

Adult learning statistics - characteristics of education and training

Statistics Explained

*Data extracted in June 2024.
Planned article update: 2030.*

Highlights

" In 2022, in the EU, one-fifth of the instruction hours spent by adult learners aged 25-64 years in formal and non-formal learning activities concerned business, administration and law. "

" In the EU, over 80 % of the non-formal learning activities of adults aged 25-64 years were job-related in 2022. "

" In 2022, in the EU, 35 % of the non-formal learning activities of adults aged 25-64 years were provided by the employer. "

This article presents [European Union \(EU\)](#) statistics related to characteristics of learning activities. Based on the [adult education survey](#), it focuses on two main characteristics: fields of education and training as well as purpose, i.e. whether the learning was job-related. In addition, information about the providers of non-formal education and training is given. This article is one of a set of statistical articles forming part of the online publication [Education and training in the EU - facts and figures](#). For more information on adult learning, see the articles [adult learning](#) and [adult learning - participants](#).

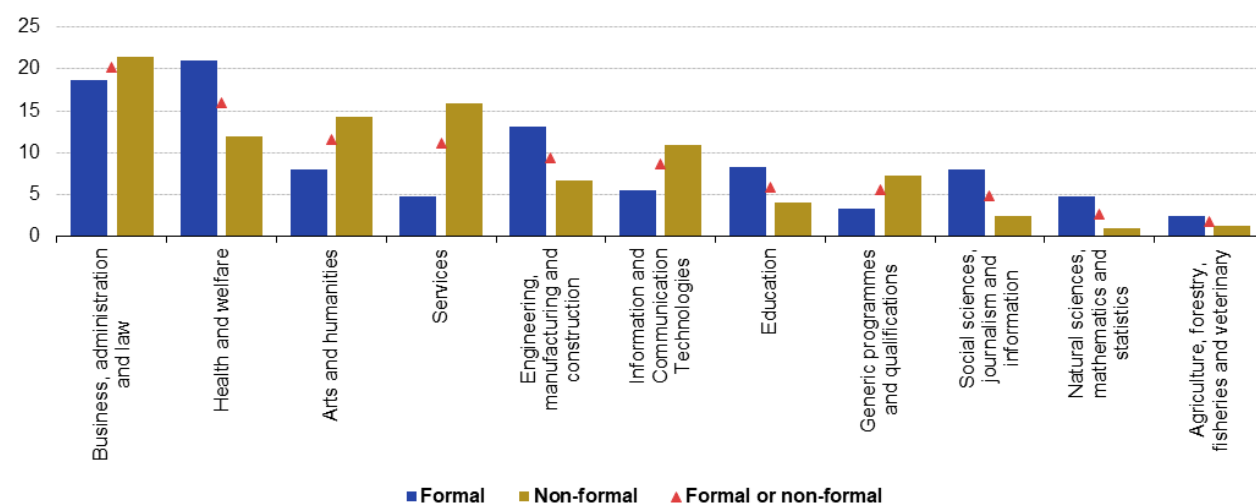
Adult education and training by field of study

In 2022, according to the adult education survey (AES) the proportion of persons aged 25 to 64 years in the EU who participated in education or training during the previous 12 months was 46.6 %, see the article on [adult learning](#). For these adult learners, AES also collects information on instruction hours spent in the learning activities and how these hours were distributed across fields of study.

An analysis of the instruction hours spent by field of study reveals that in 2022 one-fifth (20.2 %) of the formal or non-formal education and training that was given to adults aged 25–64 years in the EU concerned business, administration and law. Health and welfare accounted for 15.9 % of the total hours spent by adults in instruction. Arts and humanities as well as services were the only other fields that recorded double-digit shares (see Figure 1).

Distribution of fields of education of adult learning, by type of instruction, EU, 2022

(% of instruction hours spent by adults aged 25–64 on the corresponding type of instruction)



Source: Eurostat (online data code: trng_aes_174)

eurostat

Figure 1: Distribution of fields of education of adult learning, by type of instruction, EU, 2022 (% of instruction hours spent by adults aged 25–64 years on the corresponding type of instruction) Source: Eurostat (trng_aes_174)

A higher proportion of the instruction hours given in health and welfare was provided in a formal setting, while the opposite was true for services

Figure 1 details the relative importance of different fields of study in terms of instruction hours, contrasting formal and non-formal education and training. In 2022, health and welfare accounted for 21.0 % of the total number of hours adults spent in formal education and training in the EU compared with 12.0 % of hours spent in non-formal education and training.

