

# Education at a Glance 2022

OECD Indicators



# Italy

## Highlights

- Between 2000 and 2021, educational attainment increased at a slower pace than on average across OECD countries. The share of 25-34 year-olds with a tertiary education rose by 18 percentage points (from 10% in 2000 to 21% in 2011 and 28% in 2021). Italy remains one of the 12 OECD countries where tertiary education is still less common than upper secondary or post-secondary non-tertiary education as the highest level of attainment among 25-34 year-olds.
- Educational attainment also affects wage levels but the earnings gap is lower in Italy than on average across OECD countries. On average across the OECD, 25-64 year-old workers with tertiary attainment earn about twice as much as those without an upper secondary education. In 2018, workers with tertiary attainment earned 76% more than those with below upper secondary attainment.
- There are significant differences of labour-market benefits depending on the field of study among tertiary-educated adults. In 2021, employment rates in Italy were highest among tertiary-educated individuals who studied health and welfare with 89% and lowest among those who studied arts at 69%. Among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 1.5 percentage points lower than among those 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 Italy, 53% of bachelor's students graduate within three years after the end of the theoretical programme duration, compared to 68% on average across the OECD.
- Public policies on tuition fees and financial support for students differ greatly across countries. In Italy, mid-range levels of comparatively low levels of tuition fees are combined with mid-range levels of financial support for students. Public institutions charge tuition fees of USD 1 985 for national students at bachelor's level and of USD 2 221 at master's level, while 38% of all tertiary students receive financial support.
- In Italy, 92% of all 3-5 year-olds are enrolled in early childhood education, which is above the OECD average.
- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in Italy. Lower secondary teachers in Italy earn 27.4% less than other tertiary-educated workers. In contrast school head actual salaries in Italy are much higher than the earnings of other tertiary educated workers, similarly to most OECD countries).
- During the pandemic, teacher absences also affected the regular operation of schools, whether due to COVID-19 infections or because of precautionary quarantine. In Italy, teachers' absences increased strongly (by more than 5%) between 2019/20 and 2021/22, mostly because of the impact of the COVID-19 pandemic.

- In school year 2022, national programmes to support students affected by the pandemic were implemented in Italy. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included, adjustments to subject curricula, psychosocial and mental health support to students and increased instruction time through summer schools.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Italy has responded to the pandemic with an enhanced provision of digital tools at school, hybrid learning, in-service digital training to teachers and digital training to students.
- The challenges related to the COVID-19 pandemic have created additional financial pressure on education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to tertiary level in Italy increased strongly (by more than 5%, in nominal terms).

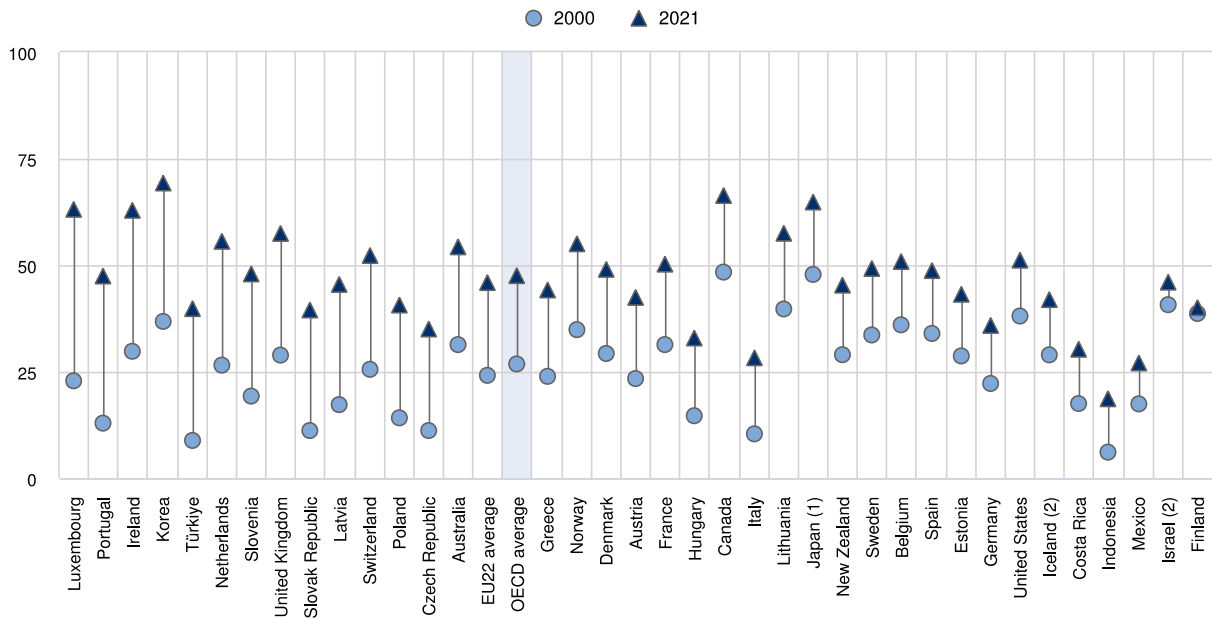
### The output of educational institutions and the impact of learning

