105		Germany	114	105	108
	Greece ^{1,2}	160	90	178		Greece ^{1,2}	244	193	126
	Hungary ³	141	92	153		Hungary ³	182	170	107
	Iceland	m	m	m		Iceland	m	m	m
	Ireland	157	94	168		Ireland	163	134	121
	Italy ^{2,3}	107	98	110		Italy ³	137	107	128
	Japan ¹	106	84	127		Japan ¹	139	123	114
	Korea	m	91	m		Korea	m	159	m
	Luxembourg	m	m	m		Luxembourg	m	m	m
	Mexico	149	113	132		Mexico	167	148	113
	Netherlands	139	105	132		Netherlands	112	109	103
	New Zealand ²	158	m	m		New Zealand ²	111	m	m
	Norway	130	117	111		Norway	112	111	100
Poland ^{2,3}	159	85	186	Poland ^{2,3}	170	269	63		
Portugal ^{2,3}	133	80	166	Portugal ^{2,3}	140	148	95		
Slovak Republic ¹	135	91	147	Slovak Republic ¹	167	201	83		
Spain	104	81	129	Spain	158	111	143		
Sweden	135	118	115	Sweden	141	141	100		
Switzerland ^{2,3}	113	107	105	Switzerland ^{2,3}	174	119	146		
Turkey ^{2,3}	194	114	170	Turkey ^{2,3}	202	104	194		
United Kingdom	149	118	126	United Kingdom	120	120	100		
United States	137	107	128	United States	133	121	110		
<i>OECD average</i>	<i>133</i>	<i>100</i>	<i>133</i>	<i>OECD average</i>	<i>146</i>	<i>138</i>	<i>106</i>		
<i>EU19 average</i>	<i>124</i>	<i>97</i>	<i>127</i>	<i>EU19 average</i>	<i>147</i>	<i>145</i>	<i>101</i>		
Partner countries	Brazil	142	120	119	Partner countries	Brazil	140	158	89
	Chile	180	118	153		Chile	186	168	111
	Israel	119	116	102		Israel	130	152	86
	Russian Federation	m	m	m		Russian Federation	m	m	m

1. Some levels of education are included with others. Refer to "x" code in table B1.1a for details.

2. Public expenditure only.

3. Public institutions only.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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

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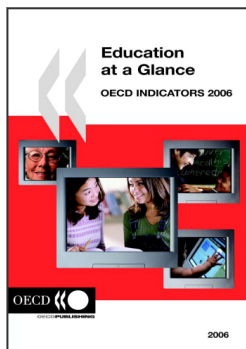
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