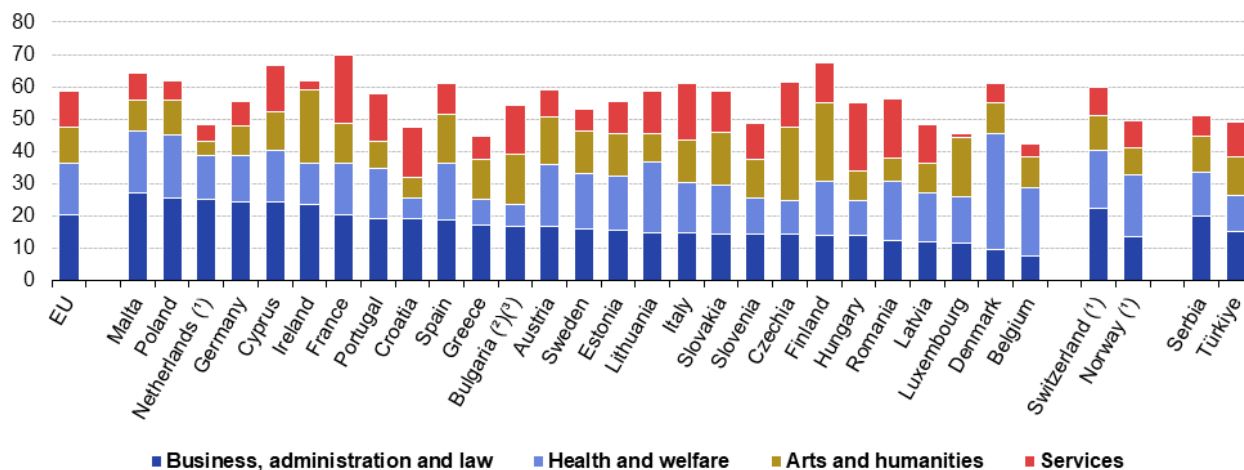
Engineering, manufacturing and construction also accounted for a considerably higher proportion of the formal instruction hours of adults in the EU in 2022 (when compared with its share of non-formal instruction hours), while the relative share of services in non-formal instruction hours was considerably higher than its share in formal instruction hours. In a similar vein, social sciences, journalism and information as well as education and natural sciences, mathematics and statistics accounted for a relatively high share of the total number of hours of formal instruction that were given to adults, while arts and humanities, information and communication technologies and generic programmes and qualifications accounted for relatively high shares of the total number of hours of non-formal education and training.

Business, administration and law, together with health and welfare, accounted for the largest shares of adult learning activities

Figure 2 highlights that, while business, administration and law was the most popular field of study in terms of hours spent for adult education and training in the EU in 2022, with nine Member States recording their highest shares in this domain, health and welfare was just behind with eight Member States. Among the other Member States, three recorded highest shares in services, three in arts and humanities, two in generic programmes, one in education and the last one in information and communication technologies.

Distribution of selected fields of education of adult learning, 2022

(% of total instruction hours spent by adults aged 25–64 on formal or non-formal learning activities)



(*) Low reliability.

(*) Health and welfare: low reliability.

(*) Arts and humanities: low reliability.

Source: Eurostat (online data code: trng_aes_174)

eurostat

Figure 2: Distribution of selected fields of education of adult learning, 2022 (% of total instruction hours spent by adults aged 25–64 years on formal or non-formal learning activities) Source: Eurostat (trng_aes_174)

Focus on non-formal learning activities

As shown in the article [adult learning – participants](#), the vast majority of adult learning is non-formal education and training, in other words education and training that takes place outside the formal institutions of schools, colleges and universities. This is not surprising given that the age criterion for adult learning refers to persons of working age (25–64 years-old), when most people have already completed their formal studies.

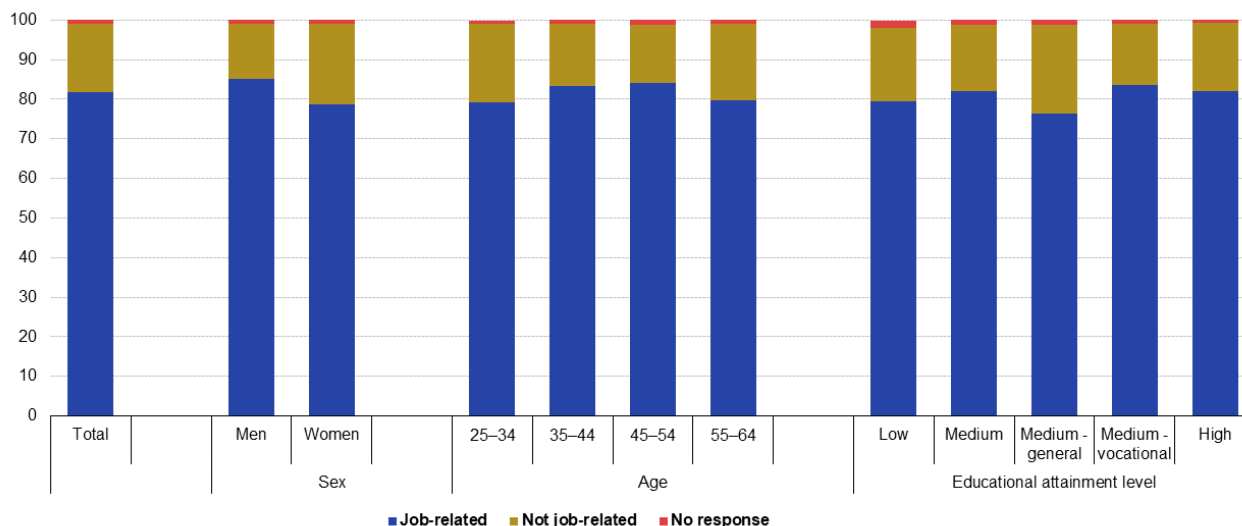
The following concentrates on this most common type of adult learning, non-formal education and training. The AES provides information on basically all non-formal learning activities in which an adult participated during the last 12 months, and it is possible to analyse at the level of the non-formal activities, i.e. whether these learning activities were job-related, and also who financed them.

