Participation and outcomes of vocational education and training

- Vocational education and training (VET) programmes attract a diverse range of students, including those seeking qualifications and technical skills to enter the labour market, adults wishing to increase their employability by developing their skills further, and students who may seek entry into higher education later on.

- About one in three students from lower secondary to short-cycle tertiary level are enrolled in a VET programme on average across OECD countries. However, there are wide variations across countries, ranging from less than 20% of students enrolled in vocational education to more than 45% in a few countries. In Colombia, 19% of students are enrolled in vocational programmes, lower than the OECD average (32%), with the majority of lower secondary to short-cycle tertiary VET students (65%) found in short-cycle tertiary education (Figure 1).

Figure 1. Snapshot of vocational education

Note: Only countries and economies with available data are shown. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.

VET is an important part of upper secondary education in most OECD countries. On average, 27% of all upper secondary students opt for VET programmes in Colombia, a lower proportion than the OECD average of 42% (Figure 1). Certain fields of study are more common than others at this level. In Colombia, the most common broad field is business, administration and law with 47% of upper secondary vocational graduates earning a qualification in this field, compared to 18% on average across OECD countries.

Vocational upper secondary students are typically less likely to complete their qualification than those from general programmes. Colombia follows this pattern as the completion rate for upper secondary education (within the theoretical duration of the programme) is lower among students enrolled in vocational programmes (78%) than among those in general ones (81%).

To support upper secondary vocational students’ transition to post-secondary education and improve their career prospects, many countries have created direct pathways from vocational programmes to higher levels of education. In Colombia, all upper secondary vocational students are enrolled in programmes that offer the chance of direct access to tertiary education, higher than the OECD average of 70% (Figure 1).

The rising demand for tertiary education

From the gender perspective, younger women are more likely than younger men to achieve tertiary education in all OECD countries. In Colombia, 34% of 25-34 year-old women had a tertiary qualification compared to 26% of their male peers, while on average across OECD countries the shares are 51% of younger women and 39% of younger men.

In Colombia, the average age of first-time entrants to tertiary education in 2018 was 22 years, the same as the OECD average. Structural factors, such as admission procedures, the typical age at which students graduate from upper secondary education, or cultural perceptions of the value of professional or personal experiences outside of education may explain the differences in the average age of entry to tertiary education across countries.

If current entry patterns continue, it is estimated that 49% of young adults will enter tertiary education for the first time in their life before the age of 25 on average across OECD countries (excluding international students). In Colombia, 32% of young adults will enter tertiary education by that age and most of them will enter at bachelor's or equivalent level.

Short-cycle tertiary programmes are generally designed to be vocationally oriented and represent the second most common route of entry into tertiary education on average across OECD countries, after bachelor's programmes. If current entry patterns continue, 11% of adults are expected to enter short-cycle tertiary education before the age of 25 in Colombia, compared to 10% on average across OECD countries. In Colombia, women make up 48% of students in such programmes, compared to 52% on average across OECD countries.

Young people can face barriers to labour market entry as they transition from school to work, but higher educational attainment increases their likelihood of being employed and is associated with higher incomes. On average across OECD countries, the employment rate in 2019 was 61% for 25-34 year-olds without upper secondary education, 78% for those with upper secondary or post-secondary non-tertiary education as their highest attainment and 85% for those with tertiary education. In Colombia, the shares are 70% for below upper secondary, 74% for upper secondary or post-secondary non-tertiary and 81% for tertiary attainment. Having a tertiary degree also carries a considerable earnings advantage in most OECD and partner countries. In Colombia, in 2018, 25-64 year-olds with a tertiary degree with income from full-time, full-year employment earned 128% more than full-time, full-year workers with upper secondary education compared to 54% on average across OECD countries (Figure 2).
International student mobility has been expanding quite consistently in the past twenty years. In 2018, 5.6 million tertiary students worldwide had crossed a border to study, more than twice the number in 2005. In Colombia, the share of foreign or international students remained stable at 0% between 2014 and 2018. Meanwhile 2% of Colombian tertiary students are enrolled abroad, a similar value to the total across OECD countries (Figure 2). English-speaking countries are the most attractive student destinations overall in the OECD area, with Australia, Canada, the United Kingdom and the United States receiving more than 40% of all internationally mobile students in OECD and partner countries. Among students leaving Colombia to study, the most popular destination country is Argentina.

Figure 2. Snapshot of tertiary education

Note: Only countries and economies with available data are shown. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.


