One of the 20 underlying principles of the European pillar of social rights seeks to ensure that ‘everyone has the right to quality and inclusive education, training and lifelong learning in order to maintain and acquire skills that enable them to participate fully in society and manage successfully transitions in the labour market’. Indeed, at least a basic level of education is desirable, so that everyone has the opportunity to participate in economic and social life, while reducing the risk of falling into poverty or social exclusion. From a broader perspective, the promotion of education and training is also considered crucial to driving forwards both economic and social progress; this is particularly the case in a globalised and knowledge-driven economy, where a highly-skilled workforce is necessary to compete in terms of productivity and innovation.

Education, vocational training and lifelong learning play a vital role in the economic and social strategies of the European Union (EU). This chapter presents data following the natural progression of pupils and students through different levels of the education system (according to the international standard classification of education (ISCED) — see box for more details), before analysing transitions from education into the labour market. Data are presented for: the share of children under the age of three in formal care; participation rates in early childhood education; gender gaps for students in vocational training; the share of the population with a tertiary degree; early leavers from education and training; the share of young people neither in employment nor
International standard classification of education (ISCED)

As national education systems vary in terms of structure and curricular content, it can be difficult to make spatial or temporal comparisons when assessing the performance of different systems. In order to interpret the inputs, processes and outcomes of education systems, official statistics on education are compiled according to the international standard classification of education (ISCED). It is used to assemble a wide variety of statistics, covering topics such as enrolments and attendance, educational attainment, or human or financial investment.

ISCED is the reference classification for organising formal education programmes and related qualifications by education levels and fields into internationally agreed categories. The most recent version of the classification — ISCED 2011 — was adopted by the UNESCO General Conference in November 2011 and identifies the following levels of education:

- early childhood education — ISCED level 0;
- primary education — ISCED level 1;
- lower secondary education — ISCED level 2;
- upper secondary education — ISCED level 3;
- post-secondary non-tertiary education — ISCED level 4;
- short-cycle tertiary education — ISCED level 5;
- bachelor’s or equivalent level — ISCED level 6;
- master’s or equivalent level — ISCED level 7;
- doctoral or equivalent level — ISCED level 8.

The term tertiary education is used to refer to levels 5-8.

In 2016, there were 110 million children, pupils and students enrolled across the EU in all levels of education from early childhood education to doctoral studies.

Early childhood education (and care)

As one of its 20 underlying principles, the European pillar of social rights seeks to ensure that 'children have the right to affordable early childhood education and care of good quality’. Research has shown that early experiences of children are often critical for their long-term development, with early childhood and primary education thought to play a key role in potentially redressing life chances through tackling inequalities and raising proficiency in basic competences.

Early childhood education (ISCED level 0) is typically designed with a holistic approach to support children’s cognitive, physical, social and emotional development, with two categories of programmes: early childhood educational development (level 01) and pre-primary education (level 02). Primary education (ISCED level 1) programmes are typically designed to provide students with fundamental skills in reading, writing and mathematics, in other words developing literacy and numeracy.

Almost 3 out of every 10 children under the age of three in the EU attended formal child care

One of the first opportunities children have to develop learning, critical thinking and collaborative skills is if they attend formal child care. In 2016, almost three tenths (29.5 %) of children in the EU-28 under the age of three participated in formal child care; this indicator forms part of a scoreboard for the European pillar of social rights, designed to build a more inclusive and fairer EU.

Figure 1 shows the distribution of this ratio by degree of urbanisation, with a higher proportion of children...
living in cities (31.7%) participating in formal child care than those living in towns and suburbs (28.6%) or rural areas (26.8%). There were however considerable differences between EU Member States in terms of the propensity to make use of formal child care for children under the age of three. Higher participation rates were most often recorded in northern and western regions of the EU, whereas children under the age of three from southern and eastern regions were more likely to remain at home or with the extended family/friends (rather than attend formal child care).

Contrary to the pattern for the EU as a whole, more children under the age of three living in the rural areas of Denmark (82.4%), the United Kingdom (66.1%) and France (53.7%) participated in formal child care, in comparison with their peers living in cities, or towns and suburbs. A similar pattern was repeated in Germany (38.0%) and Finland (36.4%), where slightly more than one third of all children less than the age of three living in rural areas participated in formal care, as well as in Slovenia where the participation rate in rural areas was just 2.6%. Elsewhere, children under the age of three living in cities and in towns and suburbs were more likely than children living in rural areas to be enrolled in formal care, possibly reflecting, at least in part, a lack of care services in remote areas with low levels of population density.