Most non-formal adult learning activities were job-related

In 2022, more than four-fifths (81.8 %) of the non-formal education and training activities of adults in the EU were job-related and less than one-fifth (17.2 %) was non-job-related; the remaining 1.0 % concerned non-formal activities where there was no response as to whether it was job-related or not.

Distribution of non-formal learning activities by type, EU, 2022

(% of all non-formal learning activities of adults aged 25–64)



Source: Eurostat (online data codes: trng_aes_188, trng_aes_189 and trng_aes_190)

eurostat

Figure 3: Distribution of non-formal learning activities by type, EU, 2022 (% of all non-formal learning activities of adults aged 25–64 years) Source: Eurostat (trng_aes_188), (trng_aes_189) and (trng_aes_190)

A higher proportion of non-formal learning activities of men rather than women was job-related

Within the EU in 2022, a high proportion (85.2 %) of non-formal learning activities of men aged 25–64 years was job-related. This share could be compared with the corresponding value for women, where more than three-quarters (78.8 %) of all non-formal learning activities were job-related. Note that these shares are, at least in part, linked to lower employment rates among women; the EU employment rate for women aged 25–64 years was 71.1 % in 2022, compared with a rate of 82.3 % for men of the same age.

The share of job-related non-formal education and training activities was highest for the middle age groups

In 2022, the share of non-formal learning activities in the EU that was job-related was highest in the middle age groups – 83.4 % for those aged 35–44 years and 84.0 % among those aged 45–54 years. At below 80 %, it was noticeably lower among the younger age group and the older age group (79.2 % among those aged 25–34 years and 79.7 % among those aged 55–64 years). While considerably more than half of the non-formal learning of people aged 55–64 years continued to be job-related, the relatively low shares for this age group suggest that maybe some older persons were preparing for retirement by expanding their knowledge or skills in non-job-related areas (see Figure 3).

The share of non-formal education and training activities that were job-related was somewhat lower for adults with a low level of education

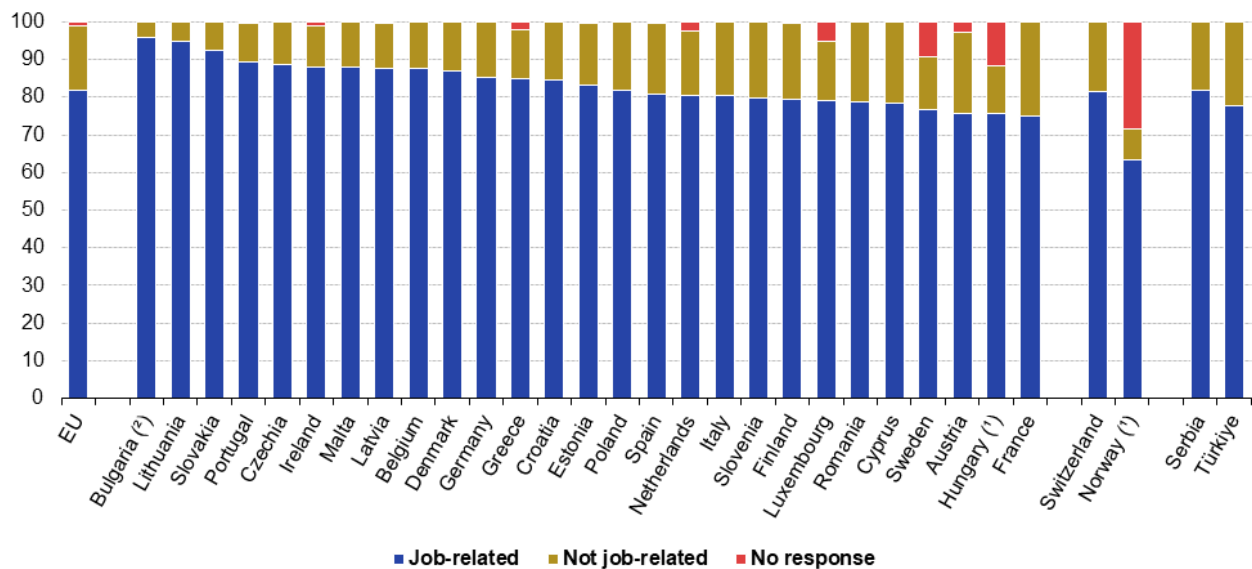
An analysis by level of educational attainment (see Figure 3) shows quite similar shares of job-related learning activities across the different levels of education. Adults in the EU with a medium or high level of educational attainment were slightly more likely to follow some form of job-related education and training. In 2022, some 82.0 % of the non-formal learning activities of people aged 25–64 years with a medium (ISCED 2011 levels 3 to 4) or a high (ISCED 2011 levels 5 to 8) level of education were job-related, compared with 79.4 % among those with a low level of education (ISCED levels 0-2). For adults with a medium level of education, for which the orientation can be detailed, 76.5 % of the non-formal learning activities of people with a general orientation was job-related while the share was 83.7 % for people with a vocational orientation.