- In Italy, the share of 25-64 year-olds that have a tertiary education reached 20% in 2021, while this share was twice as high on average across OECD countries (41%). In addition, 43% of adults had reached upper secondary or post-secondary non-tertiary education as their highest level of educational attainment (slightly higher than the OECD average of 42%), while the remaining 37% had not reached an upper secondary qualification.
- Educational attainment has been increasing throughout the OECD, in particular at tertiary level and among younger adults. Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Italy, the share also increased albeit at a slower pace, by 18 percentage points (from 10% in 2000 to 21% in 2011 and 28% in 2021) (Figure 1). Italy remains one of the 12 OECD countries where tertiary education is still less common than upper secondary or post-secondary non-tertiary education as the highest level of attainment among 25-34 year-olds.
- 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 Italy, the share is 23%, which is higher than the OECD average.
- Higher educational attainment is often associated with better employment prospects and Italy is no exception. In 2021 the employment rate among 25-34 year-olds with tertiary education in Italy was 20 percentage points higher than among those with below upper secondary attainment and 6 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 Italy, 31% of women with below upper secondary attainment were employed in 2021, compared to 70% of those with tertiary attainment. In contrast, the figures were 64% and 71% for men.
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. However, this was not the case during the COVID-19 pandemic in Italy. Between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment fell by 0.5 percentage points, by 0.2 percentage points for workers with upper

secondary attainment and by 0.4 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment increased by 0.6 percentage points, compared to 2020 by 0.1 percentage points for workers with upper secondary attainment and decreased by 1.2 percentage points for workers with tertiary attainment.

**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, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-A.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf)).

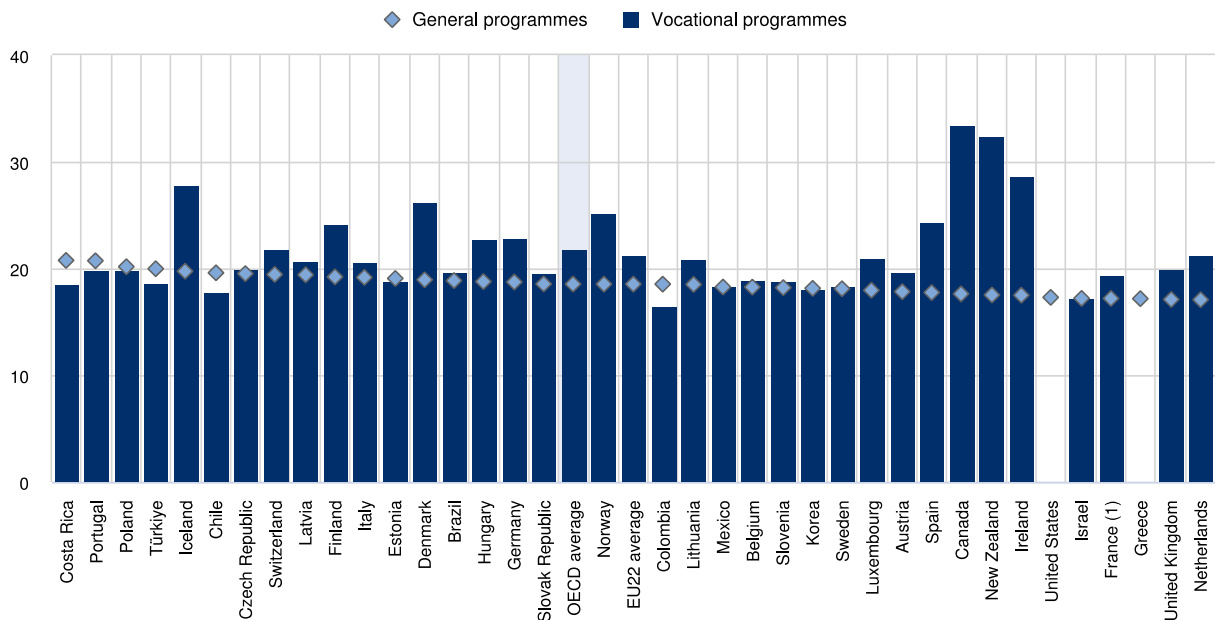
- Educational attainment affects not just employment prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Italy, the earnings advantage of tertiary-educated workers was smaller than the OECD average. In 2018, workers with upper secondary attainment earned 27% more than those with below upper secondary attainment and those with tertiary attainment earned 76% 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 Italy. In 2021, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Lazio, at 26%) and that with the lowest share (Sicily, at 15%) was 11 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.