More than 95% of children in the EU between the age of four and the age for starting compulsory primary education participated in early childhood education.

The education and training 2020 (ET 2020) strategic framework set a headline target, insofar as by 2020 at least 95% of children between the age of four and the age for starting compulsory primary education should...
participate in early childhood education; note that in contrast to child care, early childhood education has a specific educational component. In 2016, this ratio stood at 95.3 % across the EU-28 — in other words the headline target had already been reached.

An analysis by NUTS level 2 regions reveals that in 2017 there were 85 out of 226 regions — as shown by the yellow shades in Map 1 — where the early childhood education participation rate for children between the age of four and the age for starting compulsory primary education was less than 95.0 %. These regions were located in every region of Bulgaria, Czechia (except Střední Morava), Greece, Croatia, Poland (except the capital city region of Warszawski stoleczny), Romania, Slovenia, Slovakia and Finland (except the island region of Åland), as well as Estonia and Cyprus (both single regions at this level of detail) and Lithuania (only national data available).
Map 1: Participation rates in early childhood education, 2017(% share of children between the age of four and the age of starting compulsory primary education, by NUTS 2 regions)

Source: Eurostat (educ_uoe_enra17) and (educ_uoe_enra10)
During the period 2014-2017, there was a rapid increase in the proportion of children attending early childhood education in the vast majority of Greek regions.

Figure 2 extends the analysis of participation rates in early childhood education by looking in more detail at recent developments: it provides information for those EU regions with the highest increases and the largest reductions — in percentage point (pp) terms — during the period 2014-2017. There was a rapid increase in the take-up of early childhood education across Greece, with 7 out of the 10 highest increases in the EU being recorded in Greek regions, including:

- Notio Aigaio in the southern Aegean, where the participation rate of children between the age of four and the age of starting compulsory primary education in early childhood education rose by its biggest margin, up 19.4 pp;
- Attiki, the capital city region, up 16.2 pp;
- Kentriki Makedonia in the north that includes the city of Thessaloniki, up 12.1 pp.

At the other end of the range, many of the regions that had participation rates for early childhood education below 95 % also reported that their participation rates were in decline during the period 2014-2017, suggesting they were unlikely to attain the 2020 target. This was particularly the case for:

- five out of the six Bulgarian regions (with the participation rate also falling in Yugozapaden — the capital city region);
- Bratislavský kraj, the Slovakian capital city region;
- Scotland in the United Kingdom (data are only available for NUTS level 1), which had the biggest reduction, as its participation rate fell by 19.5 pp, the only region across the EU to record a double-digit reduction.
Vocational education

Vocational education and training (VET) is designed for students to acquire the knowledge, skills and competencies specific to a particular occupation or trade. Policymakers have shown a growing interest in this type of education as it has the potential to help lower youth unemployment rates and facilitate the transition of young people from education into the labour market, especially when such programmes teach specific skills that are required by employers.

In 2016, there were 22.0 million students enrolled in the EU’s upper secondary education establishments

Upper secondary education (ISCED level 3) typically ends when students are aged 17 or 18 years. These programmes are designed to prepare students for tertiary education and/or to provide them with the skills that are relevant for employment. In 2016, there were 10.8 million upper secondary students across the EU-28 participating in vocational education programmes, equivalent to almost half (49.3 %) of the total number of upper secondary students; the remaining 50.7 % participated in general upper secondary education programmes that were more academic in nature.

The proportion of upper secondary students participating in vocational education programmes varied considerably across NUTS level 2 regions. Some of these differences may be attributed to the availability of and perceptions concerning vocational education and training: for example, in Czechia, the Netherlands and Austria, this type of education is widely seen as an effective way of helping to facilitate an individual’s transition into the labour market. In 2017, there were 24 NUTS level 2 regions across the EU where more than 7 out of 10 upper secondary students participated in vocational education, they included: seven out of eight regions from Czechia, with the highest share across all NUTS level 2 regions recorded in Severozápad (76.7 %); six regions...
from the Netherlands and five regions from Austria.