Highest shares of job-related non-formal learning activities in Slovakia, Lithuania and Bulgaria

Looking at national level, the share of non-formal learning activities that was job-related ranged among the EU Member States from highs of more than 90 % in Slovakia, Lithuania and Bulgaria, down to 75.1 % in France (see Figure 4).

Distribution of non-formal learning activities by type, 2022

(% of all non-formal learning activities of adults aged 25–64)



(*) Low reliability.

(?) Non-formal education and training - not job-related: low reliability.

Source: Eurostat (online data code: trng_aes_188)

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Figure 4: Distribution of non-formal learning activities by type, 2022 (% of all non-formal learning activities of adults aged 25–64 years) Source: Eurostat (trng_aes_188)

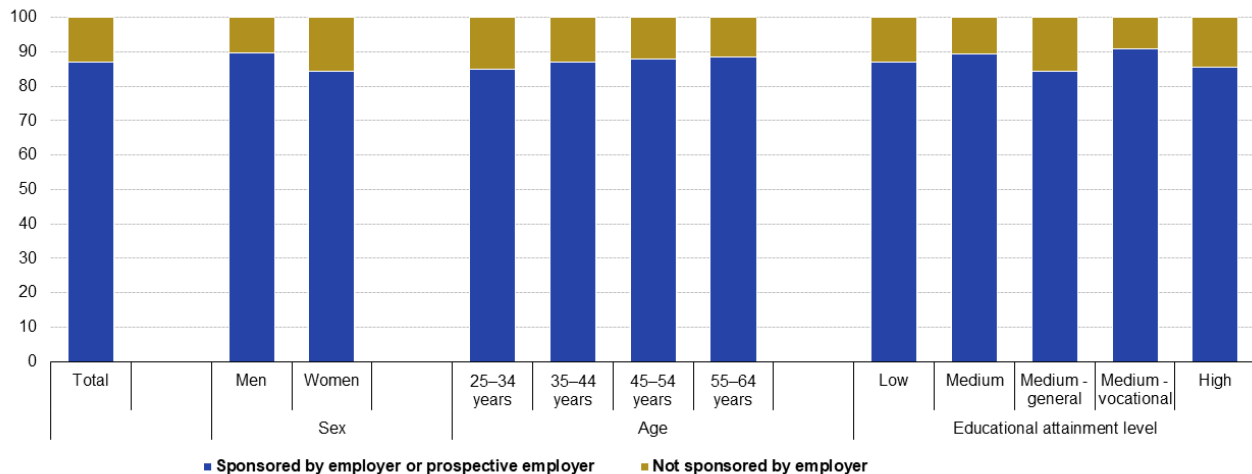
Most job-related non-formal adult learning activities were sponsored by the employer

Figure 5 shows the relative contribution of sponsorship from employers to job-related non-formal education and training activities. Employer-sponsored refers to all job-related non-formal learning activities that were paid at least partially by the employer or prospective employer and/or were done during paid working hours. In 2022, some 87.0 % of job-related non-formal learning activities of adults were sponsored by employers, while 13.0 % of activities were financially supported by other means.

With more than four-fifths of all non-formal learning activities of adults in the EU being job-related, it is perhaps unsurprising to find that the vast majority of these activities were sponsored by employers providing financial support to their workforce in the form of training designed to improve the knowledge of their staff. The relatively high shares of education and training that are sponsored by employers may also be linked to the general affordability of training, which may be prohibitive for many people on an individual basis.

Distribution of job-related non-formal learning activities by financial support, EU, 2022

(% of all job-related non-formal learning activities of adults aged 25–64)



Source: Eurostat (online data codes: trng_aes_188, trng_aes_189 and trng_aes_190)

eurostat

Figure 5: Distribution of job-related non-formal learning activities by financial support, EU, 2022 (% of all job-related non-formal learning activities of adults aged 25–64 years) Source: Eurostat (trng_aes_188), (trng_aes_189) and (trng_aes_190)

The share of employer-sponsoring of job-related learning activities was higher for men ...

A more detailed examination of these figures shows that employers provided financial support more often to male (rather than female) employees in order to follow job-related non-formal instruction. Almost nine-tenths (89.7 %) of the job-related non-formal education and training activities followed by adult men in the EU were sponsored by employers, while among adult women the share was less than six-sevenths (84.4 %) — see Figure 5.

... and it was higher for the older age group and for those with a medium level of education

Across the EU in 2022, the share of job-related non-formal learning activities that were sponsored by the employer rose slightly the higher the age, from 84.8 % for those aged 25–34 years, 87.1 % for those aged 35–44 years, 88.0 % for those aged 45–54 years to 88.5 % for those aged 55–64 years (see Figure 5). This increase with age may, at least in part, reflect the interest of employers and employees in keeping skills up to date.

