



EAfA

EUROPEAN
YEAR OF
SKILLS

Transversal skills in apprenticeships



Launched in 2013, the **European Alliance for Apprenticeships (EAfA)** is a multi-stakeholder platform aiming to strengthen the quality, supply and image of apprenticeships, as well as the mobility of apprentices in Europe and beyond. EAfA aims to do so through national commitments by public authorities and voluntary pledges from stakeholders, and by providing practical information and increasing knowledge exchange on apprenticeships.

Introduction

Transversal skills, such as critical thinking, adaptability and teamwork, are a set of essential skills for work, education and daily life. These skills are distinctive in the way they can be applied to any type of job, making them highly transferable¹. They are becoming increasingly important in today's rapidly changing world of work.

This factsheet provides an overview of the concept of transversal skills and their significance in the current job market. It explores the potential challenges of integrating transversal skills into apprenticeship programmes. Through inspiring examples of developing transversal skills in vocational education and training (VET) and apprenticeships, it highlights opportunities for development and innovation.

Why transversal skills are needed now more than ever

Transversal skills, also referred to as 'soft skills', 'human skills' or '21st century skills', among others, are commonly understood as necessary or valuable in any kind of work, education and training, and in daily life. They can help employers and workers adapt to transformative changes in the labour market, such as those driven by the digital and green transitions. By supporting the development of transversal skills alongside occupation-specific skills, apprenticeships can play an integral role in enabling young labour market entrants as well as existing workers to adapt to these changes and thus promote sustainable economic growth, social inclusion, and competitiveness. In addition to their economic relevance, transversal skills can also provide people with the motivation and the necessary self-confidence to have a fulfilling career.

¹ European Commission and Cedefop (2021) [Towards a structured and consistent terminology on transversal skills and competences](#).



As technological advancements are resulting in the increasing digitalisation of certain tasks, more value will continue to be given to skills and competences that cannot easily be automated.



As the EU strives to meet climate targets and drive the development of new digital technologies, innovative and creative solutions will be fundamental to mitigate climate-related risks and to support environmental sustainability.



65 % of small and medium-sized enterprises (SMEs) in the EU say flexibility and critical thinking are becoming increasingly important².



By 2030, competences of entrepreneurship such as initiative-taking will be **32 %** more in demand in Europe than they were in 2016⁴.



As artificial intelligence (AI) is reshaping the world of work, transversal competences to manage the pace of change are critical for both employees and organisations.



Transversal skills can help apprentices sustain employment and help businesses drive innovation, growth and the competitiveness of the European economy.



LinkedIn's latest global inventory of skills revealed that **adaptability** is the most in-demand skill on the labour market in 2024³.



70 % of businesses in the EU report a lack of staff with adequate **digital skills** as an obstacle to investment⁵.

The **Council Recommendation on Key Competences for Lifelong Learning** sets out a framework for the development of key competences and basic skills for all, from an early age and throughout life. These include transversal skills such as interpersonal skills, entrepreneurship and digital literacy. Examples of transversal competences include:

- personal and social learning to develop competences such as **empathy, flexibility** and **critical thinking** (see: [LifeComp](#));
- digital literacy and competences such as **information and data literacy, cybersecurity** and the use of **digital tools** powered by AI and machine learning (see: [DigComp](#));
- sustainability competences such as **exploratory thinking, systems thinking** and **valuing sustainability** (see: [GreenComp](#));
- entrepreneurship competences such as **creativity, financial and economic literacy** and **initiative-taking** (see: [EntreComp](#)).

By actively integrating transversal skills into apprenticeship curricula and learning activities, apprenticeships can equip individuals to thrive in today's labour market, supporting their professional, career and social development.



² Eurostat (2023) [Flash Eurobarometer 529: European Year of Skills: Skills shortages, recruitment and retention strategies in small and medium-sized enterprises](#), p. 8.

³ Brodnitz, D. (2024) [The Most In-Demand Skills for 2024](#) (LinkedIn).

⁴ McKinsey Global Institute (2018) [Skill shift: Automation and the future of the workforce](#).

⁵ European Commission, [Digital skills and jobs](#).