By contrast, the relative importance of vocational education programmes in relation to the total number of students following upper secondary education was generally quite low in capital city regions, reflecting the concentration of academic establishments in these cities. Indeed, less than one quarter of all upper secondary students followed vocational programmes in:

- the north-western Hungarian region of Közép-Dunántúl (24.0 %);
- two regions from Greece, the mainland region of Peloponnisos (24.8 %) and the capital city region of Attiki (23.4 %);
- Cyprus, which had the lowest share in the EU (16.7 %; national data at this level of detail).

While 54.0 % of upper secondary male students in the EU followed a vocational programme, the corresponding share among upper secondary female students was lower, at 44.5 %

There was a gap between the sexes in terms of their respective participation in vocational education programmes: in 2016, young men in the EU were more likely to follow a vocational programme (54.0 % of all male students in upper secondary education), while young women were more likely to follow a more academic, general programme (55.5 % of all female students in upper secondary education).

The first half of Figure 3 shows those NUTS level 2 regions with the highest and lowest ratios of male to female students in upper secondary education following vocational programmes. For example, there were more than three times as many male as female students in Cyprus following a vocational programme in 2017, while ratios of between two and three times as many male as female students were recorded in five Greek regions (the biggest gender gap being registered in Ionia Nisia), two eastern German regions (Brandenburg and Sachsen) and the southern Italian region of Abruzzo.

By contrast, there were 30 regions where the number of female students enrolled in a vocational programme of upper secondary education was higher than that recorded among male students; these regions were exclusively located across Belgium, the Netherlands, Finland, Sweden and the United Kingdom. In 2017, the biggest gender gaps in favour of women were recorded in:

- Stockholm, the Swedish capital city region, where the number of male students following vocational programmes was equivalent to 82.8 % of the female total;
- two regions from the United Kingdom (both 2016 data and NUTS level 1), East Midlands (83.9 %) and the capital city region of London (85.8 %).

Between 2014 and 2016, the ratio of male to female students following vocational programmes in upper secondary education across the EU-28 fell by 2.8 pp. The second half of Figure 3 shows those regions with the biggest changes in their shares of male and female students during the period 2014-2017, when the proportion of women following vocational programmes rose across much of Spain, Cyprus (national data at this level of detail), the Netherlands, Poland, Romania, Sweden and the United Kingdom.
Figure 3: Ratio of male to female students in upper secondary education following vocational programmes, 2017(% in 2017 and percentage points difference 2017 minus 2014, by NUTS 2 regions)

Source: Eurostat (educ_uoe_enrs06)

Tertiary education

Tertiary education (ISCED levels 5-8) builds on secondary education, providing learning activities at a higher level of complexity; it is offered by universities, vocational establishments, institutes of technology, as well as other institutions awarding academic degrees and/or professional certificates. There are a range of policy challenges for tertiary education, among which: increasing participation (especially among disadvantaged groups); reducing drop-out rates and the time it takes some individuals to complete their course; making degree courses more relevant for the modern workplace. Indeed, in the coming years, it is likely that a growing share of the workforce will need to develop/learn new skills during the course of their working lives in order to safeguard their employability.

In Inner London — West, more than four fifths of the people aged 30-34 had a tertiary level of education attainment

Map 2 provides information on the share of the population aged 30-34 years who had successfully completed a tertiary education programme; this age group has been used as it is commonplace for most students to have completed their tertiary education during their twenties (even if they followed a masters or postgraduate course). This indicator forms part of a scoreboard used to monitor the European pillar of social rights, while it is also an ET 2020 benchmark and a Europe 2020 target; for the latter two cases, the policy goal is to increase tertiary educational attainment in the EU-28 so that it reaches at least 40 %.

In 2018, more than two fifths (40.7 %) of the EU-28 population aged 30-34 years possessed a tertiary level of education; as such, the ET 2020 benchmark was attained with two years to spare. The EU-28’s tertiary
educational attainment among people aged 30-34 years rose by 9.6 pp between 2008 and 2018, and by 0.8 pp between 2017 and 2018. Across the EU Member States, attainment levels in 2018 ranged from a low of 24.6 % in Romania and 27.8 % in Italy to cover more than half of this subpopulation in Sweden (52.0 %), Luxembourg (56.2 %), Ireland (56.3 %), Cyprus (57.1 %) and Lithuania (57.6 %).