## Access to education, participation and progress

- Compulsory education begins at the age of 6 and ends at the age of 16 in Italy. 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 3 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 Italy, early childhood education starts offering intentional education objectives at age 3 and 5% 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 Italy, 92% of all children of this age are enrolled in early childhood education, which is above the OECD average.
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 19 years in Italy. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Italy, the average age of graduation from vocational upper secondary education is 21 years, which is slightly below the OECD average at 22 years (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Italy, the share is 61% (OECD average 55%). In contrast, men are overrepresented among graduates of vocational upper secondary programmes in most OECD countries, as is the case in Italy where they make up 61% of all vocational upper secondary graduates, above the OECD average (55%).
- In Italy, 54% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (the same as the OECD average). A subset of these students (3% of 18-24 year-olds) combine their education or training with some form of employment in Italy, 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, all vocational upper secondary graduates have direct access to tertiary education. In Italy, 81% of graduates from vocational upper secondary programme have direct access to tertiary education.
- At 20%, arts and humanities was the most popular field of study among new entrants into tertiary education in Italy, in contrast to most OECD countries where the broad field of business, administration and law was most popular. 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 Italy, 88% of 25-64 year-olds with a tertiary ICT qualification are employed, but ICT students make up only 2% of new entrants into tertiary education. This is below the OECD average of 6%.

Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020)

In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

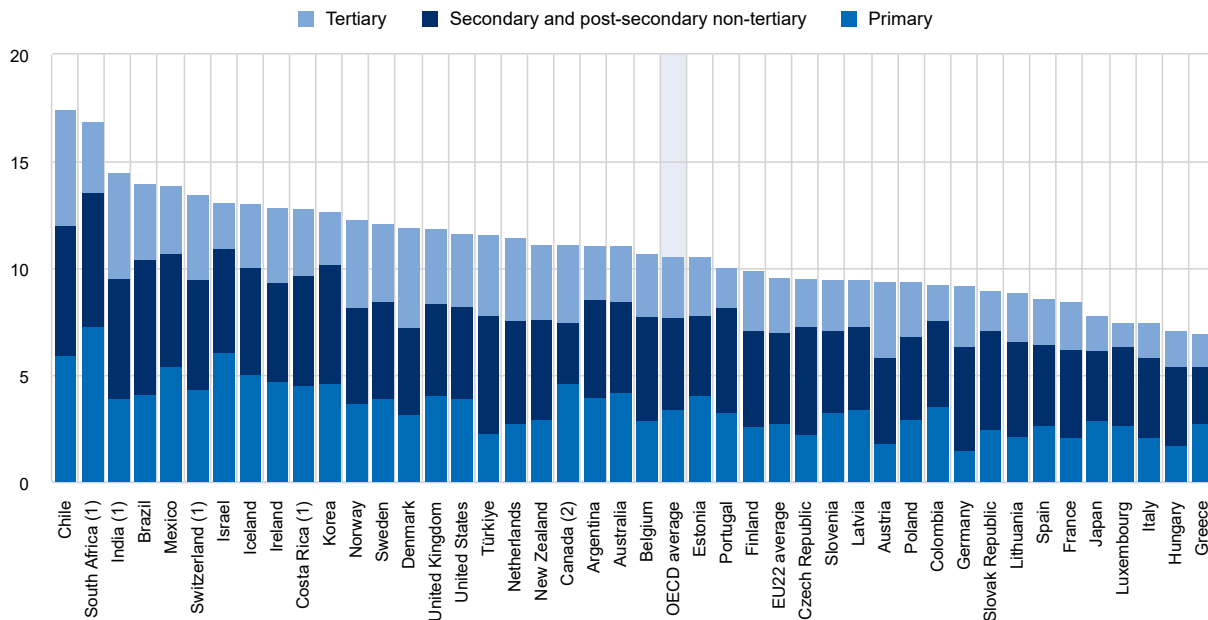
Source: OECD/Eurostat/UIS (2022), Tables B3.1 and B3.2. See Source section for more information and Annex 3 for notes ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-B.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-B.pdf)).

