



# EDUCATION AT A GLANCE 2020

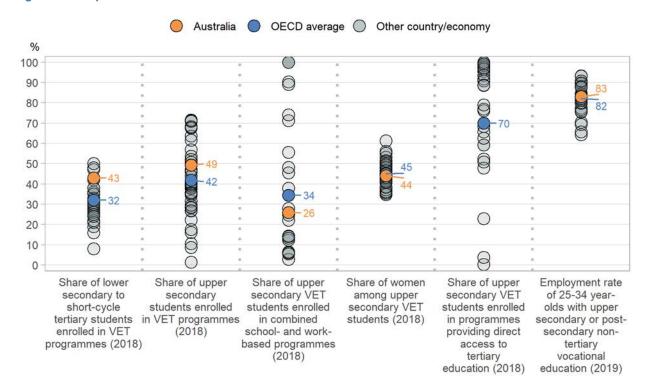
Education at a Glance: OECD Indicators is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in OECD and partner countries.

## **Australia**

# 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.

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.

Source: OECD (2020), indicator A3 and B7. See Education at a Glance Database. <a href="http://stats.oecd.org/">http://stats.oecd.org/</a> for more information and Annex 3 for notes (<a href="https://doi.org/10.1787/69096873-en">https://doi.org/10.1787/69096873-en</a>).

 Australian VET programmes are mainly reported against upper secondary and lower secondary levels of education in Education at a Glance. The VET system in Australia is largely distinct from the schooling system. 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 Australia, 43% of students are enrolled in vocational programmes, higher than the OECD average (32%), with the majority of lower secondary to short-cycle tertiary VET students (41%) found in upper secondary education (Figure 1).

- On average, 49% of all upper secondary students opt for VET programmes in Australia, a higher proportion than the OECD average of 42% (Figure 1). Certain fields of study are more common than others at this level. In Australia, the most common broad field is engineering, manufacturing and construction with 30% of upper secondary vocational graduates earning a qualification in this field, compared to 33% on average across OECD countries.
- The organisation and delivery of upper secondary VET programmes varies considerably from country to country. In combined school- and work-based programmes, between 25% and 90% of the curriculum is taught as work-based learning, while the remainder is organised within the school environment. In Australia, 26% of upper secondary vocational students are enrolled in combined school- and work-based programmes, which is slightly lower than the OECD average of 34% (Figure 1).
- The average age of enrolment in upper secondary vocational programmes across OECD countries (21 years) tends to be higher than for general programmes (17 years), a pattern also found in Australia. The average age of enrolment in upper secondary education is higher for students in vocational programmes (32 years) than for students in general programmes (17 years). The share of upper secondary vocational students tends to increase with age. In Australia, the share of upper secondary students enrolled in VET is 14% among 15-19 year-olds (OECD average: 37%), and 86% among 20-24 year-olds (OECD average: 62%).
- In 2019, 20% of 25-34 year-olds in Australia held an upper secondary or post-secondary non-tertiary vocational qualification as their highest educational level while 18% held a general one. The employment rate of younger adults with a vocational upper secondary or post-secondary non-tertiary education tend to be higher than the employment rate of those with general qualifications at this level (by 9 percentage points on average across OECD countries). Australia follows this pattern, as 83% of 25-34 year-olds with an upper secondary or post-secondary non-tertiary vocational qualification are employed compared with 78% of those with a general qualification (Figure 1).
- Poorer labour-market prospects of VET qualifications combined with higher tertiary attainment may have contributed to the decline in the share of adults with an upper secondary vocational qualification across generations in many countries. In Australia, among those with upper secondary or post-secondary non-tertiary education as their highest attainment, 61% of 55-64 year-olds (older adults), compared with 53% of 25-34 year-olds (younger adults) held a vocational qualification. In comparison, the equivalent OECD averages are 72% for older adults and 59% for younger adults.