As with several other education indicators, one of the main characteristics apparent from Map 2 is that capital city regions appear to act as a magnet for highly-qualified people. Capital cities may exert considerable ‘pull effects’ through the varied employment (and social/lifestyle) opportunities that they offer tertiary graduates; for example, they are often the headquarters for large organisations (in both the public and private sectors) and they tend to have a relatively high concentration of graduate jobs in other dynamic or well-paid areas (for example, creative industries or the financial sector). The pull of some capital cities has the potential to create labour market imbalances as a growing number of graduates moving into capital city regions may result in the gentrification of formerly working-class areas, while people on relatively low salaries are driven out (due to the high cost of living and inappropriate housing). The pull of some capital cities may also result in some graduates (at least temporarily) accepting work for which they are over-qualified; in recent years this pattern has extended to cover a growing number of foreign graduates migrating to some of Europe’s most cosmopolitan capitals in search of work and a certain lifestyle.

In 2018, there were 10 NUTS level 2 regions where more than three fifths of the population aged 30-34 years had a tertiary level of educational attainment (as shown by the darkest shade of blue in Map 2): four of these regions were located in the United Kingdom: Inner London — West, which had the highest level of education attainment in the EU (80.4 %); two more regions from the capital, Inner London — East and Outer London — West and North West; and North Eastern Scotland; while four others were capital city regions from other EU Member States, namely, Denmark, Lithuania, Poland and Sweden.

By contrast, tertiary educational attainment remained below the ET 2020 benchmark of 40 % in more than half (152 out of the 278) of the NUTS level 2 regions for which data are available (these are shown in three yellow shades in Map 2). Many of them were rural or sparsely populated regions that had a relatively large agricultural sector, and consequently a low level of supply of highly-skilled employment opportunities.
Tertiary educational attainment, 2018
(%, share of people aged 30-34 years, by NUTS 2 regions)

Map 2: Tertiary educational attainment, 2018(%, share of people aged 30-34 years, by NUTS 2 regions)
Source: Eurostat (edat_lfse_12)
Transition from education to work

Education policy seeks to ensure that Europeans have the skills, knowledge, and capabilities to manage their careers throughout life, thereby supporting each individual’s well-being and participation in the workforce, while on a broader scale contributing to overall productivity. Nevertheless, school-leavers and graduates are not guaranteed employment when they finish their education, with a range of barriers restricting their progression into the world of work: inappropriate education; a lack of relevant work experience; a lack of skills, such as problem-solving, communication and teamwork; the increased pace at which technology and globalisation disrupt some industries; an overall lack of jobs.

On this journey from education to work, there are greater difficulties for people with low levels of literacy and numeracy, for those who leave education at an early age, and for people coming from disadvantaged backgrounds (for example, immigrant families or families at risk of poverty or social exclusion).

Early leavers from education and training may be analysed by looking at the share of individuals aged 18-24 years who have at most a lower secondary level of educational attainment (ISCED levels 0-2) and who were not engaged in any further education and training (during the four weeks preceding the labour force survey (LFS)). This indicator forms part of a scoreboard used to monitor the European pillar of social rights, while it is also an ET 2020 benchmark and a Europe 2020 target; for the latter two cases, the policy goal is to reduce the proportion of early leavers in the EU to less than 10 %.

In 2018, the share of early leavers from education and training in the EU-28 stood at 10.6 %; this was the same share as that recorded a year before, thereby ending a pattern of falling rates. Across the EU Member States, the proportion of early leavers from education and training ranged from 3.3 % in Croatia up to 17.9 % in Spain: this distribution was skewed insofar as just nine Member States recorded shares above the EU-28 average, while 19 Member States had lower shares — 17 of which recorded shares of early leavers from education and training that were below the 10 % policy target.

The lowest regional share of early leavers from education and training was recorded in the Lithuanian capital city region — Sostinės regionas — at 1.9 %

In 2018, the share of early leavers from education and training was below the 10.0 % policy target in approximately half — 120 out of 257 — of the NUTS regions for which data are available (as shown by the blue shades in Map 3). Some of the lowest shares of early leavers were concentrated in eastern Europe: among the 23 regions with shares below 5.0 % (dark blue) there were seven regions from Poland, four regions from Czechia and both regions from Croatia and from Slovenia.

Map 3 also shows that capital city regions tended to record some of the lowest shares of early leavers from education and training in 2018. This was the case for each of the eastern Member States mentioned above — with their capital city regions recording shares that were below 5.0 %; they were joined by the capital city regions of Ireland, Greece and Lithuania. The relatively low share of early leavers in capital city regions may reflect, among others: a broader choice of education programmes; a greater range of education, training and labour market opportunities; or a higher level of educational attainment among parents.

