Japan

Highlights

- The proportion of students enrolled in vocational education and training (VET) at upper secondary level in Japan, 22%, is less than the OECD average of 42%.
- If current graduation patterns continue, 67% of young adults in Japan will graduate from tertiary education for the first time by the age of 30, compared to 38% on average across OECD countries.
- The majority of early childhood education and care is provided by the private sector in Japan, where 76% of children in pre-primary education are enrolled in private institutions, compared to about one in three children on average across OECD countries.
- In 2017, Japan spent 4% of its Gross Domestic Product (GDP) on primary to tertiary educational institutions, 0.9 percentage points lower than the OECD average.
- Between 2005 and 2019, primary and secondary teachers’ statutory salaries fell in Japan by 8% while they increased by 5-7% on average across OECD countries.
- Classes in Japan are larger than in most OECD countries. At lower secondary level, there are 32 students per class compared to 23 students on average across OECD countries.

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.
- VET is an important part of upper secondary education in most OECD countries. On average, 22% of all upper secondary students opt for VET programmes in Japan, a lower proportion than the OECD average of 42% (Figure 1). Certain fields of study are more common than others at this level. In Japan, the most common broad field is engineering, manufacturing and construction with 43% 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 that context, the combination of learning in school and in the work environment through combined school- and work-based programmes offers numerous advantages. In Japan, these programmes are not recognized by the central government and are managed at regional and local level. All students in upper secondary vocational education in Japan are enrolled in school based programmes where at least 75% of the curriculum is taught within the school environment.
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.


- 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 Japan, 98% of 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

- 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 Japan, the share increased by 6 percentage points during this period, lower than the average increase across OECD countries (9 percentage points). However, a larger share of adults have a tertiary qualification in Japan than in many other OECD countries. In 2019, 62% of 25-34 year-olds had a tertiary degree in Japan 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 Japan, 64% of 25-34 year-old women had a tertiary qualification compared to 59% of their male peers, while on average across OECD countries the shares are 51% of younger women and 39% of younger men.

- If current patterns 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 Japan, 67% of young adults will graduate from tertiary education by that age and many of them will graduate from a bachelor’s or equivalent level.
Excluding international students, if current graduation patterns continue, 22% of adults in Japan are expected to graduate from a short-cycle tertiary programme and 44% from a bachelor’s before the age of 30, compared to 8% and 31% respectively on average across OECD countries. Policies to promote practical vocational education in Japan, such as the establishment of new types of universities and colleges in April 2019, may increase opportunities for upper secondary vocational graduates’ to transition into tertiary education. These new tertiary education institutions, senmonshoku daigaku (professional and vocational universities) and senmonshoku tanki-daigaku (professional and vocational junior colleges), train and educate specialist professionals through the delivery of short-cycle tertiary or bachelor programmes (MEXT, 2020[1]).

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 Japan, the share of foreign or international students increased from 3% in 2014 to 5% in 2018. Meanwhile 1% of Japanese 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 Japan to study, the most popular destination country is the United States.

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

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 Japan, 92% of 3-5 year-olds are enrolled in ECEC programmes and primary education in Japan, compared to 88% on average across OECD countries. However, children younger than 3 years of age are less likely to be enrolled in an ECEC programme: 7% of 2-year-olds participate in formal ECEC (ISCED 0) in Japan, compared to 46% on average across OECD countries (Figure 3). However, enrolment in other registered ECEC services is more common in Japan: In 2018, 50% of 2-year-olds attended such settings.

- Public provision of early childhood education and care is an important factor in ensuring broad access to affordable ECEC. 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 Japan, 76% of children attending pre-primary education are enrolled in private institutions, compared to about one in three children on average across OECD countries. Comprehensive public aids are provided to private ECEC institutions and households to secure access to affordable ECEC centres in Japan. In addition, since October 2019, free early childhood education and care is a universal legal entitlement for children age 3 to 5.

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.


- 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 Japan, the ratio of children for every full-time equivalent teacher working in pre-primary education (ISCED 02) is 14 compared to 14 among on average 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 averaged USD 7 609 per child in Japan, lower than the average across OECD countries (USD 9 079) (Figure 3).