Apprenticeships and transversal skills

Increasing importance of transversal skills in VET and apprenticeships

Given their increasing importance in the labour market, transversal skills are highly relevant to apprenticeship programmes. Apprenticeships are well placed to help people develop transversal skills and integrate them into new occupational profiles due to their combination of practical and theoretical learning. Given their close connection to businesses and employers, apprenticeships can identify transversal skills that are in demand and assist learners in developing these in a balance of school-based and work-based learning environments.

The work-based learning aspect of apprenticeships is crucial for the development of transversal skills, as they can be difficult to teach in a school-based setting. Developing transversal skills effectively requires a practical learning environment where learning-by-doing is possible. Nevertheless, they do have a theoretical or knowledge-based component that training providers should include. For example, to develop sustainability competences, a worker needs knowledge about climate change, the impact of human activity and how actions like recycling can help. This theoretical knowledge can then help apprentices develop their critical thinking by considering how to practically make their workplaces more sustainable.

The [European Framework for Quality and Effective Apprenticeships](#) already provides the basis for the inclusion of transversal skills in apprenticeship programmes by calling on apprenticeships to respond to the needs of both apprentices and employers throughout the European Union. Member States can play a role by formally integrating the acquisition of transversal competences into apprenticeships in national legislation, as it is already happening in Austria.

'Job profile screening to create a list of priorities' project in Austria



Recognising the increasing importance of transversal skills in vocational training, Austria has sought to formally integrate transversal skills and competences into all training regulations for apprenticeships. To facilitate this, the Federal Ministry of Digital and Economic Affairs (BMDW) initiated a project to screen the job profiles of all apprenticeship training regulations in 2019. This allowed authorities to better understand where training regulations were meeting the needs of companies in terms of digital and transversal skills.

Together with social partners, the BMDW has developed a draft model for teaching transversal skills in the context of apprenticeships which it began to operationalise in 2022. Provisions outlined in the model will be integrated into training regulations, highlighting the country's commitment to ensuring all apprenticeships provide necessary transversal skills⁶.

Transversal skills in response to the green and digital transitions

The green and digital transitions are reshaping industries and redefining the skills needed in the modern workforce. Transversal skills, such as sustainable thinking and acting, collaborative working, communication and persuasion will, alongside job-specific technical skills, be crucial in all occupations to ensure that green solutions and practices are implemented, including in sectors strongly impacted by the **green transition**. For example, to build smart green cities, ICT skills and analytical skills are the key technical skills necessary to understand data generated by sensors and other technical equipment implemented. These technical skills will need to be paired with transversal competences, such as communication and persuasion skills to encourage the general public to make use of newly available green services, functions and technologies and to efficiently collaborate with other service providers. The combination of job-specific technical skills and soft skills will be equally important in other sectors related to the green and digital transitions, such as waste management, circular economy and agri-food⁷. As seen in the example below, VET providers increasingly recognise the crucial role of integrating transversal skills into apprenticeship curricula.

⁶ Cedefop, [Timeline of VET policies in Europe – Austria](#).

⁷ Cedefop (2023) [Skills in transition](#).

'GRÆDUCATION' project in Greece



As part of the country's commitment to the European Green Deal, since 2018 Greece has been implementing a reform of its VET system, including greening the curricula of apprenticeships to make them more relevant to companies' skills needs arising from the green transition. The project, coordinated by the International Centre for Technical and Vocational Education and Training (UNESCO-UNEVOC), has sought to contribute to this reform by aiming at increasing training opportunities in the renewable energy sector.

As part of the project, Greek and German apprenticeship trainers worked together to design and implement new training programmes. In light of new innovation requirements (e.g. digitalisation push and the COVID-19 pandemic), project participants recognised the importance of interdisciplinary competences in closing innovation gaps and developed training courses in which training on innovative technical competences is complemented with transversal ones, such as new attitudes and awareness towards greening and entrepreneurial skills which can empower apprentices for the green transition⁸.