In 2018, the lowest regional shares of early leavers from education and training across the EU were recorded in:

- three capital city regions in eastern Europe — Sostinės regionas in Lithuania (1.9 %); Praha in Czechia (2.7 %); Warszawski stoleczny in Poland (also 2.7 %; 2015 data);
- the coastal/island region of Jadranska Hrvatska in Croatia (2.5 %).

The Belgian and German capital city regions were atypical insofar as they both recorded shares of early leavers from education and training that were above their respective national averages. In 2018, the share of early leavers in Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest was 10.7 % (compared with a national average of 8.6 % for the whole of Belgium), while the share of early leavers in Berlin was 13.6 % (compared with a national average of 10.3 %). A closer analysis reveals that Berlin had the third highest regional share of early leavers in Germany, with only Koblenz (13.9 %) and Bremen (14.6 %) recording higher proportions.

Many of the regions in the EU with the highest shares of early leavers from education and training were concentrated in island and/or peripheral regions, where it is likely that a disproportionately high proportion of students have to leave home if they wish to follow a particular tertiary education course or programme, leaving behind a higher concentration of early leavers. There were only three regions across the EU where more than one quarter of young people aged 18-24 were classified as early leavers from education and training.
• the Portuguese island region of Região Autónoma dos Açores (28.3 %);
• the Spanish autonomous region of Ciudad Autónoma de Melilla (29.5 %);
• the outermost French region of Guyane (31.0 %).
Early leavers from education and training, 2018
(%, share of people aged 18-24 years, by NUTS 2 regions)

Note: includes data of low reliability for some regions (too many to document). Austria, Makroregion Poludniowo-Zachodni (PL5), Makroregion Centralny (PL7), Makroregion Wschodni (PL8), London (UKI), South West (England) (UKK), NUTS level 1. Dresden (DE2), Voreio Aigaio (EL41), Notio Aigaio (EL42), Peloponnisos (EL65), Miatopoliak (PL21), North Yorkshire (UKE2), North Eastern Scotland (UKM5) and Ticiano (CH07); 2017: Trier (DE32), Thessalia (EL81) and Região Autónoma da Madeira (PT30); 2016: Prov. Luxembourg (BE34), Dytriki Makedonia (EL53), Warszawski stoleczny (PL91) and Highlands and Islands (UKM6): 2015.

Source: Eurostat (online data code: edat_lfse_16)
The Dutch regions of Groningen and Utrecht had the lowest regional shares of young people who were neither in employment nor in education or training, at 4.1%.

The share of young people aged 18-24 years who were neither in employment nor in education or training (NEET) may be expressed relative to the total population of the same age (18-24 years); note that the numerator includes not only young people who are unemployed but also young people who are economically inactive for reasons other than education or training (for example, because they are caring for family members, volunteering or travelling, sick or disabled). The NEET rate is one of the indicators used within the scoreboard for the European pillar of social rights.

Having risen during the global financial and economic crisis to a peak of 17.2% in 2012, the NEET rate in the EU fell for six consecutive years to 13.7% in 2018; the reduction of 0.9 pp between 2016 and 2017 was the largest year-on-year fall during this period and was followed by a further reduction of 0.6 pp between 2017 and 2018. The NEET rate ranged from a low of 5.4% in the Netherlands up to a high of 24.9% in Italy; this distribution was skewed insofar as just eight EU Member States recorded shares above the EU average, while 20 Member States had shares below.

Map 4 shows the regional distribution of NEET rates for NUTS level 2 regions: in 2018, the lowest rates (as shown by the lightest shade the map) were principally located across much of Czechia, Germany and the Netherlands. In total, there were 42 regions in the EU where the NEET rate was below 7.5%:

- all 12 regions of the Netherlands (including Groningen and Utrecht, which both recorded NEET rates of 4.1% in 2018 — the lowest in the EU);
- six out of the eight regions in Czechia (the exceptions being Moravskoslezsko and Severozápad);
- 16 regions from Germany.

The remaining eight regions with a NEET rate below 7.5% included five capital city regions — namely those of Bulgaria, Denmark, Lithuania, Poland and Slovenia — as well as two regions from Austria (note, data for Westösterreich concern a NUTS level 1 region) and Prov. Vlaams-Brabant in Belgium. Indeed, it was commonplace in most of the EU Member States to find that capital city regions had relatively low shares of young people who were neither in employment nor in education or training. In this respect, the Belgian and German capital city regions were atypical, as they posted the highest regional rates for each of their respective territories — Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest (16.6% compared with a national average of 11.5%) and Berlin (12.0% compared with 8.1%).

