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MICRO-CREDENTIALS AND THE ROLE OF QUALITY ASSURANCE

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European VET Recommendation 2020 – the relevance of quality and micro-credentials

A **Quality Assurance National Reference Point for Vocational Education and Training** brings together all relevant stakeholders at national and regional levels to:

- **take concrete initiatives** to implement and further **develop the EQAVET Framework**;
- inform and **mobilise a wide range of stakeholders, including Centres of Vocational Excellence**, to contribute to implementing the EQAVET framework;
- **support self-evaluation** as a complementary and effective means of quality assurance to allow the measurement of success and the identification of areas for improvement, including with respect to digital readiness of VET systems and institutions;
- participate actively in the European network for quality assurance in Vocational Education and Training;
- provide an **updated description of the national quality assurance arrangements** based on the EQAVET Framework;
- **engage in EU level Peer Reviews of quality assurance** to enhance the transparency and consistency of quality assurance arrangements, and to reinforce trust between the Member States.

INTRODUCTION



Micro-credentials in the European Education and Training systems and Skills Policy Framework

Since 2020, the EU VET Recommendation has highlighted the importance of **“exploring the concept and use of micro-credentials”**, together with Member States and relevant stakeholders. This initiative is being developed within the framework of the EQF Advisory Group, as outlined in the European Skills Agenda.

In line with this, the **Council Recommendation on Micro-credentials (2022)** and **Action 10 of the European Skills Agenda** proposed a comprehensive EU initiative to support the quality, transparency, and uptake of micro-credentials across Member States. Specifically, **the European Commission aimed to:**

- **develop European standards** in collaboration with all relevant stakeholders—including public and private education and training providers, social partners, chambers of commerce, and employers—ensuring **minimum requirements for quality and transparency**. These standards are essential for building trust in micro-credentials and supporting their **recognition and portability** throughout Europe;

- explore the **integration of micro-credentials into National Qualifications Frameworks**, through ongoing dialogue with national qualifications authorities;

- enable individuals to **store and share** their **micro-credentials** with employers **via Europass** and its **Digital Credentials infrastructure**, enhancing visibility and usability across borders.



Research questions:

- **RQ1:** *To what extent is there a shared definition of micro-credentials across European and National Education and Training systems?*
- **RQ2:** *What are the common structural and functional characteristics of micro-credentials within the evolving European education and training landscape?*
- **RQ3:** *What enabling factors facilitate the alignment of micro-credentials with the goals of inclusion, digital and green transitions, and lifelong learning in European education and training systems?*
- **RQ4:** *What are the quality assurance requirements and implications for the effective and credible implementation of micro-credentials across Europe?*

Research methodology:

The research used **qualitative methods** such as:

- case studies and comparative analyses of European and national contexts that allowed to answer the above questions;
- document and policy analysis that further supported understanding of governance and implementation frameworks.



RQ1: *To what extent is there a shared definition of micro-credentials across European and National Education and Training systems?*

*Record of the learning outcomes that a learner has acquired following a **small unit of learning**, and that have been assessed against a predefined standard.*

European Commission Proposal for a Council Recommendation, 2021

*Micro-credential means the record of the learning outcomes that a learner has acquired following a **small volume of learning**. These learning outcomes will have been assessed against transparent and clearly defined criteria. Learning experiences leading to micro-credentials are designed to provide the learner with specific knowledge, skills and competences that respond to societal, personal, cultural or labour market needs. Micro-credentials are owned by the learner, can be shared and are portable. 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.*

European Council Recommendation, 2022

*A micro-credential is a certified **small volume of learning**. Micro-credentials are designed to provide the learner with specific knowledge, skills, and competences that respond to societal, personal, cultural or labour market needs. Credentials are owned by the learner, are portable, and may be combined into larger credentials or qualifications. Micro-credentials can be earned before, during and after higher education degree programmes and as a new way to certify competences acquired earlier in life.*



RQ1: *To what extent is there a shared definition of micro-credentials across European and National Education and Training systems?*

Definition of micro-credentials (with literature references)

A **micro-credential** is a **certified record of learning** that validates the achievement of **specific, targeted learning outcomes** acquired through a **short, focused educational experience**. These credentials are designed to be **modular, stackable, and flexible**, enabling learners to acquire **skills and competences** in response to evolving personal, societal, and labour market needs.