Starting strong

- Early childhood education and care (ECEC) has experienced a surge of policy attention in OECD countries in recent decades, with a focus on children under the age of 3 in many countries. Among 2 year-olds, the enrolment rate at ISCED 0 is 37% in Colombia, 9 percentage points slightly below the OECD average of 46% (Figure 3).
- In many OECD countries, ECEC begins for most children long before they turn 5 and there are universal legal entitlements to a place in ECEC services for at least one or two years before the start of compulsory schooling. While compulsory education begins at age 5 in Colombia, 70% of 3-5 year-olds in 2018 are enrolled in ECEC programmes and primary education in Colombia, compared to 88% on average across OECD countries (Figure 3).
• Public provision of early childhood education and care is an important factor in ensuring broad access to affordable ECEC. On average across OECD countries, more than one in two of the children in early childhood educational development services (ISCED 01) are enrolled in private institutions. Enrolment in private institutions is usually less common for 3-5 year-olds, who are usually enrolled in pre-primary education (ISCED 02), than for younger children. In Colombia, 21% of children attending pre-primary education are enrolled in private institutions, compared to one in three children on average across OECD countries.

• The workforce is at the heart of high-quality early-childhood education and care: stimulating environments and high-quality pedagogy are fostered by better-qualified practitioners and high-quality interactions between children and staff facilitate better learning outcomes. In that context, lower child-staff ratios are found to be consistently supportive of staff-child relationships across different types of ECEC settings (NICHD, 2002). In Colombia, the ratio of children for every full-time equivalent (FTE) teacher working in pre-primary education (ISCED 02) is 36 compared to 14 on average across OECD countries (Figure 3).

• Sustained public financial support is critical for the growth and quality of ECEC programmes. In 2017, annual total expenditure in pre-primary settings (ISCED 02) averaged USD 1 556 per child in Colombia, lower than the average across OECD countries (USD 9 079) (Figure 3).

Figure 3. Snapshot of early childhood education and care

Note: Only countries and economies with available data are shown. Annual expenditure per child is shown in equivalent USD converted using PPPs. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.

Investing in education

- Annual expenditure per student on educational institutions from primary to tertiary level provides an indication of the investment countries make in each student. In 2018, Colombia spent less on primary to tertiary educational institutions per full-time student than the OECD average, investing a total of USD 3,538 per student compared to USD 11,231 on average across OECD countries (Figure 4).

- The way education is provided influences how resources are allocated between levels of education and between public and private institutions. In 2018, Colombia spent USD 3,855 per student at non-tertiary level (primary, secondary and post-secondary non-tertiary education), USD 6,144 lower than the OECD average of USD 9,999. At tertiary level, Colombia invested USD 2,335 per student, USD 13,992 less than the OECD average (Figure 4). Expenditure per student on private educational institutions is higher than on public institutions on average across OECD countries. This is also the case in Colombia, where total expenditure on public institutions from primary to tertiary level amounts to USD 3,263 per student, compared to USD 4,308 on private ones.

Figure 4. Snapshot of the financial resources invested in educational institutions

![Figure 4: Snapshot of the financial resources invested in educational institutions](image)

**Note:** Only countries and economies with available data are shown. 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 years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.


- The share of national wealth devoted to educational institutions is higher in Colombia than on average among OECD countries. In 2018, Colombia spent 5.5% of gross domestic product (GDP) on primary to tertiary educational institutions, which is 0.5 percentage points higher than the OECD average. Across levels of education, Colombia devoted an above average share of GDP than the OECD average at non-tertiary levels and a below average share at tertiary level (Figure 4).
• Between 2012 and 2017, expenditure per student from primary to tertiary education increased by an average annual growth rate of 1.3% across OECD countries. In Colombia, expenditure on educational institutions grew at an average rate of 2% a year, while the number of students fell on average by 0.1% per year. This resulted in an average annual growth rate of 2.1% in expenditure per student over this period.

Working conditions of school teachers

• The salaries of school staff, and in particular teachers and school heads, represent the largest single expenditure in formal education. Their salary levels also have a direct impact on the attractiveness of the teaching profession. In most OECD countries and economies, statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach. In most OECD countries and economies, they also increase with experience. On average, statutory salaries of teachers with maximum qualifications at the top of their salary scales are 78-80% higher than those of teachers with the minimum qualifications at the start of their career at pre-primary (ISCED 02), primary and general lower and upper secondary levels. In Colombia, maximum salaries are 278% to 338% higher than minimum salaries at each level of education.

Figure 5. Snapshot of teachers’ working conditions

Note: Only countries and economies with available data are shown. Teachers’ salaries are shown in equivalent USD converted using PPPs. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.


• The average number of teaching hours per year required of a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases, from
993 hours at pre-primary level (ISCED 02), to 778 hours at primary level, 712 hours at lower secondary level (general programmes) and 680 hours at upper secondary level (general programmes). In Colombia, teachers are required to teach 768 hours per year at pre-primary level, 960 hours per year at primary level, 845 hours at lower secondary level (general programmes) and 845 hours at upper secondary level (general programmes).

