Education and training statistics introduced

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Alongside the provision of health care, public expenditure on education is often considered as 1 of the most important investments that can be made in people. Education has the potential to drive socioeconomic development forward: this is particularly the case in a globalised world, where a highly skilled workforce can be an advantage in terms of productivity, innovation and competitiveness.

Education, vocational training (VET) and more generally lifelong learning play a vital role in both an economic and social context. The opportunities which the European Union (EU) offers its citizens for living, studying and working in other countries make a major contribution to cross-cultural understanding and personal development.

The consolidated versions of the Treaty on European Union and of the Treaty establishing the European Community acknowledge the importance of education and training by stating that 'the Community shall contribute to the development of quality education by encouraging cooperation between EU countries and, if necessary, by supporting and supplementing their action ... The Community shall implement a vocational training policy which shall support and supplement the action of the EU countries'. As such, the European Commission follows up on policy cooperation and works with EU countries, while funding various programmes.

This article starts by explaining several EU education-related policy issues and concludes by introducing Eurostat's statistics on education and training.

European Education Area

A Council Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021/C 66/01) was adopted by the Council in February 2021. It seeks to remove barriers to learning and improve access to quality education for all people through 5 strategic priorities during the period 2021 to 2030

- improving quality, equity, inclusion and success for all in education and training

- making lifelong learning and mobility a reality for all

- enhancing competences and motivation in the education profession

- reinforcing European higher education

- supporting the green and digital transitions in and through education and training.

In order to monitor progress, 7 EU-wide targets have been introduced. They define benchmarks against which the EU's performance across education and training may be judged, including

- the share of low-achieving 15-year-olds in basic skills – reading, mathematics and science – should be less than 15%, by 2030

- the share of low-achieving 8th graders (generally 13-year-olds) in digital skills – computer and information literacy – should be less than 15%, by 2030

- at least 96% of children between the age of 3 and the age for starting compulsory primary education should participate in early childhood education and care, by 2030

- the share of early leavers (aged 18 to 24) from education and training should be less than 9%, by 2030

- the share of people aged 25 to 34 with tertiary educational attainment should be at least 45%, by 2030

- the share of recent graduates from vocational education and training (VET) benefiting from exposure to work-based learning during their VET should be at least 60%, by 2025

- at least 47% of people aged 25 to 64 should have participated in adult learning during the previous 12 months, by 2025.

The latest EU data for these 7 targets are available on Eurostat's website – Education and training – Policy context .

The European Education Area's strategic framework promotes collaboration between EU countries and key stakeholders and allows the monitoring of progress towards the achievement of their collective vision. It does so by

- strengthening means of policy cooperation

- enhancing synergies with other relevant initiatives, including the European Research Area and the Bologna Process

- identifying targets and indicators to guide work and monitor progress

- fostering the integration of education and training into the European Semester process.

European Year of Skills

The European Commission designated the period from 9 May 2023 to 8 May 2024 as the ' European Year of Skills '.

The European Year of Skills was designed to 'promote reskilling and upskilling, helping people to get the right skills for quality jobs'. It aimed to provide fresh impetus to help the EU reach 2 of its social targets that form part of the European Pillar of Social Rights Action Plan (see below).

Embedded within the European Year of Skills, the European Vocational Skills Week (23 to 27 October 2023) outlined how vocational education and training is key for people of all ages to upskill and reskill for their personal development and careers.

European Pillar of Social Rights Action Plan

The European Pillar of Social Rights Action Plan sets out 20 key principles that are considered essential for fair and well-functioning labour markets and social protection systems. It lays out 3 headline targets for the EU to reach by 2030, with 2 of these linked to education and training, namely that, by 2030

- at least 60% of all adults should participate in training every year

- at least 78% of the population aged 20 to 64 should be in employment.

In the context of recovery from the COVID-19 crisis and the digital and green transitions, the desire to see adult participation in training rise to 60% is considered paramount if the EU is to improve employability, boost innovation, ensure social fairness and close the digital skills gap. A key factor of success will be to ensure that adults are able to engage in upskilling and reskilling later in life. To do so, the EU has announced a number of related targets that seek to strengthen and increase adult participation in training; 1 of these seeks to ensure that, by 2030, at least 80% of people aged 16 to 74 have basic digital skills (a precondition for inclusion and participation in the labour market and society in a digitally transformed Europe).