“A micro-credential certifies the learning outcomes of short-term learning experiences, following transparent and clearly defined standards” — *European Commission, 2020; Brown et al., 2021.*

Micro-credentials:

- are **learner-owned** and **portable**
- can be **stand-alone or combined** into larger qualifications
- are supported by **robust quality assurance frameworks**
- aim to increase **accessibility, flexibility**, and **lifelong learning**
- typically focus on **specific skills**, especially in emerging or high-demand areas (e.g., digital, green, and inclusive transitions)

“They are designed to meet the needs of learners, employers, and society, providing verifiable and shareable evidence of learning outcomes in a rapidly changing world.” — *OECD, 2021; Brown et al., 2021.*



Common factors in micro-credentials



RQ2: *What are the common structural and functional characteristics of micro-credentials within the evolving European education and training landscape?*

Several key factors are commonly found in micro-credentials:

Duration and volume: the duration of the educational programmes associated with micro-credentials is typically described as “**short**”, and the **learning volume** associated with credentials is considered “**small**” compared to traditional programmes.

Flexibility in delivery: micro-credential programmes are often designed to be **more flexible** in their delivery compared to traditional programmes, offering learners more adaptable learning paths.

Focused on **learning outcomes**: these programmes are generally aimed at the **acquisition of specific knowledge** on a particular topic or the **mastery of a single skill**, in contrast to traditional programmes, which offer a more **holistic approach** to learning, providing a broad and complementary set of knowledge and skills in a specific field of study.

Motivations for enrolment: learners may enrol in micro-credential programmes as a **stepping stone** toward a degree, but also for a variety of other reasons —such as personal enjoyment, pursuing an interest or skill not directly related to their career, or for **professional development**.



RQ3: *What enabling factors facilitate the alignment of micro-credentials with the goals of inclusion, digital and green transitions, and lifelong learning in European education and training systems?*

Skills Development, Upskilling, and Reskilling

European documents emphasize the urgent need for continuous **upskilling and reskilling** to adapt to the digital and green transitions and demographic changes (see §§2, 4, 12). This aligns with the micro-credentials' call for:

- supporting strategies like continuous training programmes;
- reskilling for green and digital sectors;
- addressing the teaching and learning changes.

Micro-credentials as Tools for Flexible, Inclusive Learning

Micro-credentials are presented as **innovative, modular learning units** designed to fill emerging skill gaps while allowing flexibility and stackability (§§5, 6, 11). This supports:

- promoting equitable access to technology and skills;
- supporting non-traditional learners;
- creating future-ready learning environments.



CONTEXT (2)



Engagement of HEIs with Communities

European documents encourage **collaboration among higher education institutions, employers, social partners, and civic organisations** to co-design and implement micro-credentials (§§10, 11). This matches the micro-credentials' interest in:

- community-HEI synergies;
- fostering civic engagement;
- strengthening the models, strategies and tools of innovation and education.

Digital and Green Transitions

The EU documents directly connect **micro-credentials** to supporting both the **Digital Education Action Plan** and the **European Green Deal**, making them strategic tools for the **twin transitions** (§17). This echoes the micro-credentials' interest in:

- AI and sustainability in Higher Education;
- eco-friendly digital education;
- addressing global challenges through curriculum innovation.

Inclusion and Democratic Participation

Specific emphasis is placed on using micro-credentials to **support disadvantaged and vulnerable groups**, promote **lifelong learning**, and ensure **broad democratic access to education and employment pathways** (§15). This aligns with micro-credentials' focus on:

- active ageing;
- civic participation;
- socially inclusive educational innovation.



The growing variety of micro-credentials and the challenges users face in evaluating them have raised concerns about their **quality and credibility**, which remain key barriers to wider acceptance and trust.

This makes **quality assurance (QA)** a central element in any regulatory framework aimed at ensuring **transparency, consistency, and confidence** in micro-credentials.

To be effective and widely recognized —especially in formal education and training systems— micro-credentials must be supported by **rigorous, transparent, and well-documented assessment processes**.