# The rising demand for tertiary education

- The expansion of tertiary education is a worldwide trend. Between 2009 and 2019, the share of 25-34 year-olds with a tertiary degree increased in all OECD and partner countries. In Australia, the share increased by 8 percentage points during this period, lower than the average increase across OECD countries (9 percentage points). In 2019, 52% of 25-34 year-olds had a tertiary degree in Australia compared to 45% on average across OECD countries (Figure 2).
- From the gender perspective, younger women are more likely than younger men to achieve tertiary education in all OECD countries. In Australia, 59% of 25-34 year-old women had a tertiary qualification compared to 46% of their male peers, while on average across OECD countries the shares are 51% of younger women and 39% of younger men.
- In Australia, the average age of first-time graduates from tertiary education in 2018 was 25 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 graduation from tertiary education across countries.

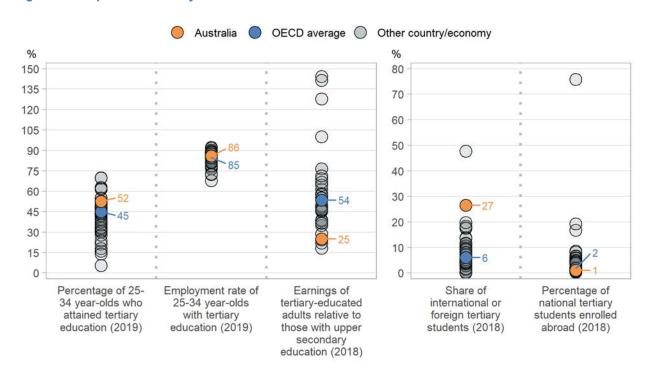


Figure 2. Snapshot of tertiary education

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.

Source: OECD (2020), indicator A1, A3, A4 and B6. See Education at a Glance Database http://stats.oecd.org/for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

If current patterns of graduation continue, it is estimated that 38% of young adults will graduate from tertiary education for the first time in their life before the age of 30 on average across OECD countries (excluding international students). In Australia, 37% of young adults will graduate from tertiary education by that age.

- Short-cycle tertiary programmes are generally designed to be vocationally oriented and represent
  the second most common path among first-time graduates from tertiary education on average
  across OECD countries, after bachelor's programmes. Excluding international students, 14% of
  adults are expected to graduate from short-cycle tertiary education before the age of 30 in
  Australia, compared to 8% 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 Australia, the shares are 61% for below upper secondary, 81% for upper secondary or post-secondary non-tertiary and 86% for tertiary attainment. Having a tertiary degree also carries a considerable earnings advantage in most OECD and partner countries. In Australia, in 2018, 25-64 year-olds with a tertiary degree with income from full-time, full-year employment earned 25% 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 Australia, the share of foreign or international students increased from 18% in 2014 to 27% in 2018. Meanwhile 1% of Australian tertiary students are enrolled abroad compared to 2% in 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 Australia to study, the most popular destination country is the United States.
- Beyond the economic and employment outcomes, higher educational attainment is related to greater social benefits. For example, those with a tertiary education are more likely to feel they have a say in what their government does. In 2016, on average across OECD countries participating in the International Social Survey Programme, 41% of tertiary-educated adults agreed with this sentiment compared to 28% of those with below upper secondary education. In Australia, 38% of tertiary-educated adults feel this way compared with 23% of those with below upper secondary education.

### 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. In Australia, 45% of 1-year-olds were enrolled in a formal ECEC programme (ISCED 0) in 2018, above the OECD average of 34%. Among 2-year-olds, the enrolment rate at ISCED 0 is 58% in Australia, 12 percentage points above 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 6 in Australia, 84% of 35 year-olds in 2018 are enrolled in ECEC programmes and primary education in Australia,
  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 Australia, 85% of children attending pre-primary education are enrolled in private institutions, compared to one in three children on average across OECD countries.
- 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 7 994 per child in Australia, slightly lower than the average across OECD countries (USD 9 079) (Figure 3).