At the other end of the range, the highest NEET rates in the EU were recorded in two outermost regions of France, with the share of young people who were neither in employment nor in education or training reaching 41.2% in La Réunion and peaking at 46.6% in Guyane; these rates were more than 10 times as high as the lowest rates in Groningen and Utrecht.

Another pattern that was apparent in some western EU Member States, was for former industrial heartlands to be characterised by some of the highest NEET rates in their territories. For example, three of the highest rates in Belgium were registered in Prov. Liège, Prov. Namur and Prov. Hainaut, while relatively high rates were also recorded in the French regions of Champagne-Ardenne, Nord - Pas-de-Calais and Picardie, and the British regions of West Midlands, West Wales and the Valleys, Merseyside, Northumberland and Tyne and Wear.
Map 4: Young people neither in employment nor in education or training (NEETs), 2018 (% share of people aged 18-24 years, by NUTS 2 regions)

Note: includes data of low reliability for some regions (too many to document). Ostárias (AT1) and Westösterreich (AT3): NUTS level 1. Dresden (DE22) and Bratislavský kraj (SK01): 2017. Niederbayern (DE22), Oberpfalz (DE23), Valle d’Aosta/Vallée d’Aoste (ITC2), Zeeland (NL34), Kärnten (AT21), Algarve (PT15) and Região Autónoma da Madeira (PT30): 2016.

Source: Eurostat (online data code: edat_lfse_22)
Niederbayern in Germany had the highest employment rate for recent graduates, at 98.2 %

Increasing the employability of young people forms an integral part of the ET 2020 strategy. For this purpose, a benchmark indicator was set concerning the employment rate for young people aged 20-34 years who had successfully completed their education within the previous 1-3 years, obtaining at least an upper-secondary level of educational attainment (referred to here as recent graduates): the target is at least 82 %.

From a relative low of 75.4 % in 2013 — recorded in the aftermath of the global financial and economic crisis — the EU-28’s employment rate for recent graduates registered five consecutive annual increases, the latest of which was a gain of 1.4 pp. In 2018, the employment rate for recent graduates stood at 81.6 %; as such, it was only slightly (0.4 pp) below the ET 2020 benchmark.

The employment rate for recent graduates was higher than the ET 2020 benchmark in a majority (17) of the EU Member States in 2018, ranging from upwards of 90 % in Malta, Germany and the Netherlands down to less than three fifths of recent graduates in Italy (56.5 %) and Greece (55.3 %).

A more detailed regional analysis is presented in Map 5: its shows that in 2018 the employment rate for recent graduates was equal to or above the 82 % benchmark in three fifths of the NUTS level 2 regions for which data are available. Among these, there were 75 NUTS level 2 regions where the employment rate for recent graduates reached 90 % or more (as shown by the darkest shade of blue); they were concentrated across much of Czechia, Germany, the Netherlands, Austria and Sweden, with the south-east German region of Niederbayern — that borders Czechia and Austria — recording the highest regional employment rate for recent graduates, at 98.2 %.

By contrast, there were four regions in the EU where the employment rate for recent graduates was less than one third:

- three of these were located in southern Italy — Basilicata (31.4 %), Calabria (31.3 %) and Sicilia (27.3 %);
- one was located in central Greece — Sterea Ellada (31.8 %; low reliability).
Map 5: Employment rate of recent graduates, 2018 (% share of people aged 20-34 years with at least an upper secondary level of educational attainment having left education and training 1-3 years earlier, by NUTS 2 regions)

Source: Eurostat (edat_lfse_33)
Lifelong learning

Lifelong learning — or lifelong education and training — seeks to improve an individual’s knowledge, skills, competences and/or qualifications for personal, social and/or professional reasons. During the course of a person’s working life it is increasingly necessary to develop existing and learn new skills that are relevant to a specific job or which provide opportunities for new career paths. Within this context, the EU’s labour force survey (LFS) provides information on the share of the population aged 25-64 years that received formal or non-formal education or training (during the four weeks preceding the survey). This indicator of adult participation in learning (education and training) is part of the scoreboard for monitoring progress with respect to the European pillar of social rights, while it also forms part of the ET 2020 framework: the target is to increase adult participation to at least 15% by 2020. Note that Eurostat’s adult education survey (AES) provides a more comprehensive measure of adult learning (based on a complete 12-month reference period), however, sample sizes are not sufficient for an analysis by NUTS level 2 region.