Early childhood education and care

Early childhood education and care (ECEC) includes centre-provided and family day care, privately- and publicly-funded, pre-school and pre-primary provision. It has the potential to lay the foundations for later success in life in terms of education, well-being, employability and social integration and is, as such, an efficient and effective investment in education and training.

ECEC is particularly important for children from disadvantaged backgrounds. Indeed, every child in the EU should have the right to affordable and high-quality ECEC, as outlined in the European Pillar of Social Rights. Through achieving this goal, educational attainment in the EU should be decoupled from social, economic and cultural status.

The European Commission supports EU countries and facilitates cooperation between them by providing data and analysis on developments and issues concerning ECEC, identified as a priority area for cooperation under the European Education Area initiative for the period 2021–30. In May 2019, the Council adopted a Recommendation on High-Quality Early Childhood Education and Care Systems . A European Commission working group supports peer-based learning, sharing knowledge and best practices for monitoring and evaluating the quality of ECEC provision. It also supports EU countries in their efforts to improve access to and the quality of early childhood education and care. As part of this work, the working group has published

- a toolkit for inclusive ECEC

- guidelines on how to recruit, train and motivate well-qualified ECEC staff.

The European Commission is also working on a European Child Guarantee to ensure that every child in the EU at risk of poverty or social exclusion has access to the most basic rights, including healthcare and education.

As part of the European Education Area initiative, the EU has agreed a target for 2030

- to have at least 96% of children between 3 years old and the starting age for compulsory primary education participating in early childhood education and care.

School education

Schools are a focus area for cooperation to ensure that the European Education Area becomes a reality. The European Commission's vision is based on 5 dimensions

- quality and equity in education and training – work on key competences, tackling early school leaving, fostering multilingualism and language awareness in schools, promoting supportive learning environments, addressing well-being and mental health at school

- school teachers and school leaders – guidance and work on supporting teachers' and school leaders' careers and professional development, promoting teachers' learning mobility

- digital education – digital competences and skills are considered essential to give every individual an equal chance to thrive in life, find employment and to be an engaged citizen (more information is provided below in the section on the Digital Education Action Plan)

- green education – whereby education and training systems/institutions can act as catalysts to support a shift to a more sustainable society (more information is provided below in the section on Green education)

- the EEA in the world – EU instruments for quality and inclusive, digital and green education are widely used across educational communities of non-EU countries, with the EU contributing towards a holistic approach to education and training.

As part of the European Education Area strategic framework, a working group on schools was established by the European Commission. It is composed of representatives from national educational authorities and stakeholder organisations active in the field education. The working group offers opportunities for peer learning, sharing of best practices and information, networking and collaboration on topics related to school success, and education for environmental sustainability.

As part of the European Education Area initiative, the EU has agreed 3 specific targets concerning school education for 2030

- the share of low-achieving 15-year-olds in basic skills – reading, mathematics and science – should be less than 15%

- the share of low-achieving 8th graders (generally 13-year-olds) in digital skills – computer and information literacy – should be less than 15%

- the share of early leavers (aged 18 to 24) from education and training should be less than 9%.

Higher education

Higher education occupies a unique position – serving society and the economy – as it sits at the crossroads of education, research and innovation. There are a broad range of higher education institutions across the EU, from universities, research and technology institutes to vocational education and training institutions, or schools of art/design.

In May 2017, the European Commission adopted a Communication on a renewed EU agenda for higher education (COM(2017) 247 final), focusing on 4 priority activities

- tackling future skills mismatches and promoting excellence in skills development

- building inclusive and connected higher education systems

- ensuring higher education institutions contribute to innovation

- supporting effective and efficient higher education systems.

The Communication also proposed to streamline EU support for higher education by

- creating a knowledge hub to enhance data quality, comparability, data collection and indicators and draw lessons from the implementation of EU higher education data tools to date

- strengthening the work of the Eurydice network and cooperation with the OECD to avoid a duplication of efforts

- simplifying student mobility by building on existing Erasmus+ projects for the electronic exchange of student data and exploring the feasibility of establishing an electronic student identification system

- initiating a discussion on efficient support to students, staff, institutions and higher education systems.