A similar analysis by educational attainment level (see Figure 5) shows that in 2022, the share of employer-sponsoring among job-related non-formal learning activities was between 85 and 90 % for all three levels of education – low, medium and high. This share was lowest for those with a high level of education (85.6 %), followed by those with a low level of education (86.9 %) while it was highest for those with a medium level of education (89.5 %).

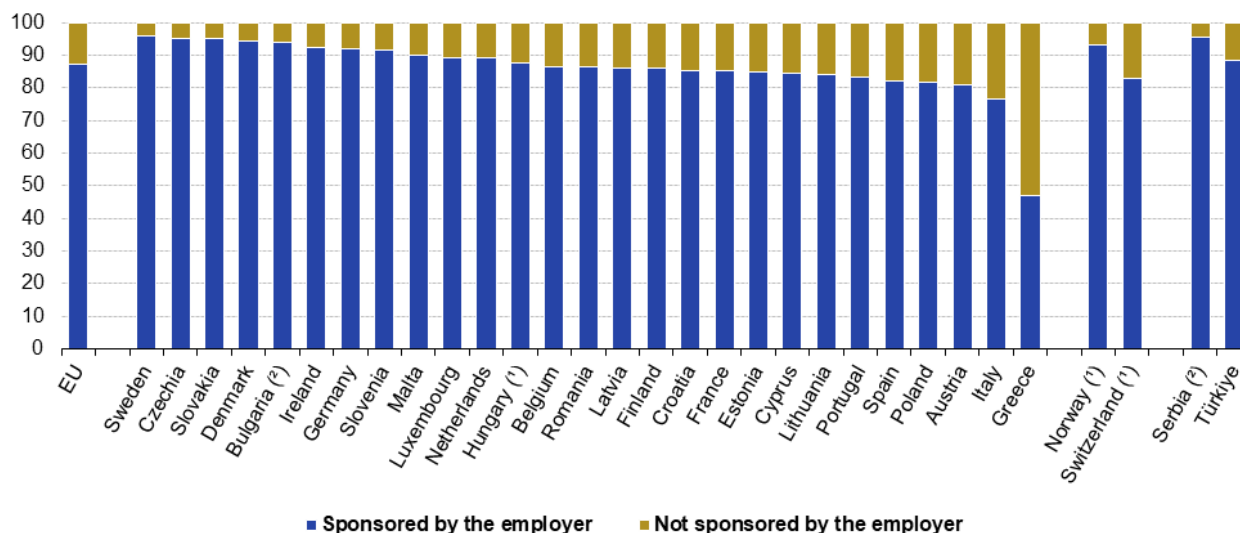
Looking at people with a medium level of education, those with a vocational diploma recorded the highest share by far (90.8 %) of job-related non-formal education and training being sponsored by the employer, while the same share was only 84.3 % for those with a general diploma.

Lowest shares of employer-sponsoring of job-related non-formal learning activities in Greece and Italy

The share of job-related non-formal learning activities followed by adults that were sponsored by employers peaked at 95.8 % in Sweden, followed by around 95.0 % in Czechia and Slovakia. In contrast, less than half the job-related non-formal instruction was sponsored by employers in Greece (47.1 %). The only other country that also reported a share below 80 % was Italy (76.6 %, see Figure 6).

Distribution of job-related non-formal learning activities by financial support, 2022

(% of all job-related non-formal learning activities of adults aged 25–64)



(¹) Low reliability.

(²) Not sponsored by the employer: low reliability.

Source: Eurostat (online data code: trng_aes_188)

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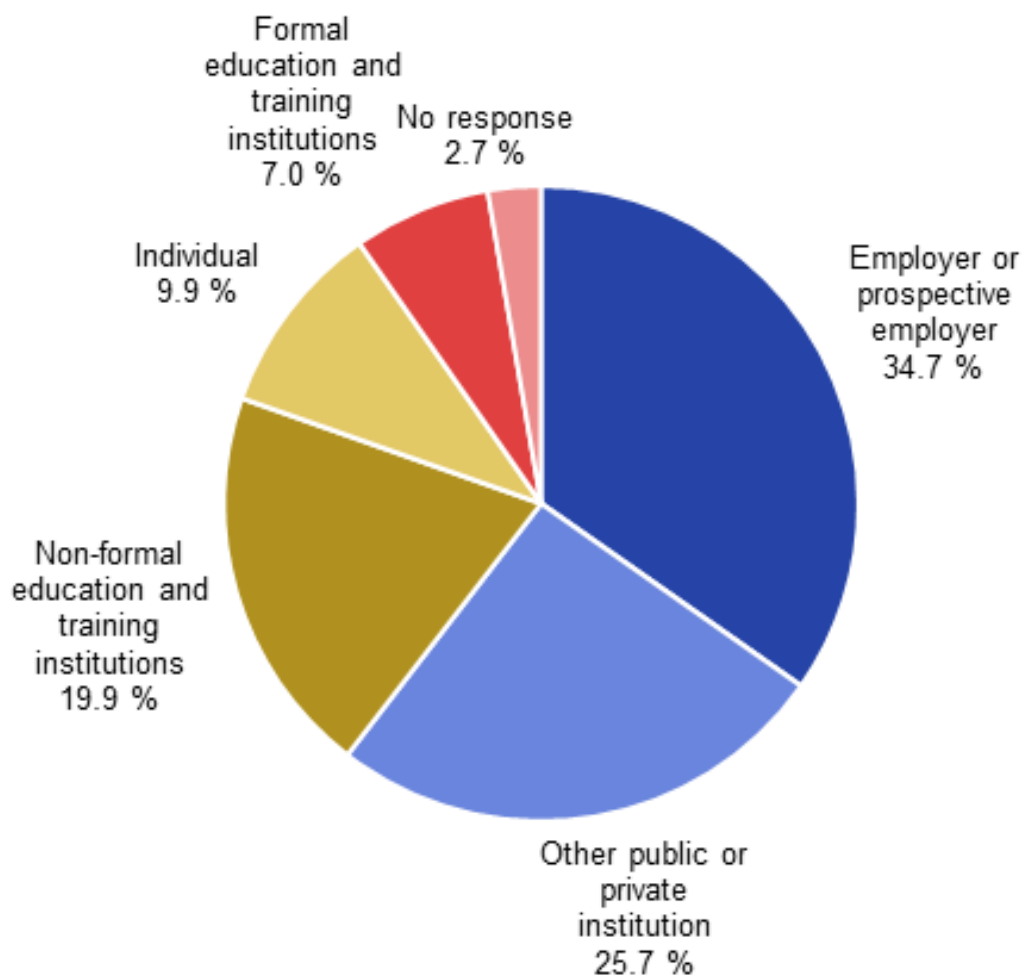
Figure 6: Distribution of job-related non-formal learning activities by financial support, 2022 (% of all job-related non-formal learning activities of adults aged 25–64 years) Source: Eurostat (trng_aes_188)

