



EAfa

10
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SKILLS

Micro-credentials: How can they bring value to 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. EAfa aims to do so through national commitments and voluntary pledges from stakeholders, and by providing practical information and increasing knowledge exchange on apprenticeships.

Understanding micro-credentials

Short duration learning activities have always been a feature of the skills development landscape. Such courses have long been used by individuals and companies to improve skills needed in the workplace. Delivered by a wide range of training providers in the public and private sectors, they often sit alongside qualifications that are part of national qualifications systems. In recent years, however, digitalisation of learning (which has increased the possibilities for online and blended learning) and the need to upskill and reskill workers for the digital and green transitions have driven the growth of micro-credentials.

Micro-credentials vary considerably in function, scope, duration and delivery enabling them to meet new skill needs in a targeted, flexible way. As a result, they are playing an increasing role within vocational education and training (VET) ecosystems. However, employers and individuals can find it difficult to understand the quality and value of the learning experience provided by micro-credentials compared to formal qualifications.

In light of these concerns, the [Council Recommendation on a European approach to micro-credentials](#)¹ sets out to promote quality, trust and uptake of micro-credentials by making them more transparent, comparable and understandable. It provides a definition of micro-credentials to enable their further development although currently many micro-credentials may not meet these criteria. In this definition,² the key features of micro-credentials are:

- They record the learning outcomes that a learner has acquired following a small volume of learning.
- The learning outcomes will have been assessed against transparent and clearly defined criteria.
- They may be stand-alone or combined into larger credentials.
- They are underpinned by quality assurance following agreed standards in the relevant sector or area of activity.

1. [Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability](#) (2022/C 243/02).

2. According to the Council Recommendation on a European approach to micro-credentials.

The Recommendation specifies a set of standard elements, which should comprise a micro-credential. EU Member States are recommended to adopt and promote these elements to facilitate the ongoing and emerging development of micro-credentials (see box below). It also recommends that Member States support the exploration by VET institutions and other VET providers of the role of micro-credentials in supporting upskilling and reskilling of adults in continuing VET. The Recommendation also encourages Member States to consider providing public funding, according to national circumstances, for the development and provision of small education and training activities leading to micro-credentials at *all levels of education and training*.

Standard elements of micro-credentials³

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|---|---|
| 1. Identification of the learner | 9. Type of assessment |
| 2. Title of micro-credential | 10. Form of participation in the learning activity |
| 3. Country(ies)/Region(s) of the issuer | 11. Type of quality assurance underpinning the micro-credential |
| 4. Awarding body(ies) | |
| 5. Date of issuing | |
| 6. Learning outcomes | |
| 7. Notional workload needed to achieve the learning outcomes (in European Credit Transfer and Accumulation System (ECTS) if possible) | |
| 8. Level (and cycle, if applicable) of the learning experience leading to the micro-credential | |



How can micro-credentials bring value to apprenticeships?

Apprenticeships are programmes of structured learning that lead to formal qualifications.⁴ Their **quality and value** are derived from the involvement of social partners in their design and implementation, and from being part of national qualification systems. Designed and used in the right way, micro-credentials have the potential to add value to apprenticeships by using the principles and practices set out in the Council Recommendation, which will ensure quality, transparency and trust.

The Council Recommendation also promotes the development of **micro-credentials in non-formal and informal learning settings** by stakeholders including social partners, companies, professional associations, private training providers, civil society organisations and research and innovation organisations.

The time is therefore ripe for stakeholders involved in apprenticeships to embrace micro-credentials as a key tool to **meet economic, environmental and social needs**, and to ensure they make a high-quality contribution to the further evolution of apprenticeships.

As micro-credentials are relatively new to apprenticeships, we are in the early stages of considering how they might add value to apprenticeships, but it is possible to draw on lessons and examples from outside as well as inside apprenticeships to see how they might develop. Some inspiring examples are presented in the sections below.

3. According to the Council Recommendation on a European approach to micro-credentials.

4. The [Council Recommendation on a European Framework for Quality and Effective Apprenticeships](#) and the International Labour Organisation's Quality Apprenticeship Recommendation both call for apprenticeships to lead to recognised qualifications.

1 Supporting upskilling and reskilling for the green and digital transitions

The green and digital transitions are generating fast-changing skill needs in the economy and society generally. **Basic levels of digital competence** are now seen as essential for workplace participation and **skills and competences for more sustainable living and working** are vital to combat climate change. Additionally, in specific industries and occupations there are new and evolving technical skill needs. Such is the pace of change that it can be difficult to adjust apprenticeship programmes to take into account newly emerging needs. Micro-credentials have the potential to respond to these demands owing to their flexibility. For example, generic micro-credentials on digital skills and the '3Rs' (reduce, reuse, recycle) can support apprentices in a wide range of industries, while in new and developing green occupations such as in construction, entire suites of micro-credentials can be developed and implemented.