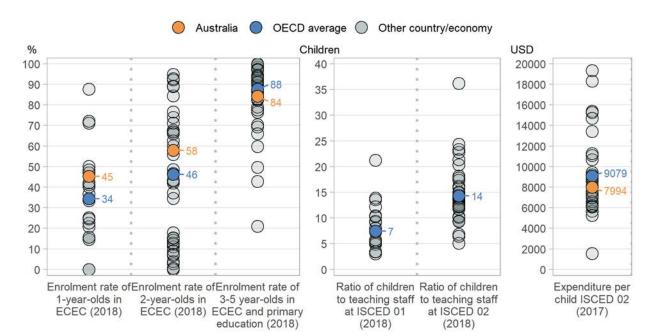


Figure 3. Snapshot of early childhood education and care

**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.

**Source:** OECD (2020), indicator B2. See Education at a Glance Database <a href="http://stats.oecd.org/">http://stats.oecd.org/</a> for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

# 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 2017, Australia spent more on primary to tertiary educational institutions per full-time student than the OECD average, investing a total of USD 13 272 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 2017, Australia spent USD 11 270 per student at non-tertiary level (primary, secondary and post-secondary non-tertiary education), USD 1 271 higher than the OECD average of USD 9 999. At tertiary level, Australia invested USD 20 436 per student, USD 4 108 more than the OECD average (Figure 4). Expenditure per student on private educational institutions is higher than on public institutions on average across OECD countries. However, this is not the case in Australia, where total expenditure on public institutions from primary to tertiary level amounts to USD 13 829 per student, compared to USD 12 044 on private ones.

- 0 |
- In most OECD countries, expenditure per upper secondary student varies according to programme
  orientation. Spending per student on upper secondary vocational programmes tends to be higher
  than for upper secondary general ones due to the higher cost of equipment, lower student-toteacher ratios, and work-based requirements of such programmes. On average across
  OECD countries, expenditure per student in upper secondary vocational programmes was
  USD 1 470 higher than in general programmes in 2017.
- Among OECD countries, Australia spent the seventh highest proportion of its gross domestic
  product (GDP) on primary to tertiary educational institutions. In 2017, Australia spent on average
  6% of GDP on primary to tertiary educational institutions, which is 1.1 percentage points higher
  than the OECD average. Across levels of education, Australia devoted an above average share of
  GDP at non-tertiary levels and an above average share at tertiary level (Figure 4).
- Tuition fees in public institutions in Australia are among the highest for a bachelor's programme across countries with available data. National students are charged USD 4 961 per year for a bachelor's degree 9% more than they paid on average in 2007. Public transfers to the private sector play an important role in the financing of tertiary education in Australia and in providing financial support to students. They account for 19% of the total funds devoted to tertiary educational institutions, the third highest share across OECD countries. While loans may reduce the upfront cost, students are required to repay them once they start work. In Australia, students' average debt on graduation is USD 10 326.

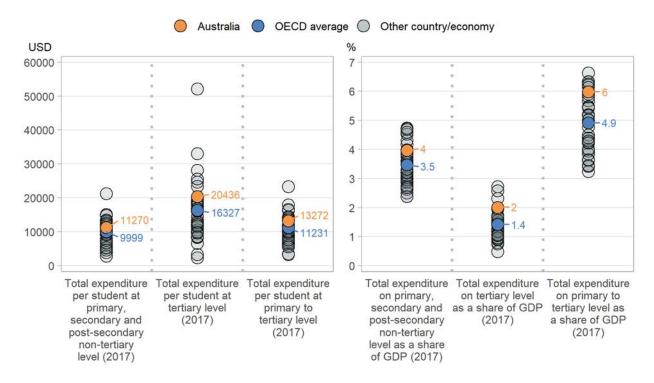


Figure 4. Snapshot of the financial resources invested in educational institutions

**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.

**Source:** OECD (2020), indicator C1 and C2. See Education at a Glance Database <a href="http://stats.oecd.org/">http://stats.oecd.org/</a> for more information and Annex 3 for notes (<a href="https://doi.org/10.1787/69096873-en">https://doi.org/10.1787/69096873-en</a>).