Providers of non-formal adult education and training

Figure 7 shows the distribution of non-formal education and training activities by provider in the EU. In 2022, 34.7 % of non-formal education and training activities of adults were provided directly by the employer or prospective employer, 25.7 % by other public or private institutions, 19.9 % by non-formal education and training institutions, 9.9 % by individuals and 7.0 % by formal education and training institutions. The remaining 2.7 % corresponds to non-response.

Distribution of non-formal learning activities by provider, EU, 2022

(% of all non-formal learning activities of adults aged 25–64)



Source: Eurostat (online data code: trng_aes_170)

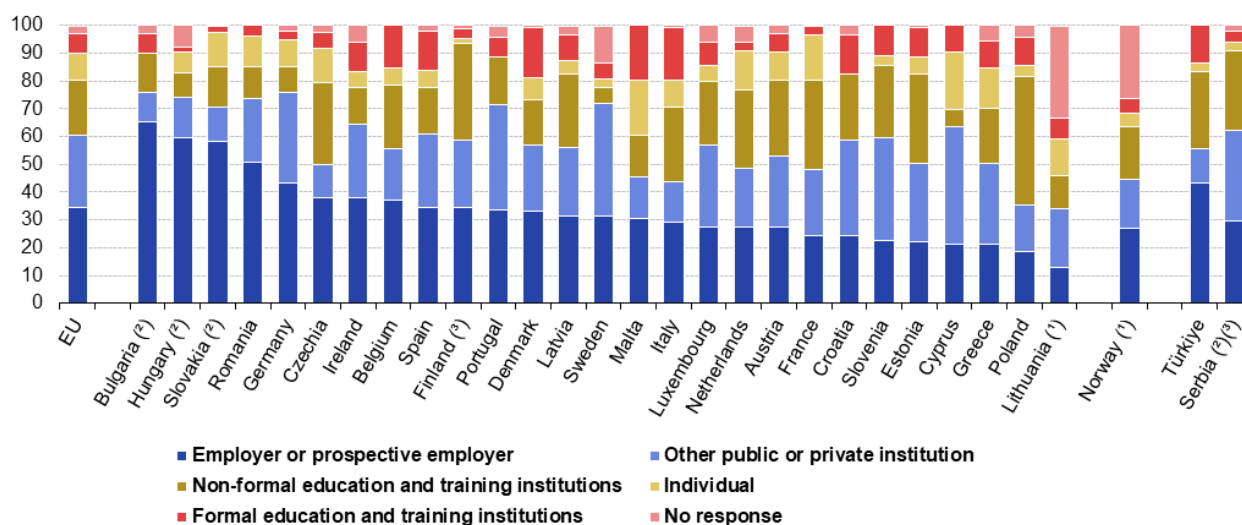
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Figure 7: Distribution of non-formal learning activities by provider, EU, 2022 (% of all non-formal learning activities of adults aged 25–64 years) Source: Eurostat (trng_aes_170)

The employer or prospective employer was the first provider of non-formal activities in 14 Member States, while other public or private institutions represented the first provider in seven countries: Portugal, Sweden, Luxembourg, Croatia, Slovenia, Cyprus and Greece. Lastly, non-formal education and training institutions were the main provider in five countries: Finland, the Netherlands, France, Estonia and Poland (see Figure 8).

Distribution of non-formal learning activities by provider, 2022

(% of all non-formal learning activities of adults aged 25–64)



(*) Low reliability.

(*) Formal education and training institutions: low reliability.

(*) Individual: low reliability.

