# Australia

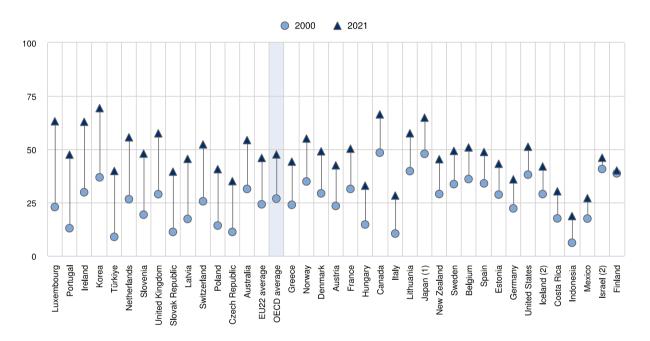
# The output of educational institutions and the impact of learning

- Educational attainment has been increasing throughout the OECD, in particular at tertiary level. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Australia, the share increased at an even faster pace, by 23 percentage points (from 31% in 2000 to 54% in 2021) (Figure 1). Australia is one of the 14 OECD countries where at least half of 25-34 year-olds have a tertiary education.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Australia, the share is 9%, which is lower than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Australia is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Australia was 27 percentage points higher than among those with below upper secondary attainment and 5 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. On average across OECD countries, the employment rate among 25-34 year-olds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Australia, 47% of women with below upper secondary attainment to 84% of those with tertiary attainment. In contrast, the figures were 70% and 91% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. This was also the case during the COVID-19 pandemic in Australia. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 2.1 percentage points, by 3.2 percentage points for workers with upper secondary attainment and by 3.1 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment for workers with below upper secondary attainment for workers with below upper secondary attainment fell by 2 percentage points, compared to 2020, by 2.9 percentage points for workers with upper secondary attainment and by 2.5 percentage points for workers with tertiary attainment.
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Australia, the earnings advantage of tertiary-educated workers was smaller than the OECD average. In 2020, workers with upper secondary or post-secondary non-tertiary attainment earned 18% more than those with below upper secondary attainment and those with tertiary attainment earned 55% more.

 National averages provide only an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Australia. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Canberra region (ACT), at 66%) and that with the lowest share (Tasmania, at 40%) was 26 percentage points. These subnational variations do not only reflect differences in education opportunities. To a large degree, they are due to economic conditions and internal migration patterns.

#### Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)

In per cent



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group). 2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021. **Source**: OECD (2022), Education at a Glance Database, <u>http://stats.oecd.org/</u>. See *Source* section for more information and Annex 3 for notes (<u>https://www.oecd.org/education/education-at-a-glance/EAG2022\_X3-A.pdf</u>).

# Access to education, participation and progress

- Compulsory education begins at the age of 6 and ends at the age of 17 in Australia. The range of ages for which at least 90% of the population are enrolled is longer than the period of compulsory education and goes from the age of 5 to the age of 17. This is similar to most other OECD countries, where more than 90% of the population are also enrolled for longer than the period of compulsory education.
- The age at which children enter early childhood education differs widely across countries. In Australia, early childhood education starts offering intentional education objectives for children younger than 1 and 45% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, but the rates range from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Australia, 56% of all children of this age are enrolled in early childhood education, which is below the OECD average.

#### 4 | AUSTRALIA- COUNTRY NOTE

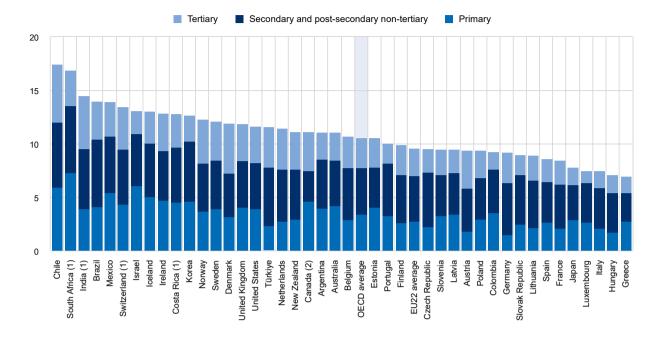
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Australia, the share is 51% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, but not in Australia where they make up 50% of all vocational upper secondary graduates, below the OECD average (55%).
- In Australia, 52% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (slightly below the OECD average of 54%). A subset of these students (36% of 18-24 year-olds) combine their education or training with some form of employment in Australia, compared to 17% on average across the OECD.
- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, including Australia, all vocational upper secondary graduates have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Australia are bachelor's students (58%). However, the next commonest enrolment level varies from country to country. In Australia, short-cycle tertiary students make up the second largest group of tertiary students at 21%. This is also the case in 13 other OECD countries, while in the remaining 26 countries with available data, master's students form the second largest group.
- At 32%, business, administration and law was the most popular field of study among new entrants into tertiary education in Australia, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in information and communication technologies (ICT), only a small fraction of entrants into tertiary education choose this field. In Australia, 88% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up 7% of new entrants into tertiary education. However, this is above the OECD average of 6%.

# Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Australia, the corresponding share was 6.1%.
- Public spending on primary to tertiary education was 11.1% of total government expenditure in Australia (Figure 2), higher than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (4.7%) is higher than the OECD average (4.4%).
- Spending on educational institutions as share of GDP or public budgets are important measures
  of the importance that countries place on education in their budgeting decisions. However, they do
  not show the total amount of funding per student because GDP levels, public budgets and student
  numbers vary from country to country. Across primary to tertiary education, OECD countries spend
  an average of USD 11 990 per student (in equivalent USD converted using PPPs for GDP) on
  educational institutions each year. In comparison, Australia spent USD 14 278 per student in 2019.
  Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 126 020, which
  was above the OECD average of USD 105 502.
- Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average around USD 9 923 per student at primary and USD 11 400 per student at secondary level. In Australia, the values are USD 11 340 at primary and USD 14 120 per student at secondary level.

# Figure 2. Composition of total public expenditure on education as a percentage of total government expenditure (2019)

#### Primary to tertiary education (including R&D), in per cent



1. Year of reference differs from 2019. Refer to the source table for more details.

2. Primary education includes pre-primary programmes.

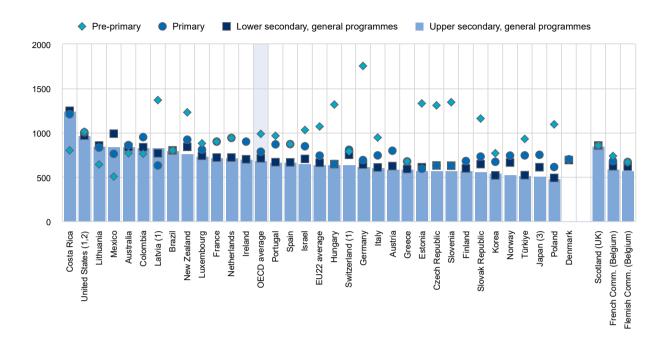
Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure. **Source**: OECD/UIS/Eurostat (2022), Table C4.1. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022 X3-C.pdf).

- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Australia is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Australia is USD 20 625 per year, which is about USD 9 300 higher than that of the primary level and USD 6 500 higher than that of the secondary level. It is above the OECD average, but similar to many other countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 32%, the share of research and development (R&D) expenditure makes up a slightly larger fraction of expenditure on tertiary education in Australia than on average across OECD countries (29%).
- Public funding dominates non-tertiary education (primary, secondary and post-secondary non-tertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 18% in Australia in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Australia, the share of private expenditure at tertiary level reached 66%, which was above the OECD average of 31%, after public-to-private transfers. These latter accounted for 18% of expenditure on educational institutions at this level.

# Teachers, the learning environment and the organisation of schools

- The salaries of teachers and school heads are an important determinant of the attractiveness of the teaching profession, but they also represent the single largest expenditure item in formal education. In most OECD countries, the statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach, and also with experience. Actual salaries also increase with the level of education. On average across OECD countries, actual salaries range from USD 41 941 at the pre-primary level to USD 53 682 at the upper secondary level. In Australia, actual salaries average USD 66 922 at pre-primary level and USD 63 079 at upper secondary level.
- Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In Australia, salaries increased similarly to the OECD average.
- The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases.
- Based on official regulations or agreements, annual teaching hours in Australia are 768 hours per year at pre-primary level, 860 hours at primary level, 838 hours at lower secondary level (general programmes) and 839 hours at upper secondary level (general programmes) (Figure 3).
- The duration of initial teacher education for primary and lower secondary teachers ranges from 2.5 years to 6.5 years across OECD countries. In Australia, initial teacher education typically lasts 4 years for prospective lower secondary teachers (general programmes). It is the same length for prospective primary teachers. As is the case in almost all OECD countries, a tertiary degree is awarded to prospective teachers of all levels of education upon completion of their initial teacher training.