The European Commission has a number of other higher education initiatives that are intended to enable the higher education sector to adapt and thrive; they are based on shared values, such as excellence and inclusion. The following list provides a summary of some recent initiatives.

- Micro-credentials certify the learning outcomes of short-term learning experiences: they offer a flexible, targeted way to help people develop the knowledge, skills and competences they need for their personal and professional development. The EU has put in place a set of recommendations to support the development, implementation and recognition of micro-credentials across institutions, businesses, sectors and borders, promoting lifelong learning through shorter forms of learning opportunities, to ensure that everyone has the knowledge, skills and competences they need to thrive in their personal and professional lives.

- A Communication on a European strategy for universities (COM(2022) 16 final) outlined plans to develop 'European universities' – transnational alliances of higher education institutions based on long-term structural and strategic cooperation – as a key pillar of the European Education Area. With an announcement in mid-2024 concerning additional funding, the initiative was providing support for the establishment of 64 European universities – designed to enable Europeans to cooperate across languages, borders and disciplines – bringing together more than 560 higher education institutions.

- The European Student Card Initiative (ESCI) is designed to promote student mobility across Europe, through a European student card (for students to benefit from a range of services), an Erasmus+ App (to assist with practical administrative steps), and a range of digital solutions to connect higher education institutions (so they may better manage Erasmus+ mobile students).

Erasmus+

The Erasmus programme was 1 of the most well-known European programmes and ran for just over a quarter of a century; in 2014 it was superseded by the EU's programme for education and training, youth and sport , referred to as Erasmus+. The programme's current funding period runs from 2021 to 2027. It has an estimated budget of € 26.2 billion (which is nearly double the funding of the 1st funding period (2014–20)).

The Erasmus+ programme supports priorities and activities set out in the European Education Area, Digital Education Action Plan and the European Skills Agenda. It also

- supports the European Pillar of Social Rights

- implements the EU Youth Strategy 2019–27 which seeks to engage young people so they become active citizens participating in democracy and society

- develops the European dimension in sport (COM(2011) 12 final).

Erasmus+ offers mobility and cooperation opportunities in school education (including early childhood education and care), higher education, vocational education and training, adult education and sport. The programme has 4 overarching priorities – inclusion, digital, green, democratic participation. It is designed so that Europeans from all backgrounds may benefit from the opportunities offered, which provide real life-changing experiences, with positive effects on professional, social, educational and personal development. The programme aims at being more inclusive by improving participation rates among vulnerable and under-represented groups. Through developing digital skills and competences in areas such as combating climate change, clean energy, artificial intelligence, robotics or big data analysis, it may

- contribute to sustainable growth and ensure equity, prosperity and social inclusion

- support and facilitate transnational and international cooperation in the fields of education, training and sport to strengthen European identity and the participation of young people in democratic processes.

Erasmus+ supports 3 key actions

- learning mobility for individuals, both within the EU and beyond, for example through study and training, traineeships, and teaching and professional development

- cooperation among organisations and institutions – for innovation and the exchange of good practices – between educational institutions, or between educational institutions and organisations for young people, businesses, local and regional authorities and non-governmental organisations (NGOs)

- support for policy development and cooperation – designed to promote the active participation of young people in democratic life.

The latest information available concerning the reach and impact of Erasmus+ concerns 2022. Participation in Erasmus+ rebounded to a level that was above that recorded before the COVID-19 pandemic. There were 1.2 million students or staff members who studied, trained or volunteered abroad in 2022 thanks to Erasmus+, with 13.3% of all participants having a low level of opportunity (special needs, from disadvantaged backgrounds, or from outermost regions of the EU). Erasmus+ provided funds to 26 000 projects that were spread over 73 000 organisations, with a budget of € 4.0 billion.

Vocational education and training (VET)

VET prepares people for work (to qualify them for the labour market) and develops skills so that they remain employable and respond to the needs of the economy. It provides learners with essential skills that enhance their employability and support their personal development. In a broader context, VET may boost enterprise performance, competitiveness, research and innovation.