Source: Eurostat (online data code: trng_aes_170)

eurostat

Figure 8: Distribution of non-formal learning activities by provider, 2022 (% of all non-formal learning activities of adults aged 25–64 years) Source: Eurostat (trng_aes_166)

Source data for tables and graphs

- [Adult learning statistics: tables and figures](#)

Data source

The [adult education survey \(AES\)](#) is the source of all information in this article. The AES covers adults' participation in education and training (formal, non-formal and informal learning) and is one of the main data sources for EU lifelong learning statistics. Until the 2016 AES, it covered adults of working age (25–64 years), since 2022 it covers all adults aged 18-69 years.

AES – reference period and data collection period

The survey refers to all learning activities in which respondents may have participated in education and training during a 12-month period prior to the interview. The data collection for the 2022 AES took place between June 2022 and March 2023 in the majority of countries. For simplicity, data are referred to as "2022" in this article.

AES – waves

Four waves of the AES have been implemented so far, in 2007, 2011, 2016 and 2022. The first was a pilot exercise and was carried out on a voluntary basis, while since 2011, AES is underpinned by legal acts: [Commission Regulation \(EU\) No 823/2010](#) for 2011 AES, [Commission Regulation \(EU\) No 1175/2014](#) for 2016 AES and [Commission Implementing Regulation \(EU\) 2021/861](#) for 2022 AES.

Classification

Levels of educational attainment

Common definitions for education systems have been agreed between the UNESCO Institute for Statistics (UIS), the OECD and Eurostat. UNESCO developed the International standard classification of education (ISCED) to facilitate comparisons across countries on the basis of uniform and internationally agreed definitions. In 2011, a revision of the ISCED was formally adopted, referred to as ISCED 2011. Prior to this, ISCED 1997 was used as the common standard for classifying education systems. For more information, see the article on the [ISCED classification](#) .

Levels of educational attainment are as follows

- less than primary, primary or lower secondary level of education (ISCED 2011 levels 0–2; referred to as a low educational attainment level or low level of education);
- upper secondary or post-secondary non-tertiary education (ISCED 2011 levels 3 and 4; referred to as medium educational attainment level or medium level of education); at this level, information whether the programme had general or vocational orientation is available;
- tertiary education (ISCED 2011 levels 5–8; referred to as a high educational attainment level or high level of education).

Fields of education

ISCED Fields of Education and Training classifies education programmes and related qualifications by fields of study. A field is the 'broad domain, branch or area of content covered by an education programme or qualification'. For details see the [ISCED Fields of Education and Training 2013 \(ISCED-F 2013\)](#) . The classification has been designed principally to describe and categorise fields of formal education and training programmes but is also used for classifying non-formal education and training activities in the AES.

The fundamental criterion to distinguish learning activities from non-learning activities is that the activity must be intentional (and not by chance — 'random learning'), in other words, a deliberate search for knowledge, skills, competences or attitudes.

Broad categories of learning activities are defined in the International Standard Classification of Education 2011 ([ISCED 2011](#)). The Classification of learning activities ([1] CLA) provides further details, in particular for non-formal learning activities.

- **Formal education and training** is defined as 'education that is *institutionalised, intentional and planned through* public organisations and recognised private bodies and – in their totality – constitute *the formal education system* of a country. Formal education programmes are thus recognised as such by the relevant national education authorities or equivalent authorities, e.g. any other institution in cooperation with the national or sub-national education authorities. Formal education consists mostly of initial education. Vocational education, special needs education and some parts of adult education are often recognised as being part of the formal education system.' (ISCED 2011)
- **Non-formal education and training** is defined as 'education that is *institutionalised, intentional and planned by an education provider* . The defining characteristic of non-formal education is that it is an addition, alternative and/or complement to formal education within the process of the lifelong learning of individuals. It is often provided to guarantee the right of access to education for all. It caters to people of all ages but does not necessarily apply a continuous pathway-structure; it may be short in duration and/or low-intensity, and it is typically provided in the form of short courses, workshops or seminars. Non-formal education mostly leads to qualifications that are not recognised as formal or equivalent to formal qualifications by the relevant national or sub-national education authorities or to no qualifications at all. Non-formal education can cover programmes contributing to adult and youth literacy and education for out-of-school children, as well as programmes on life skills, work skills, and social or cultural development.' (ISCED 2011)

In short, non-formal education and training covers **institutionalised taught learning activities outside the formal education system** .

The CLA further distinguishes the following broad categories of non-formal education:

- non-formal programmes;
- courses (which are further distinguished into classroom instruction, private lessons and combined theoretical-practical courses including workshops);
- guided-on-the-job training.

Job-related non-formal education and training : the respondent takes part in the non-formal education and training activity in order to obtain knowledge and/or learn new skills needed for a current or future job, to increase earnings, to improve job and/or career opportunities in a current or another field and generally to improve his/her opportunities for advancement and promotion.

Employer-sponsored job-related non-formal education and training : all job-related non-formal education and training activities paid at least partially by the employer (or the prospective employer) and/or done during paid working hours.