Care about IT Erasmus+ project (Netherlands, Italy, Estonia and Finland)

Started in 2023, this ongoing project explores the opportunities and challenges in initial and continuing VET education within the care and IT domains. The project will develop micro-credentials related to healthcare technology and technical digital skills as well as transversal competences. These are to be used in retraining and in-service training, and are intended to make the healthcare sector better connected to regional skill needs. While results are not yet available, micro-credentials that are developed as part of this project may be relevant for the planning and implementation of apprenticeships in the care sector in the future.

Using short courses and digital badges for greener construction apprenticeships in Ireland

To comply with new net zero energy building regulations, the Limerick Institute of Technology and the Waterford and Wexford Education and Training Board (regional education and training authority) have developed a portfolio of short modules and learning units called Nearly Zero Energy Building (NZEB). Short courses include examples on fundamental awareness, retrofit and ventilation. These are suitable for apprenticeships and for the upskilling of current craftworkers (e.g. plasterer, carpenter, electrician, ventilation engineer, etc.). The courses are approved by the Construction Industry Federation and backed by the international awards organisation – City & Guilds, which provides digital badges and benchmark programmes against their quality standards.⁵ The Waterford and Wexford Education and Training Board is co-financed by European Structural and Investment Funds.

2 Supporting apprenticeships for adults

Apprenticeships for adults have emerged as a key development in recent years, providing an important means of upskilling and reskilling the workforce. The flexibility afforded by micro-credentials could be invaluable in this context. For example, micro-credentials can play a role in the **validation of prior learning**. Adults often possess a wide variety of knowledge, skills and competences that they have acquired informally in the workplace, but which have not been captured, recorded and formally validated. They may also have acquired transversal or soft skills through other activities in their wider lives, which could be relevant to their future employment and could potentially contribute to business success, e.g. teamwork or leadership skills developed through cultural or sporting activities.

Procedures for recognising and validating prior learning could be developed or adapted to enable micro-credentials to be awarded. This would have benefits for individuals by helping to clarify the **pathways into an apprenticeship** (e.g. through a set of micro-credential 'stepping stones') and for both individuals and employers by avoiding the need for adult apprentices to undertake parts of an apprenticeship programme for which they already have the skills – making the apprenticeship more attractive and accessible.

Micro-credentials also have the potential to give people the opportunity to gain credit for competences on a stage-by-stage basis, which helps to stimulate and maintain a sense of achievement, and perhaps to spread out an apprenticeship over a longer period. Increasing the flexibility of apprenticeships in this way could potentially open them up to a wider group of individuals and employers. For example, individuals from disadvantaged backgrounds may struggle to fit in an apprenticeship around domestic commitments, so micro-credentials might help to address such challenges.

Exceptional admission to apprenticeship examination with micro-credentials in Austria

In dual VET, exceptional admission to the apprenticeship examination (*Außerordentlicher Zugang zur Lehrabschlussprüfung*) can be granted to people without formal training upon submitting evidence of having already acquired the relevant skills and knowledge, e.g. through courses. Micro-credentials have a role to play here in offering such proofs of prior learning achievements.⁶

5. ILO (2022). [Towards lifelong learning and skills for the future of work: Global lessons from innovative apprenticeships](#), p. 60.

6. Cedefop (2023). [Microcredentials for labour market education and training](#), p. 119.

3

Enhancing mobility and progression

Apprentices are increasingly being offered opportunities to participate in transnational learning periods abroad. However, a long-standing issue with such mobility periods is that there are weaknesses in the recognition of skills acquired and that such skills might not actually count towards graduating from an apprenticeship scheme. Micro-credentials can be used in such contexts as a means of capturing, recognising and validating skills acquired abroad. National rules and regulations governing apprenticeships will determine whether such micro-credentials are integrated into apprenticeships, but, even if they are not integrated, using micro-credentials in this way will likely increase the value of the transnational mobility period both to the individual and to their current and future employers.

Micro-credentials also have the potential to support mobility across sectors and occupations and an individual's progression to higher levels. Labour markets are becoming more fluid with digitalisation and the green transition. Structuring qualifications as coherent and transparent blocks around micro-credentials, with the assurance of quality provided by national qualification frameworks, could enhance the portability of skills between occupations and across levels of education and training. Many transversal/soft skills are applicable across a range of occupations, and this also applies to some technical skills. Micro-credentials for such skills can be part of more than one apprenticeship, increasing their portability. Micro-credentials could also enable pathways across levels of education and training, e.g. supporting progression to higher education where this is currently only possible by taking a school-based programme that might be unattractive for older apprenticeship graduates.