In 2018, one in nine (11.1%) of the EU-28 adult population participated in education and training. This marked a modest increase in relation to the year before, up 0.2 pp, and was the third consecutive year that the participation rate increased by a small margin. Nevertheless, adult participation in learning remained some distance from its benchmark target of 15%.

There were eight EU Member States where the adult participation rate in learning had already reached the benchmark target of 15% by 2018, with the highest rates in the Nordic Member States — Denmark (23.5%), Finland (28.5%) and Sweden (29.2%). By contrast, adult participation was below 5% in Greece, Slovakia, Croatia, Bulgaria and Romania; the last of these recorded the lowest participation rate, at 0.9%.

Adult participation in learning was higher than 15% in every region of Denmark, the Netherlands, Finland and Sweden.

Adult participation in learning was higher than the ET 2020 benchmark in approximately one quarter of NUTS level 2 regions for which data are available (as shown by the blue shades in Map 6). The distribution of these regions across individual EU Member States was very homogeneous — likely reflecting the organisation of education and training initiatives at a national (rather than regional) level — with participation rates of at least 15% in every region of Denmark, the Netherlands, Finland and Sweden, as well as Estonia and Luxembourg (both single regions at this level of detail).

Looking in more detail, the highest share in 2018 was recorded in Helsinki-Uusimaa — the capital city region of Finland — where close to one third (32.2%) of all adults aged 25-64 participated in education and training. It was followed by five regions that together covered the southern half of Sweden, among which the highest rate was recorded in Sydsverige (30.4%).

The darkest yellow shade in Map 6 indicates those regions where the participation rate for adult education and training was below 5.0%, including every region of Bulgaria, Croatia and Romania and all but one of the regions in Greece and Slovakia (the exceptions being the capital city regions of Attiki and Bratislavský kraj). The lowest shares were recorded in Romania, where all eight regions had adult participation rates for learning that were less than 1.5% in 2018; the lowest rates (0.7%) were registered in four different regions — Nord-Vest, Centru, Sud-Est and Sud-Vest Oltenia. The only other regions in the EU to record participation rates of less than 1.5% were the Bulgarian regions of Severozapaden and Severoiztochen and the Greek region of Sterea Ellada.
Map 6: Adult participation in education and training, 2018 (% share of people aged 25-64 years that received formal or non-formal education or training in the four weeks preceding the survey, by NUTS 2 regions) Source: Eurostat (trng_lfse_04)

Note: includes data of low reliability for some regions (too many to document). Sud-Vest Oltenia (RO41); 2017.
Source: Eurostat (online data code: trng_lfse_04)
Data sources

As the structure of education systems varies from one country to another, a framework for assembling, compiling and presenting regional, national and international education statistics is a prerequisite for the comparability of data — this is provided by the international standard classification of education (ISCED). ISCED 2011 was adopted by the UNESCO General Conference in November 2011 and is used as the basis for the statistics presented in this article.

For more information:

International standard classification of education (ISCED 2011)

Most EU education statistics are collected as part of a jointly administered exercise that involves the UNESCO Institute for Statistics (UNESCO-UIS), the Organisation for Economic Cooperation and Development (OECD) and Eurostat, often referred to as the UOE data collection exercise; data on regional enrolments are collected separately by Eurostat. The UOE data collection exercise is principally based on administrative sources, as provided by education ministries or national statistical authorities. Reference periods are the calendar year for data on graduates and the school/academic year (classified to the calendar year in which the school/academic year finishes) for all other non-monetary data.

For more information:

UNESCO-UIS website

The EU’s labour force survey provides data on early leavers from education and training, the share of young people neither in employment nor in education or training (NEET), the share of the population by level of educational attainment, employment rates of recent graduates, and information pertaining to adult learning. It covers the total population of individuals aged 15 years and more living in private households and is updated twice a year, with information for each new reference year being made available in the spring of the following year. Note that labour force survey data by educational attainment level for Estonia and Austria have a level shift (a break in series) in 2014.

For more information:

EU’s labour force survey (LFS)

Dedicated section on education and training: methodology

Context

Each of the EU Member States is responsible for its own education and training policy. However, the EU supports national actions and helps Member States to address common education and training challenges through what is known as the open method of coordination: indeed, the EU provides a policy forum for discussing topical issues (for example, ageing societies, skills deficits, or global competition) and also allows Member States an opportunity to exchange best practices.