- During their working time, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students’ work and communicating or co-operating with parents or guardians. At the lower secondary level, teachers in Colombia spend 55% of their statutory working time on teaching, compared to 44% on average among OECD countries (Figure 5).

- Large proportions of teachers in many OECD countries will reach retirement age in the next decade, while the size of the school-age population is projected to increase in some countries, putting many governments under pressure to recruit and train new teachers. In Colombia, 12% of primary teachers are considered young teachers (under the age of 30), which is the same as the OECD average of 12%. On average across OECD countries, the proportion of young teachers decreases at other levels of education, to 10% in lower secondary education and 8% in upper secondary education. In Colombia, the proportion of young teachers decreases to 10% at lower secondary level and to 9% at upper secondary level (Figure 5).

The impact of COVID-19 on education

- The global 2020 COVID-19 pandemic has sent shockwaves around the world. In a first effort to contain the virus, many countries have imposed a lockdown and schools and/or universities have closed for several months across all OECD and partner countries. In Colombia, the closures were nationwide from 16 March 2020. By the end of June, Colombia had experienced 15 weeks of effective school closures in some form, compared to 14 weeks on average across OECD countries (UNESCO, 2020). However, the actual impact in some countries may have been less severe as some of these periods included scheduled school breaks.

- Excluding the non-compulsory part of the curriculum, students in public institutions in Colombia attended classes for 1,000 hours per year on average at primary level and 1,200 hours at lower secondary level in 2019. Each week of school closure therefore represents about 25 hours of compulsory instruction time at the primary level and 30 hours of compulsory instruction time at lower secondary level during which students have physically not attended school (Figure 6). During this time, many OECD and partner countries have turned to distance learning to ensure the continuity of education.

- School reopening in the context of the pandemic is contingent on the capacity to maintain a safe distance of 1-2 metres between pupils and staff. Countries with smaller class sizes may find it easier to comply with new restrictions on social distancing. In Colombia, the average class size at primary level is 25 students in public institutions, which is larger than the OECD average of 21. In public lower secondary institutions, there are 31 students per class in Colombia, compared to 23 students per class on average across OECD countries. However, the need to reduce class size may depend on other factors such as physical space, the availability of rooms and staff, and personal decisions by students and staff on whether to return to school (Figure 6).

- While there is uncertainty about the likely overall impact of the COVID-19 pandemic on education expenditure, governments will face difficult decisions on the allocation of resources, as government funds are injected into the economy and the health sector. In 2018, public spending on primary to tertiary education as a share of government expenditure in Colombia was 9%, lower than the OECD average of 11% (Figure 6).

- As unemployment rises, private funding of education may also be at risk. The impact may be most severe in those countries and levels of education that rely most heavily on household expenditure,
in particular early childhood education and care and tertiary education. In pre-primary education (ISCED 02), private sources accounted for 28% of total expenditure in Colombia in 2018, higher than the OECD average of 17%.

- The crisis may have a severe impact on the internationalisation of higher education as the delivery of online course material and travel restrictions may raise questions among international students’ perception on the value of obtaining their degree from an institution abroad. Colombia, with a lower share of foreign students than in total across the OECD, may be less strongly affected than other countries.
- Unemployment may increase, as the economy struggles to cope with the reduced activity that resulted from the lockdown. Those with lower educational attainment are the most vulnerable, as they are the most unlikely to benefit from remote working. In 2019, before the pandemic hit, 10% of young adults with below upper secondary education in Colombia were unemployed compared to 12% of tertiary-educated 25-34 year-olds (Figure 6).

Figure 6. Snapshot of indicators relevant to the impact of COVID-19 on education

Note: Only countries and economies with available data are shown. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.
References


More information

For more information on Education at a Glance 2020 and to access the full set of Indicators, visit www.oecd.org/education/education-at-a-glance-19991487.htm

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, visit Annex 3 of the publication (https://doi.org/10.1787/69096873-en).


Updated data can be found online at http://dx.doi.org/10.1787/eag-data-en and by following the StatLinks under the tables and charts in the publication.

Explore, compare and visualise more data and analysis using the Education GPS: https://gpseducation.oecd.org/

The calculation on the number of weeks of school closures due to the COVID-19 pandemic is based on data from UNESCO (UNESCO, 2020). For general information on the methodology considered for the data, please refer to the methodological note.

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On 15 May 2020, the OECD Council invited Costa Rica to become a Member. While Costa Rica is included in the OECD averages reported in this note, at the time of its preparation, Costa Rica was in the process of completing its domestic procedures for ratification and the deposit of the instrument of accession to the OECD Convention was pending.

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