Interlab Erasmus+ project (Ireland)

The Carlow Institute of Further Education and Training in Ireland and its partners are implementing a blend of virtual learning and work-based mobility (2023–2024). Mobility experiences encompass four weeks of virtual collaboration, followed by a two-week campus-based learning and work placement. Participants who engage in the mobility will gain an additional credential of a work-based study module that fits into the National Framework of Qualifications, which is referenced against the European Qualifications Framework (EQF).

4

Addressing the needs of emerging industries and occupations

As new products and services emerge, the need for apprenticeship develops. With the green and digital transitions we have seen – and continue to see – the emergence of new industries and occupations. Some sectors, notably the global technology sector, use industry-designed micro-credentials for career entry and progression. Industry-recognised micro-credentials have value in the labour market and could be used to develop apprenticeships in some sectors. This is a potential win-win for employers and individuals who can benefit from the breadth and depth of learning that apprenticeships offer, can be certain that the latest skills are being acquired and can be clear in the knowledge that there is strong industry endorsement. Using micro-credentials that already exist also shortens the development time needed to design a new apprenticeship. Some countries (e.g. Ireland) have used this approach to develop VET programmes. For example, SOLAS – the State agency that oversees the Further Education & Training sector – has concluded a national certification agreement with a certification provider business (Certiport) to access industry-recognised examinations and certification.

Addressing the skills gap in the Management education sector Erasmus+ project (Ireland, Italy, Finland, Germany, Greece)

The project supports the acquisition of competences in Equality, Diversity and Inclusion (EDI) within the Management education sector, aimed at management students and managers in business, especially in small and medium-sized enterprises (SMEs). By developing a 10-credit module for EQF level 6, the project aims to respond to societal transformation by setting up a system for skill assessment, learning offer, and validation and recognition.

The micro-credential consists of a series of 15 EDI topics with a work-based learning (WBL) component and associated project work, which will be validated by the Institute of Art, Design and Technology (IADT) in Ireland. The micro-credential will be aligned with EU quality assurance standards and the ECTS framework, and will be portable, stackable and recognisable by EU Member States.

5

Supporting the professional development of teachers and in-company trainers

Keeping teachers and trainers up-to-date with new developments in their professional domains is an important concern across Europe, especially in light of the green and digital transitions. In many countries there is a need to improve the professional skills of teachers and trainers around pedagogy and assessment since the requirements to enter the profession are often minimal or non-existent, and opportunities for continuing professional development are limited. Micro-credentials can help to address these issues since they present learning in small volumes, which can be relatively easily scheduled around day-to-day work commitments, while also offering complete professional development pathways by forming part of full qualifications. Micro-credentials could also be used to validate existing skills if linked to recognition of prior learning.

National initiative on teachers' badges in Finland

The national initiative on teacher's badges (2018–2020) developed a national system of digital badges to support the recognition of professional competences for vocational teachers and aid their continuing professional development. Open badges were created in various competence areas (e.g. learning and guidance, personalised learning, etc.) based on several frameworks, such as DigiCompEdu. New badges are developed on an ongoing basis, overseen by a dedicated network and the Finnish Education Ministry. Prior to this initiative (in 2014), two schools of professional teacher education, together with the VET provider Omnia designed a programme that would help teachers gain working-life ICT skills. As a result of this successful initiative, by August 2021, in-service teachers had received evaluations for nearly 30 000 online learning badges. Moreover, online badges are widely used in professional teacher education qualification programmes for pre-service VET teachers.⁷

7. Cedefop (2022). [Microcredentials for labour market education and training](#), p. 103, 106.



Key sources for further reading

- Cedefop (2023). [Microcredentials for labour market education and training: microcredentials and evolving qualifications systems](#). Luxembourg: Publications Office. Cedefop research paper, No 89.
- Cedefop (2022). [Are microcredentials becoming a big deal?](#) Cedefop briefing note, June 2022.
- Cedefop (2022). [Microcredentials for labour market education and training: first look at mapping microcredentials in European labour-market-related education, training and learning: take-up, characteristics and functions](#). Luxembourg: Publications Office. Cedefop research paper, No 87.
- Cedefop podcast – Episode 6: [Microcredentials – are they here to stay?](#)
- ILO (2022). [Towards lifelong learning and skills for the future of work: Global lessons from innovative apprenticeships](#).
- ILO (2022). [The digital transformation of apprenticeships: Emerging opportunities and barriers](#).
- OECD (2023). [‘Micro-credentials for lifelong learning and employability: Uses and possibilities’](#), OECD Education Policy Perspectives, No. 66, OECD Publishing, Paris.