- Capital costs represent a higher than average share of expenditure on primary to tertiary institutions in Australia. At primary, secondary and post-secondary non-tertiary level, capital costs account for 10% of total spending on educational institutions, 2 percentage points above the OECD average. At the tertiary level, capital costs represent 16%, higher than the average across OECD countries of 10%.
- Compensation of teachers and other staff employed in educational institutions represents the largest share of current expenditure from primary to tertiary education. In 2017, Australia allocated 71% of its current expenditure to staff compensation, compared to 74% on average across OECD countries. Staff compensation tends to make up a smaller share of current expenditure on tertiary institutions due to the higher costs of facilities and equipment at this level. In Australia, staff compensation represents 60% of current expenditure on tertiary institutions compared to 76% at non-tertiary levels. On average across OECD countries, the share is 67% at tertiary level and 77% at non-tertiary level.

# 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 Australia, maximum salaries are 48% to 48% higher than minimum salaries at each level of education.
- Between 2005 and 2019, the statutory salaries of teachers with 15 years of experience and the most prevalent qualifications increased between 5-7% at primary and general lower and upper secondary levels, on average across OECD countries, despite a decrease of salaries following the 2008 financial crisis. In Australia, teachers' salaries at these levels increased by 18%.
- Teachers' actual salaries reflect their statutory salaries and additional work-related payments. Average actual salaries depend also on the characteristics of the teaching population such as their age, level of experience and qualification level. In Australia, teachers' average actual salaries amount to USD 59 736 at the pre-primary level (ISCED 02) (higher than the OECD average of USD 38 677), USD 59 346 at the primary level (higher than the OECD average of USD 43 942), USD 60 516 at the general lower secondary level (higher than the OECD average of USD 46 225) and USD 60 568 at the general upper secondary level (higher than the OECD average of USD 49 778) (Figure 5).
- Teachers' average actual salaries remain lower than those of tertiary-educated workers in almost all countries, and at almost all levels of education. Teachers' average actual salaries at pre-primary (ISCED 02), primary and general secondary levels of education are 80-94% of the earnings of tertiary-educated workers on average across OECD countries and economies. In Australia, the proportion ranges from 89% at pre-primary level (ISCED 02) 88% at primary level to 90% at lower secondary level and 90% at the upper secondary level (Figure 5).
- 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 Australia, teachers are required to teach 624 hours per year at pre-primary level,

880 hours per year at primary level, 820 hours at lower secondary level (general programmes) and 820 hours at upper secondary level (general programmes).

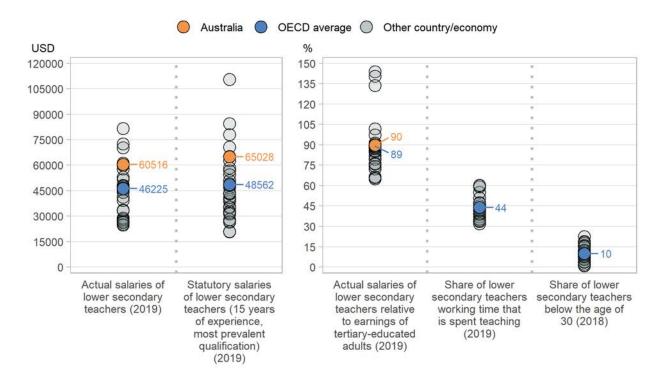


Figure 5. Snapshot of teachers' working conditions

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

Source: OECD (2020), indicator D3, D4 and D5. See Education at a Glance Database http://stats.oecd.org/for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

#### 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 Australia, the closures were localised from 24 March 2020. By 9 June 2020, schools had fully reopened. By the end of June, Australia had experienced 11 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 Australia attended classes for 1 000 hours per year on average at primary level and 1 000 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 25 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 Australia, the average class size at primary level is 23 students in public institutions, which is larger than the OECD average of 21. In public lower secondary institutions, there are 21 students per class in Australia, 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 (Al-Samarrai, Gangwar and Gala, 2020). In 2017, public spending on primary to tertiary education as a share of government expenditure in Australia was 12%, higher 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 34% of total expenditure in Australia in 2017, higher than the OECD average of 17%. At tertiary level, 64% of total expenditure comes from private sources, compared to 29% on average across OECD countries.