Education and training 2020 (ET 2020) is a key European policy that has four common objectives: making lifelong learning and mobility a reality; improving the quality and efficiency of education and training; promoting equity, social cohesion and active citizenship; and enhancing creativity and innovation, including entrepreneurship. As part of the framework, eight EU benchmarks have been set, with the goal of ensuring the ET 2020 objectives are achieved. In 2015, there was a stocktaking exercise in relation to the implementation of the ET 2020 framework, which resulted in six new priority areas for European cooperation, namely:
• promoting lifelong learning with a focus on learning outcomes for employability, innovation, active citizenship and well-being;

• inclusive education and the promotion of civic competences;

• open and innovative education and training;

• support for teachers, trainers, school leaders and other educational staff;

• transparency and recognition of skills and qualifications to facilitate learning and labour mobility;

• sustainable investment, quality and efficiency of education and training systems.

EU cohesion policy invests in people’s skills and competences, which are crucial for ensuring the long-term competitiveness of Europe, while promoting social cohesion by encouraging all citizens to benefit from more and better jobs. The European Social Fund (ESF) and the European Regional Development Fund (ERDF) support activities which are designed to help:

• modernise education and training systems, including investments in educational infrastructure;

• reduce early school leaving;

• promote better access to good quality education for all;

• enhance access to lifelong learning;

• strengthen vocational education and training systems.

For more information:

Strategic framework — education and training 2020 (ET 2020)

Joint report of the Council and the Commission on the implementation of the strategic framework for European cooperation in education and training (ET 2020) — New priorities for European cooperation in education and training

Other articles

• Education and training in the EU — facts and figures (online publication)

Publications

• Eurostat regional yearbook

• The EU has almost reached its target for share of persons aged 30 to 34 with tertiary education — News release April 2018

• 40% of 30-34 year-olds have tertiary education

• Early childhood education in your country

• Vocational study in upper secondary schools

• Four out of five recent graduates find a job

• Young people neither in education nor employment
Main tables

- Regional statistics (t_reg), see:

  Regional education statistics (t_reg_educ)

- Education and training (t_educ), see:

  Participation in education and training (t_educ_part)
  Education and training outcomes (t_educ_outc)
    Tertiary educational attainment, age group 30-34 by sex and NUTS 1 regions (tgs00105)
    Tertiary educational attainment, age group 25-64 by sex and NUTS 2 regions (tgs00109)
    Early leavers from education and training by sex and NUTS 1 regions (tgs00106)

Database

- Regional statistics by NUTS classification (reg), see:

  Regional education statistics (reg_educ)
    Regional education statistics – ISCED 2011 (reg_educ_11)

- Education and training (educ), see:

  Participation in education and training (educ_part)
    Pupils and students - enrolments (educ_uoe_enr)
      All education levels (educ_uoe_enra)
    Adult learning (trng)
  Education and training outcomes (educ_outc)
    Educational attainment level (edat)
      Population by educational attainment level (edat1)
    Transition from education to work (edatt)
      Young people by educational and labour status (incl. neither in employment nor in education and training - NEET) (edatt0)
      Early leavers from education and training (edatt1)
    Labour status of young people by years since completion of highest level of education (edatt2)

- Income and living conditions (ilc), see:

  Living conditions (ilc_lv)
    Childcare arrangements (ilc_ca)
  EU-SILC ad-hoc modules (ilc_ahm)
    2016 - Access to services (ilc_ats)
Dedicated section

- **Education and training**
- **Regions and cities**

Data visualisation

- **Eurostat statistical atlas (Chapter 4)**
- **Regional statistics illustrated**

Methodology

- **Methodological manual on territorial typologies — Eurostat — 2018 edition**
- **Regional education statistics (ESMS metadata file — reg_educ_esms)**

External links

- **European Commission — EACEA — Eurydice — Description of national education systems**
- **European Commission — Education and Training — Strategic framework — Education & Training 2020**
- **European Commission — Employment, Social Affairs and Inclusion — New skills agenda for Europe**
- **European Commission — Regional Policy — Education and training**


This article forms part of Eurostat’s annual flagship publication, the [Eurostat regional yearbook](https://ec.europa.eu/eurostat/statistics-explained/index.php/Eurostat_regional_yearbook).