## 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 Italy, the corresponding share was 3.8%. Between 2008 and 2019, expenditure on educational institutions as a share of GDP fell by 0.1 percentage points.
- Public spending on primary to tertiary education was 7.4% of total government expenditure in Italy (Figure 3), lower than the OECD average (10.6%). Also, relative to GDP, public spending on primary to tertiary education (3.6%) is lower 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, Italy spent USD 10 902 per student in 2019. Its cumulative expenditure on educating a student from the age of 6 to 15 was USD 105 754, which was slightly above the OECD average of USD 105 502.

**Figure 3. 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](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf)).

- 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 Italy, the values are USD 10 570 at primary and USD 10 558 per student at secondary level.
- In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Italy is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Italy is USD 12 177 per year, which is about USD 1 600 higher than that of the primary level and USD 1 600 higher than that of the secondary level. It is among the lowest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 33%, the share of research and development (R&D) expenditure makes up a larger fraction of expenditure on tertiary education in Italy 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 6% in Italy in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Italy, the share of private expenditure at tertiary

level reached 37%, which was slightly above the OECD average of 31%, after public-to-private transfers. These latter accounted for 12% of expenditure on educational institutions at this level.

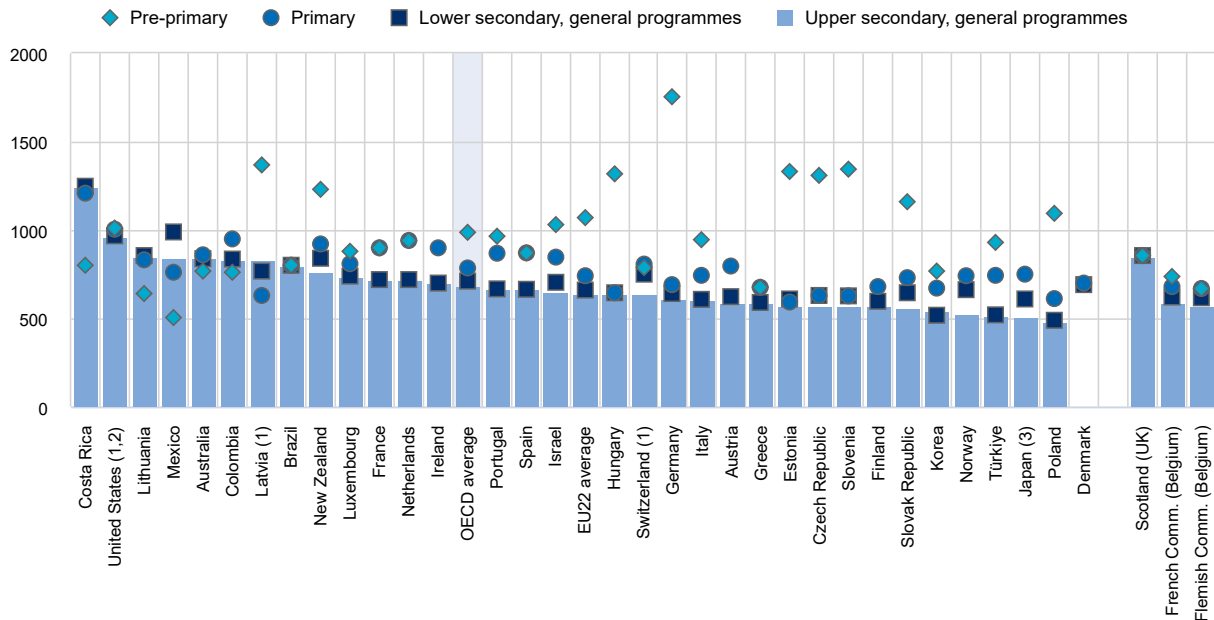
## Teachers, the learning environment and the organisation of schools