Initial vocational education and training (I-VET) is usually carried out at upper secondary level and post-secondary level before students begin their working life. It takes place either in a school-based environment (mainly in the classroom) or in a work-based setting (such as training centres and companies). On average, 50% of young Europeans aged 15 to 19 participate in I-VET at upper secondary level. However, this average figure masks significant geographical differences across EU countries, as participation rates range from 15% to upwards of 70%.

Continuing VET (C-VET) usually takes place after initial education and training or after beginning working life. It aims to upgrade knowledge, to help people acquire new skills and to retrain and further their personal and professional development; it is largely work based.

European cooperation on VET dates back to 2002 and the Copenhagen process , when plans were put in place to enhance European cooperation, matching what had previously been done for higher education – the Bologna process – with a similar process for VET. The principal objectives of the Copenhagen declaration included to

- develop a framework for the transparency of qualifications and competences

- cooperate in quality assurance

- establish a credit transfer system for VET

- strengthen policies, systems and practices for lifelong guidance

- support the development of qualifications and competences at sectoral level

- give attention to the learning needs of teachers and trainers.

Policy developments in relation to VET were subsequently enhanced, for example through the Riga conclusions (2015) , which provided a new set of medium-term (2015–20) deliverables in the field of VET.

Subsequently, VET was identified as a focus area for cooperation under the European Education Area initiative. On 24 November 2020, the Council of the EU adopted a Recommendation on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience (2020/C 417/01). It defines key principles for ensuring that vocational education and training in the EU adapts swiftly to labour market needs and provides quality learning opportunities for young people and adults alike. It places a strong focus on the increased flexibility of vocational education and training, reinforced opportunities for work-based learning, apprenticeships and improved quality assurance.

On 30 November 2020, ministers in charge of vocational education and training from EU countries, European social partners and the European Commission endorsed the *Osnabrück Declaration on vocational education and training as an enabler of recovery and just transitions to digital and green economies* . It sets out new policy actions for the period of 2021 to 2025 to complement the Council Recommendation on vocational education and training for sustainable competitiveness, social fairness and resilience, namely to

- promote resilience and excellence through quality, inclusive and flexible VET

- establish a new lifelong learning culture emphasising the relevance of C-VET and digitalisation

- foster the sustainability of VET

- develop a European education and training area and international VET.

Adult learning activities

Adult learning refers to a range of formal and informal learning activities, both general and vocational, undertaken by adults after leaving initial education and training. Individuals may pursue adult learning for a variety of reasons, for example, to

- enhance their employment prospects

- develop personally or professionally

- obtain transferrable skills, such as critical thinking.

The right to education, training and lifelong learning is enshrined in the European Pillar of Social Rights (principle 1). Furthermore, 1 of the headline targets in the Pillar of Social Rights is to have, by 2030, 60% of all adults participating in training every year.

A Council Resolution on a new European agenda for adult learning 2021-2030 (2021/C 504/02) adopted on 29 November 2021 highlights the need to increase adult participation significantly in formal, non-formal and informal learning. It focuses on 5 priority areas

- governance of adult learning

- supply and take-up of lifelong learning opportunities with sustainable funding

- accessibility and flexibility – to adapt to the needs of adults

- quality, equity, inclusion and success in adult learning – emphasising the professional development of adult learning staff, the mobility of both learners and staff, quality assurance and active support to disadvantaged groups

- green and digital transitions and related skill needs.

Digital Education Action Plan

The Digital Education Action Plan (2021–27) (COM(2020) 624 final) is a renewed EU policy initiative to support the sustainable and effective adaptation of education and training systems to the digital age. It was adopted in September 2020 and contributes towards achieving a number of the European Commission's priorities

- A Europe fit for the digital age

- NextGenerationEU , which aims to create a greener, more digital, healthy, strong and equal EU

- the European Education Area by 2025

- the European Skills Agenda by 2025

- the European Pillar of Social Rights Action Plan , which includes 3 key social policy targets by 2030

- the Digital Decade , which has a number of specific targets and objectives to guide the EU's digital transformation through to 2030.

The Digital Education Action Plan sets out 2 strategic priorities.