As a result of accelerating digitalisation of the economy, basic levels of digital competence are essential for workplace participation in most occupations. Such is the pace of change that Cedefop's skills forecast predicts that, in some jobs, digital competences, such as data analysis skills, will increasingly be considered transversal rather than purely technical. In initial VET (IVET) for young apprentices, nearly half of EU digital policy initiatives already see digital competences as transversal skills, making digital literacy a key focus⁹. For this reason, it is essential that apprenticeships remain up-to-date with digital skills demands by adding digital literacy, digital user skills and a wider range of cognitive and social skills development to all occupational frameworks, tailored to the context of the occupation¹⁰.

Challenges related to transversal skills

Defining and incorporating transversal skills

One of the key challenges associated with transversal skills is that they encompass such a broad range of skills. Given this breadth, transversal skills may be understood differently by different stakeholders. Yet defining transversal skills is key to setting standards to develop these skills, and subsequently to assess them¹¹. By developing a common understanding of transversal skills, standards can be developed to ensure the quality of learning and provide a framework through which competence can be measured to make sure learners are fully competent in those skills. Apprenticeship stakeholders, including employers and social partners, should work closely with government agencies to develop a common understanding of transversal skills on this basis. In addition, individual apprenticeship providers should also be able to adjust the provision on transversal skills at local level in consultation with employers. This would also ensure that the transversal skills integrated into apprenticeships are relevant to local employers and avoid situations in which employers feel that VET graduates have received outdated or irrelevant skills¹².

Moreover, despite employers' increasing demand for transversal skills, these skills and competences have not yet been fully integrated into many apprenticeship programmes, nor into validation and guiding procedures. Further targeted interventions are needed to help ensure that transversal skills are incorporated into apprenticeship programmes. As shown in the example of Austria above, integrating transversal skills into apprenticeship training regulations is one important way that national governments can ensure apprenticeships provide these crucial skills.

The **European Qualifications Framework** (EQF) envisages that all qualifications should be described in terms of learning outcomes under the categories of knowledge, skills and autonomy and responsibility. This approach can be used to develop the standards for transversal skills and support their formal incorporation into existing apprenticeship programmes.

8 Cedefop (2022) [Apprenticeships for greener economies and societies](#), p. 52-60.

9 Cedefop (2020) [Key competences in initial vocational education and training: digital, multilingual and literacy](#).

10 International Labour Organization (2022) [Promoting apprenticeships to meet the skills needs of the digital and knowledge economy](#).

11 Cedefop (2023) [European guidelines for validating non-formal and informal learning](#) p. 50.

12 European Commission (2022) [Engaging employers in work-based learning and apprenticeships: A recommendations paper](#), p. 15.

Assessing and validating transversal skills

Certain transversal skills may by their nature be difficult to formally assess and validate. While more technical skills such as the ability to repair an item properly can easily be observed, it is less easy to assess cognitive skills such as whether an apprentice has thought critically about an issue before undertaking a task. Assessment and validation techniques for transversal skills should therefore be versatile. For example, the ability to work in a team may be assessed through observation and feedback from supervisors or co-workers. Skills such as self-reflection and coping with stress may include a mix of self-assessment, dialogue with the assessor, and reports from colleagues. In its [European guidelines for validating non-formal and informal learning](#), Cedefop provides guidance on different types of tools and instruments to validate skills, which can also provide a useful starting point for assessing transversal skills development.

'TRANSVAL-EU' Erasmus+ project (2021-2023)



The project aimed to strengthen the recognition and validation of transversal skills in validation systems by testing innovative approaches to transversal skills in five pilot countries (Austria, Belgium, Italy, Lithuania, Poland). The project was tested also in the context of apprenticeships, exploring how transversal competences can be assessed for those who want to acquire an apprenticeship through validation. Partners also developed a [training toolkit](#) on how to integrate transversal skills and competences into VET trainers' daily work practices.