The total number of instruction hours is defined as the actual number of hours during which a person received instruction in the learning activity, i.e. actual attendance in the classes/courses/lessons itself, no matter if they took place on-site or online. Hours refers to full hours (i.e. 60 minutes). Time spent outside of class lessons such as homework, self-study, writing essays/a thesis or learning groups is excluded. Time spent for commuting to the place of instruction is also excluded.

The provider of the learning activity is the organisational unit which provides the teacher, lecturer or instructor for the learning activity. The training provider can be an enterprise, municipality, governmental authority but also an individual/private person (e.g. a student giving private lessons).

Tables in this article use the following notation:

- ‘.’ not available, confidential or unreliable value.

<context>

Context

Upskilling – Reskilling

Adults with a low level of educational attainment and a lack of skills are more likely to earn lower than average wages and are more vulnerable to the precarious nature of the labour market. These individuals often suffer from a lack of basic skills that are increasingly considered as essential for a modern-day economy: literacy, numeracy and technological skills (‘digital literacy’). Indeed, in a world that is increasingly characterised by technological change and more precarious employment opportunities, it becomes increasingly unlikely that people can rely on the skills they acquire at school/university to last them until the end of their working lives.

There are a variety of paths that people can potentially follow to gain additional education and training beyond the formal education and training system. Lifelong learning strategies imply investing in people and knowledge — promoting the acquisition of basic skills and providing opportunities for innovative, more flexible forms of learning. They aim to provide people of all ages with equal access to high-quality learning opportunities, and to a variety of learning experiences designed to increase employability, social inclusion and active citizenship.

For some people the decision to re-engage in education and training is a difficult one: it is therefore likely that a range of different approaches are required to offer participants flexible pathways. These may comprise formal, non-formal and informal learning, so that individuals engage in up-skilling or re-skilling to improve their employment opportunities and lives in general. Investment in adult skills has the potential to improve an individual’s quality of life by raising potential earnings, increase their job satisfaction and job opportunities, or promote their social mobility. From a policy perspective, adult education and training has the potential to help the EU to boost its competitiveness in globalised markets, develop a more highly-skilled workforce to meet employers’ demands, keep an ageing workforce productive and move people out of welfare. Such developments are increasingly important in a global context, given the rapid increase in the level of educational attainment and skills among the workforces of emerging and developing economies.

In the [Porto Social Commitment of 7 May 2021](#) , the European Parliament, the Council of the EU, the European social partners and civil society organisations endorsed the target that at least 60 % of all adults should participate in training every year by 2030.

The right to education, training and lifelong learning is enshrined in the [European Pillar of Social Rights](#) (principle 1) which stipulates that ‘everyone has the right to quality and inclusive education, training and life-long learning in

order to maintain and acquire skills that enable them to participate fully in society and manage successfully transitions in the labour market.' Actions and initiatives at European level provide support to national institutions and individuals to increase the participation of adults in learning and training activities.

The [European Skills Agenda](#) outlines a five-year plan to help individuals and businesses develop more and better skills and to put them to use. Actions of the skills agenda also refer to tools and initiatives to support people in their lifelong learning pathways.

Within the [European employment strategy](#) Council decision (EU) 2020/1512 recently revised the employment guidelines. Guideline 6 concerns "enhancing labour supply and improving access to employment, skills and competences". Among others, this guideline calls Member States to enable everyone to anticipate and better adapt to labour-market needs, in particular through continuous upskilling and reskilling.

</context>

Explore further

Other articles

- [Education and training in the EU — facts and figures](#) (online publication)
- All pages on [education and training](#)
- [Adult learning statistics](#)
- [Adult learning - participants](#)
- [Statistics on continuing vocational training in enterprises](#)

Database

- [Education and training](#) , see:

Participation in education and training (educ_part)

Adult learning (trng)

Adult learning - last 12 months, AES (trng_aes_12m)

Participation in education and training (last 12 months) (trng_aes_12m0)

Participation rate in education and training by sex (trng_aes_100)

Participation rate in education and training by age (trng_aes_101)

Participation rate in education and training by educational attainment level (trng_aes_102)

Participation rate in job-related non-formal education and training by type and sex (trng_aes_120)

Distribution of non-formal education and training activities by provider (trng_aes_170)

Distribution of non-formal education and training activities by type and sex (trng_aes_188)

Distribution of non-formal education and training activities by type and age (trng_aes_189)

Distribution of non-formal education and training activities by type and educational attainment level (trng_aes_190)

Time spent on education and training (last 12 months) (trng_aes_12m2)

Distribution of instruction hours by field (ISCED-F 2013) (trng_aes_174)

Thematic section

- [Education and training](#)

Methodology

Metadata

- [Adult education survey](#) (ESMS metadata file — trng_aes_12m_esms)

Manuals and other methodological information

- [Adult education survey — reference manuals](#)

External links

- [European Commission — Skills agenda](#)
- [European Commission — Education and training — adult learning](#)
- [European Commission — Education and training — Electronic Platform for Adult Learning in Europe \(EPALE\)](#)
- [European Commission — European Education Area](#)
- [European Commission — Education and training — vocational education and training](#)
- [European Commission — EU Skills Panorama](#)

Legislation

- [AES legal basis](#)