1. Fostering the development of a high-performing digital education system, including

    - infrastructure, connectivity and digital equipment
    - effective digital capacity planning and development, including up-to-date organisational capabilities
    - digitally competent and confident teachers and education and training staff
    - high-quality learning content, user-friendly tools and secure platforms which respect e-privacy rules and ethical standards.

2. Enhancing digital skills and competences for the digital transformation, requiring

    - basic digital skills and competences from an early age
    - digital literacy, including tackling disinformation
    - computing education
    - good knowledge and understanding of data-intensive technologies, such as artificial intelligence (AI)
    - advanced digital skills, which produce more digital specialists
    - ensuring that girls and young women are equally represented in digital studies and careers.

Green education

A wide range of initiatives and actions on the environment and sustainability are taking place in education and training across the EU. Indeed, education and training systems have the potential to provide a catalyst in the shift to a more sustainable society. However, a socially just transformation requires people to have the knowledge, skills and attitudes to shape and cope with these potentially profound changes.

The European Commission's work in this field is designed to ensure that sustainability becomes a systemic feature of education policy and practice in the EU, for example

- a Council Recommendation on learning for the green transition and sustainable development (2022/C 243/01) supports EU countries to embed sustainability into education and training programmes

- the European sustainability competence framework sets out the knowledge, skills and attitudes learners of all ages need to acquire for the green transition, as presented in the European Green Deal

- working groups on the green transition and sustainability have been set up for school education and for vocational education and training, adult learning and higher education

- Erasmus+ supports a range of initiatives related to sustainability in education and training

- the EU's Learning Corner includes teaching and learning materials on sustainability and the climate crisis for primary and secondary schools.

Education and training statistics

The measurement of progress towards the objectives described above requires a broad range of comparable statistics. Eurostat's education and training statistics describe education and training systems in the EU, alongside their outcomes, including data for

- participation in education and training (including adult learning)

- learning mobility

- education personnel

- education finance

- education and training outcomes

- language learning and self-reported language skills.

The standards for international statistics on education are set by 3 international organisations

- the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics (UIS)

- the Organisation for Economic Co-operation and Development (OECD)

- Eurostat , the statistical office of the EU.

The main source of data is a joint UNESCO/OECD/Eurostat (UOE) data collection on education statistics. This is the basis for the core components of Eurostat's database on education statistics. In combination with the joint data collection, Eurostat also collects data on regional enrolments and foreign language learning. Education statistics for educational attainment and adult learning are principally provided through household surveys, in particular the EU labour force survey (EU-LFS) , which is complemented by an adult education survey (AES) and the continuing vocational training survey (CVTS) .

The UOE data collection exercise is based on administrative sources, with the data compiled by education ministries or national statistical authorities. Reference periods are the calendar year for data on expenditure and the school/academic year (classified to the calendar year in which the school/academic year finishes) for all other non-financial data.

The international standard classification of education (ISCED) is the basis for international education statistics, describing 9 different levels of education .

More information about the joint data collection is available in an article on the UOE methodology .

Annual reports and country factsheets with key statistics pertaining to the EU's programme supporting education, training, young people and sport – Erasmus+ – are available on the European Commission's website .

See also

- All pages on education and training

- Education and training in the EU – facts and figures – online publication

Dedicated section

- Education and training

Methodology

- Education and training methodology

Manuals and other methodological information

- International Standard Classification of Education (ISCED) 2011

- ISCED 2011 Operational Manual – Guidelines for classifying national education programmes and related qualifications

- UOE data collection on formal education – Manual on concepts, definitions and classifications – 2023 edition

- UNESCO OECD Eurostat (UOE) joint data collection – methodology

Legislation

- Education and training legislation

External links

- European Commission – Directorate-General for Education, Youth, Sport and Culture , see

  - Erasmus+

- European Commission – European Education Area , see

  - Strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021–30)
  - Education and Training Monitor
  - Vocational education and training initiatives

- Education, Audiovisual and Culture Executive Agency (EACEA) , see

  - Eurydice , see

    * Information network on education in Europe – National education systems

- European Centre for the Development of Vocational Training (CEDEFOP)

- OECD – Directorate for Education and Skills

- UNESCO – Education transforms lives