# Figure 3. Teaching time of teachers, by level of education (2021)



Net statutory teaching time in hours per year, in public institutions

1. Actual teaching time (in Latvia except for pre-primary level).

2. Reference year differs from 2021. Refer to the source table for details.

3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education. **Source**: OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes (<u>https://www.oecd.org/education/education-at-a-glance/EAG2022\_X3-D.pdf</u>).

# Focus on tertiary education

- Wages also differ according to the field of study. In Australia, tertiary attainment in engineering, manufacturing and construction generates the highest earnings. Full-time full-year workers aged 25-64 with a tertiary degree in this field earn on average 63% more than workers with upper secondary attainment (all fields combined). In contrast, tertiary attainment in the field of education leads to much lower wages. Workers with this educational background earn on average 31% more than the wage of workers with upper secondary attainment (all fields combined).
- Despite the labour market advantages of a tertiary degree, many tertiary students do not graduate on time or do not graduate at all. In Australia, 33% of bachelor's students graduate within the theoretical programme duration. Across the OECD, the completion rate within the theoretical programme duration ranges from 12% to 69%. Completion rates three years after the theoretical programme duration are significantly higher in most countries and the differences between OECD countries somewhat narrower. In Australia, 66% of bachelor's students have graduated within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- In all OECD countries, tertiary completion rates are higher for women than for men. In Australia, 69% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 61% of men. On average across the OECD, there is little systematic

difference between the completion rates of public and private institutions, but the figures differ from country to country. In Australia, 66% of bachelor's students graduate from public institutions within three years after the end of the theoretical programme duration, while the share is 53% for private institutions.

- In most OECD countries including in Australia, tertiary-educated adults have higher rates of
  participation in non-formal education and training than those with a lower level of educational
  attainment. In 2021, 49% of 25-64 year-olds with tertiary attainment in Australia had participated
  in non-formal education and training in the twelve months prior to being surveyed, compared to
  19% of their peers with below upper secondary attainment.
- Entering tertiary education often means costs for students and their families, in terms of tuition fees, foregone earnings and living expenses, although they may also receive financial support to help them afford it. However, public policies on tuition fees and financial support for students differ greatly across countries. In Australia, comparatively high levels of tuition fees are combined with high levels of financial support for students. Public institutions charge tuition fees of USD 5 031 for national students at bachelor's level and of USD 9 006 at master's level.
- OECD countries have different approaches to providing financial support to students enrolled in tertiary education, but in general countries with the highest level of public transfers to the private sector are those that also tend to have the highest tuition fees. In six OECD countries and other participants, including Australia, at least 80% of national students receive public financial support in the form of student loans, scholarships or grants. In another six countries and other participants, less than 25% of students receive financial support. In these countries, public financial support is targeted on selected groups of students, such as those from socio-economically disadvantaged families.
- Enabling students to enrol on a part-time basis is an important way to facilitate access to tertiary
  education. Many part-time students would not be able to study full time, for example because they
  have child-care responsibilities or have to work to fund their studies. The share of part-time
  students at the tertiary level in Australia is 38%, above the OECD average (22%). Compared to
  2013, it has increased by 5 percentage points.

# References

OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <u>https://dx.doi.org/10.1787/69096873-en</u>.

OECD (2022), "Regional education", OECD Regional Statistics (database), https://dx.doi.org/10.1787/213e806c-en.

#### More information

For more information on Education at a Glance 2022 and to access the full set of Indicators, see: <a href="https://doi.org/10.1787/3197152b-en">https://doi.org/10.1787/3197152b-en</a>

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, See Annex 3 (<u>https://www.oecd.org/education/education-at-a-glance/EAG2022\_X3.pdf</u>).

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

Updated data can be found on line at <u>http://dx.doi.org/10.1787/eag-data-en</u> and by following the *StatLinks* and *statLinks* under the tables and charts in the publication.

Data on subnational regions for selected indicators are available in the OECD Regional Statistics (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

Explore, compare and visualise more data and analysis using the Education GPS:

#### https://gpseducation.oecd.org/

The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

#### Questions can be directed to:

Directorate for Education and Skills

EDU.EAG@oecd.org



From: Education at a Glance 2022 OECD Indicators

Access the complete publication at: https://doi.org/10.1787/3197152b-en

#### Please cite this chapter as:

OECD (2022), "Australia", in Education at a Glance 2022: OECD Indicators, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/6fbed98f-en

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 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 <u>http://www.oecd.org/termsandconditions</u>.