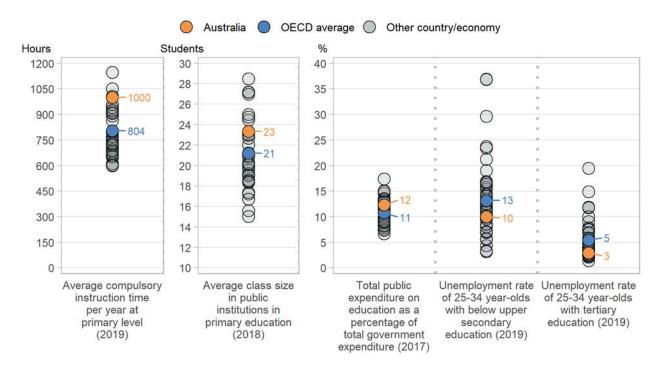


Figure 6. Snapshot of indicators relevant to the impact of COVID-19 on education

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.

Source: OECD (2020), indicator A3, D1, D2, and C4. See Education at a Glance Database http://stats.oecd.org/ for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

- 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. Australia, with a higher
  share of international students than in total across the OECD, may be more strongly affected than
  other countries.
- A decrease in the share of international students may have repercussions on the funding model of some higher education institutions, as foreign students may pay higher tuition fees than domestic ones. This is the case in Australia: international and foreign students pay USD 13 790 more per year in tuition for a bachelor's programme in a public institution than national students (USD 4 961).
- 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 Australia were unemployed compared to 3% of tertiary-educated 25-34 year-olds (Figure 6). In the aftermath of the 2008 financial crisis, the unemployment of young adults without an upper secondary education increased by 5 percentage points between 2008 and 2009 in Australia compared to 1.9 percentage points among those with tertiary education.

#### References

NICHD (2002), "Child Care Structure>Process>Outcome: Direct and indirect effects of caregiving quality on young children's development", Psychological Science, Vol. 13, pp. 199-206.

OECD (2020), Education at a Glance 2020: OECD Indicators, OECD Publishing, Paris.

OECD/Eurostat/UNESCO Institute for Statistics (2015), ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264228368-en.

Schleicher, A. and F. Reimers (2020), Schooling disrupted schooling rethought: How the Covid-19 https://read.oecd-ilibrary.org/view/?ref=133 133390pandemic is changing education, 1rtuknc0hi&title=Schooling-disrupted-schooling-rethought-How-the-Covid-19-pandemic-is-changingeducation (accessed on 3 June 2020).

UNESCO (2020),(Covid-19), School closures caused by Coronavirus https://en.unesco.org/covid19/educationresponse (accessed on 04 August 2020).

#### 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 to 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).

For general information on methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards. Definitions and Classifications (https://doi.org/10.1787/9789264304444-en).

Updated data can be found on line at http://dx.doi.org/10.1787/eag-data-en and by following the StatLinks 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.

Questions can be directed to:	Country note authors:
Marie-Helene Doumet	Etienne Albiser, Eric Charbonnier, Manon Costinot, Corinne
Directorate for Education and Skills	Heckmann, Bruce Golding, Yanjun Guo, Simon Normandeau, Daniel Sanchez Serra, Markus Schwabe and Giovanni Maria
marie-helene.doumet@oecd.org	Semeraro

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and any map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

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.

The use of this work, whether digital or print, is governed by the terms and conditions to be found at <a href="https://www.oecd.org/termsandconditions/">www.oecd.org/termsandconditions/</a>.



#### From:

# **Education at a Glance 2020**OECD Indicators

# Access the complete publication at:

https://doi.org/10.1787/69096873-en

# Please cite this chapter as:

OECD (2020), "Australia", in Education at a Glance 2020: OECD Indicators, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/910b1281-en

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <a href="http://www.oecd.org/termsandconditions">http://www.oecd.org/termsandconditions</a>.