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, Japan spent more on primary to tertiary educational institutions per full-time student than the OECD average, investing a total of USD 11 896 per student compared to USD 11 231 on average across OECD countries (Figure 4).
- Among OECD countries, Japan was among the countries that spent the lowest proportion of its gross domestic product (GDP) on primary to tertiary educational institutions. In 2017, Japan spent 4% of GDP on primary to tertiary educational institutions, which is 0.9 percentage points lower than the OECD average. Across levels of education, Japan devoted a below average share of GDP at non-tertiary levels and a similar share at tertiary level (Figure 4).
- Tuition fees in public institutions in Japan are among the highest for a bachelor’s programme across countries with available data: Students are charged USD 5 090 per year for a bachelor’s degree. While loans may reduce the upfront cost, students are required to repay the cost of their education once they start work. In Japan, students’ average debt on graduation is USD 27 489.

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

![Graph showing 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.

• Capital costs represent a higher than average share of expenditure in Japan. At primary, secondary and post-secondary non-tertiary level, capital costs account for 11% of total spending on educational institutions, 4 percentage points above the OECD average. At the tertiary level, capital costs represent 12%, 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. 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 Japan, staff compensation represents 58% of current expenditure on tertiary institutions compared to 83% 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. 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, for each level of education. In Japan, maximum salaries are 106% to 112% higher than minimum salaries at primary and secondary education levels.

• Between 2005 and 2019, the statutory salaries of teachers with 15 years of experience and the most prevalent qualifications increased by 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 Japan, teachers’ salaries at these levels decreased by 8%.

• 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, to 778 hours at primary level, 712 hours at lower secondary level (general programmes) and 680 hours at upper secondary level (general programmes). In Japan, teachers are required to teach, 747 hours per year at primary level, 615 hours at lower secondary level (general programmes) and 511 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 Japan spend 35% 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 Japan, 19% of primary teachers are considered young teachers (under the age of 30), which is higher than 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 Japan, the proportion of young teachers decreases to 18% at lower secondary level and to 13% at upper secondary level (Figure 5). Between 2005 and 2018, the proportion of young teachers at upper secondary level increased by 4 percentage points in Japan, whereas it fell by 4 percentage points on average across OECD countries during this period.
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 many universities have closed for several months across all OECD and partner countries. In Japan, school closures were nationwide from 2 March 2020 and lasted about 3 weeks. Many schools closed again after spring break following the state of emergency declared nationwide on 7 April 2020. Schools started progressively reopening in the second half of May, and were almost fully open by end of June (MEXT, 2020[2]). Although nationwide closures were not mandatory for higher education institutions in Japan, about 90% of respondents to a recent government survey of higher education institutions during the pandemic reported that they had postponed the start of the spring semester (MEXT, 2020[3]).

- Excluding the non-compulsory part of the curriculum, students in public institutions in Japan attended classes for 770 hours per year on average at primary level and 893 hours at lower secondary level in 2019. Each week of school closure therefore represents about 19 hours of compulsory instruction time at the primary level and 22 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, including Japan, have conducted distance learning to ensure the continuity of education. In Japan, about 90% of respondents to a recent government survey of higher education institutions during the pandemic reported that they had conducted distance learning in some form (MEXT, 2020[4]).

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.

In most OECD countries, 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 Japan, the average class size at primary level is 27 students in public institutions, which is larger than the OECD average of 21. In public lower secondary institutions, there are 32 students per class in Japan, compared to 23 students per class on average across OECD countries. However, the need to reduce class sizes 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 social distancing requirements are considered as only a guide in Japan, schools have implemented comprehensive safety and hygiene measures including face masks, ventilation, and frequent hand-washing.

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 public funds are injected into the economy and the health sector. In 2017, public spending on primary to tertiary education as a share of government expenditure in Japan was 8%, lower than the OECD average of 11% (Figure 6). Some countries have provided emergency financial responses to educational systems to help them cope through the crisis. To ensure educational continuity, the Japanese government has committed additional budget to support schools and students in preparing for distance learning, secure additional human resources in compulsory primary and lower secondary general education, purchase hygiene and safety equipment, and support tertiary students in financial difficulty (MEXT, 2020[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.

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, private sources accounted for 49% of total expenditure in Japan in 2017, higher than the OECD average of 17%. At tertiary level, 69% of total expenditure comes from the private sector, compared to 29% on average across OECD countries. However, recent measures have been implemented in 2019-20 to reduce the share of private funds at these levels, in particular legal entitlement to free ECEC for children aged 3-5 years and financial support for disadvantaged students at tertiary level.

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. Japan, with a lower share of international students than in total across the OECD, may be less 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 not the case in Japan: International and foreign students pay the same tuition for a bachelor's programme in a public institution than national students (USD 5,090).

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 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).


Updated data can be found on line 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/

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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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