- 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 Italy, actual salaries average USD 40 008 at pre-primary level and USD 45 870 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 Italy, salaries increased less than the OECD average, by 1%.
- Teachers' average actual salaries remain lower than earnings of tertiary-educated workers in almost all OECD countries, and at almost all levels of education. This is also the case in Italy. Lower secondary (general programme) teachers in Italy earn 27.4% less than other tertiary-educated workers. In contrast school head actual salaries in Italy are much higher than the earnings of other tertiary educated workers. This is similar to most OECD countries, where school heads tend to earn well above the average earnings of tertiary educated workers.
- 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. This is also the case in Italy.
- Based on official regulations or agreements, annual teaching hours in Italy are 945 hours per year at pre-primary level, 744 hours at primary level, 608 hours at lower secondary level (general programmes) and 608 hours at upper secondary level (general programmes) (Figure 4).
- 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 Italy, initial teacher education typically lasts 6 years for prospective lower secondary teachers (general programmes). It is shorter for prospective primary teachers, at 5 years. 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 4. 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 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3-D.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-D.pdf)).

## Focus on tertiary education

- Among 25-64 year-olds in Italy, master's degrees are the most common tertiary attainment at 14% of the population followed by bachelor's degrees at 5% and short-cycle tertiary qualifications (higher level technical education) with less than 1%. This is different from the OECD average, where bachelor's degrees are most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries and other participants, only a small fraction of the population holds a doctoral degree: the share is 1% in Italy.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Italy were highest among tertiary-educated individuals who studied health and welfare with 89% and lowest among those who studied arts at 69%. Among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 1.5 percentage points lower than among those 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 Italy, 21% 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 Italy, 53% 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 Italy, 56% of women graduated within three years after the end of the theoretical programme duration at bachelor's level, compared to 50% of men.
- In most OECD countries including in Italy, 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, 18% of 25-64 year-olds with tertiary attainment in Italy had participated in non-formal education and training in the four weeks prior to being surveyed, compared to 2% 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 Italy, mid-range levels of tuition fees are combined with mid-range levels of financial support for students. Public institutions charge tuition fees of USD 1 985 for national students at bachelor's level and of USD 2 221 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, 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. Italy falls between the two groups, with 38% of students receiving financial support.
- Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions, but this figure masks large differences between countries. In Italy, 18% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.
- Staff at tertiary level tend to start their careers relatively late due to the length of the education they need to qualify. In Italy, only 1% of academic staff are aged under 30, below the OECD average (8%). In contrast, the share of academic staff aged 50 or over is 56%, which is above the OECD average by 16 percentage points.

## COVID-19: The second year of the pandemic

- Teacher absences also affected the regular operation of schools during the pandemic, whether due to COVID-19 infections or because of precautionary quarantine. However, only approximately half of countries collected information on teachers' absences. Italy collected such data and, in contrast to many other countries, teachers' absences increased strongly (by more than 5%) between 2019/20 and 2021/22. This increase was mainly attributable to the impact of the COVID-19 pandemic.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Italy has conducted studies to evaluate the effects of the pandemic and its impact on primary, lower secondary, upper secondary general and vocational education. The assessments covered mathematics and reading.

- In school year 2022, national programmes to support students affected by the pandemic were implemented in Italy at pre-primary, primary, lower secondary, upper secondary general and vocational and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included, adjustments to subject curricula, psychosocial and mental health support to students and increased instruction time through summer schools. The government does not plan to assess the effectiveness of these programmes.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Italy has responded to the pandemic with an enhanced provision of digital tools at school, hybrid learning, in-service digital training to teachers and digital training to students.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary to tertiary level in Italy increased strongly (by more than 5%, in nominal terms).
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. In Italy, a similar pattern emerged. From 2019 to 2020, the share of adults participating in a formal or non-formal education and training activity fell by 1 percentage point. From 2020 to 2021, it increased by 3 percentage points and has thus increased above pre-pandemic levels.
- Young adults who are not in employment, education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing up to 31.7% during the COVID-19 pandemic in 2020, the share of 25-29 year-olds who are NEET in Italy kept increasing up to 34.6% in 2021. This share decreased between 2019 and 2020 from 28.5% to 27.4% and increased up to 30.1% in 2021 among 20-24 year-olds.
- The share of NEET varies according to gender, as it is higher among young women than among their male peers in many OECD countries. In Italy, the gender gap is relatively low among 15-19 year-olds (12.3% for women and 12.7% for men) and 20-24 year-olds (30.5 for women and 29.7% for men), but it widens among 25-29 year-olds where 39.2% of women and 30.3% of men are NEET.

## References

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


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:** <https://doi.org/10.1787/3197152b-en>

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 ([https://www.oecd.org/education/education-at-a-glance/EAG2022\\_X3.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2022_X3.pdf)).

For general information on the 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  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.

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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.

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