Accreditation for transversal skills

Providing appropriate apprenticeship accreditation for transversal skills is linked to the aforementioned challenges. Transversal skills have not traditionally been reflected in VET qualifications and apprenticeship programmes to the same extent as technical skills. This is partly because, in the past, transversal skills were not as valued due to the intrinsic difficulty in defining and meaningfully assessing them. Transversal skills can be seen as having similarities with tacit knowledge, which is knowledge, skills or experience gained through lived experience and which is difficult to make visible. Yet the growing demand for transversal skills means these skills need to be learned, developed and nurtured. To ensure transversal skill sets are integrated into developmental pathways, such as upskilling, it is important to recognise them through different certificates and credentials (e.g. micro-credentials) at different levels of VET¹³.

EU initiatives on transversal skills

The EU supports employers, workers and training institutions in advancing transversal skills through several initiatives, including:

- The [European Skills Agenda](#), that outlines 12 actions to equip people in Europe with the skills they need. One key action is fostering entrepreneurial and transversal skills to meet the skills demands of the changing labour market.
- The [Pact for Skills](#), that brings together public and private actors to commit to developing and investing in reskilling workers. One of the four principles of the Pact for Skills Charter is to monitor skills supply and demand, including both job-related and soft competences.

Initiatives on transversal skills are supported by funds dedicated to actions on education and training and skills development:

- The [Recovery and Resilience Fund](#) provides **EUR 806.9 billion** in financial support towards the development of transversal skills linked to the digital and green transitions.
- The [European Social Fund Plus \(ESF+\)](#) invests a total of **EUR 43.3 billion** in education, training and skills of EU citizens between 2021 and 2027. Due to a strong focus on responding to labour market needs, many projects are relevant to transversal skills.
- The [Erasmus+](#) programme provides a total of **EUR 26.2 billion** including for activities to develop key competences and transversal skills, through study, work or volunteering experiences abroad.

¹³ ILO (2022) [Promoting apprenticeships to meet the skills needs of digital and knowledge economy](#).

'Career guidance' ESF+ project¹⁴



This Austrian project supported by the ESF+ helped young people to explore potential professional paths and to experience a working environment. Participants took part in a 10-week vocational orientation and training course, during which they identified their technical and transversal skills needs, interests and personal strengths through practical projects and teamwork. The project focused on digitalisation, and along with developing technical knowledge related to 3D-printing and augmented reality, participants were supported with their job application skills and career plans for achieving their career aspirations. As a result, participants developed self-confidence and adaptability among other soft competences highly valued by future employers.

Further information on EU initiatives linked to transversal skills and on EU funding opportunities can be found on the European Year of Skills [website](#).

'DigiGo: Apprenticeships in the digital era' Erasmus+ project (2021-2023)



During this project, partners organised a training course for apprenticeship trainers and mentors to promote the DigComp competence framework and help them integrate these competences into learning activities. By training apprenticeship teachers, the project was responding to needs that emerged as a result of the COVID-19 pandemic: to develop the digital skills and literacy of apprentices ahead of entering the workplace and to better support trainers and mentors involved in apprenticeships in enhancing learners' digital skills. Project partners created an [e-learning programme](#) focusing on digital competences for company trainers and mentors, which is available in six languages.

The project was jointly implemented by seven cooperating partners, including a social enterprise, an SME and VET providers from France, Greece, Malta, Netherlands, North Macedonia and Portugal.



¹⁴ ['Innovative career guidance for young people in Austria'](#) on the European Social Fund Plus website, 2023.

Key sources for further reading

- Cedefop (2020), [Key competences in initial vocational education and training: digital, multilingual and literacy](#).
- Cedefop (2020), [Skills in transitions – The way to 2035](#).
- Cedefop (2022), [Apprenticeships for greener economies and societies](#).
- Cedefop (2022), [Strengthening skills systems in times of transition](#).
- Cedefop (2023), [Skills in transition](#).
- Cedefop, [Skills Intelligence](#).
- Cedefop, [Skills Online Vacancy Analysis Tool for Europe](#) (Skills OVATE).
- European Commission (2022), [Engaging employers in work-based learning and apprenticeships: A recommendations paper](#).
- European Commission, [European Year of Skills](#).
- International Labour Organization (2021), [Global framework on core skills for life and work in the 21st century](#).
- International Labour Organization (2022), [Promoting apprenticeships to meet the skills needs of the digital and knowledge economy](#).