These processes must be:

- **based on clear and published criteria**, aligned with intended learning outcomes;
- **fair and consistent**, ensuring equal treatment of all learners;
- **designed in consultation with stakeholders** and tested for effectiveness and practicality;
- **carried out by trained assessors**, supported in applying diverse and appropriate evaluation methods;
- **accompanied by feedback**, enabling learners to reflect on and improve their performance.

RQ4: *What are the quality assurance requirements and implications for the effective and credible implementation of micro-credentials across Europe?*



QUALITY ASSURANCE



In terms of QA, the **European standard elements** for defining a micro-credential are relevant. And, the following elements should be included to define a micro-credential, as outlined in the **European Council Recommendation (2022)**:

- **Identification** of the learner
- **Title** of the micro-credential
- Country(ies)/region(s) of the **issuer**
- **Awarding body(ies)**
- **Date** of issuance

Additionally, the following elements are essential for outlining the learning experience:

- **Learning outcomes**: Clear description of the knowledge, skills, and competences acquired.
- Notional **workload required** to achieve the learning outcomes (expressed in European Credit Transfer and Accumulation System (ECTS), whenever possible).
- **Level** (and cycle, if applicable) of the learning experience leading to the micro-credential, referencing the European Qualifications Framework (**EQF**) or Qualifications Frameworks in the European Higher Education Area (where applicable).
- **Type of assessment**: Methods and criteria used to evaluate learners.
- **Form of participation** in the learning activity (e.g., online, face-to-face).
- **Type of quality assurance** used to underpin the micro-credential, ensuring reliability and transparency.





Internal and External Quality Assurance

Micro-credentials must undergo both **internal and external quality assurance processes** within the system that produces them, such as the educational, training, or labour market context in which they are developed and delivered.

According to the European Council Recommendation (2022), quality assurance processes should be **fit-for-purpose**, **clearly documented**, and **accessible**, meeting the needs and expectations of learners and stakeholders.



A common set of quality standards is essential for ensuring that all micro-credentials meet a **minimum level of quality**. This not only builds trust in individual micro-credentials but also in the overall process of designing and delivering them by a specific provider. When these standards are consistently applied, they enhance the credibility of the micro-credentials and the providers issuing them.



Uncertainty about the quality assurance mechanisms in place is a major factor contributing to the **distrust** of micro-credentials. This concern is particularly significant given the wide range of micro-credential options available, making it difficult for end users to evaluate and assess the credibility and quality of both the micro-credentials and their providers.



External quality assurance focuses primarily on the assessment of providers rather than individual courses, evaluating the effectiveness of their internal quality assurance (QA) procedures.

Providers may choose, or be required, to undergo external quality assurance through several pathways, including:

- **accreditation or licensing procedures:** In some cases, providers must undergo external QA procedures as part of a regulatory requirement to offer micro-credentials within a specific jurisdiction.
- **professional and employer certifications:** Business membership organizations, groups of employers, or large employers often establish lists of **“approved”** providers or courses for professional development, thereby certifying the quality of these offerings.
- **external quality assurance certification schemes:** Standardization bodies such as **ISO 21001** (Educational Organisation Management Systems) or **ISO 17024** (General Requirements for Bodies Operating Certification of Persons) provide certification to ensure that providers meet international quality standards for educational services and professional certification.
- **platform certification schemes:** online platforms, such as MOOCs, may conduct their own quality assessment of courses before allowing them to be offered on their platforms. These platforms help ensure that the micro-credentials available are up to standard.

A comprehensive external quality assurance approach typically combines self-assessment, external review, and processes designed for continuous improvement.



QUALITY ASSURANCE



- Internal quality assurance** of micro-credentials is based on the following key standards:
- **design and learning outcomes.** The design of micro-credentials and the application of the learning outcomes approach should be thoroughly assessed to ensure alignment with the intended knowledge, skills, and competences.
 - **certification process.** The process of certification should be evaluated to determine if learner assessments are valid and reliable, based on agreed and transparent learning outcomes-based standards.
 - **stakeholder involvement.** All relevant stakeholders should be involved at every stage of the process to assure and improve the quality of micro-credentials.
 - **evaluation frequency.** Regular evaluations should combine self-assessment and external reviews to ensure consistent quality monitoring.
 - **integration with internal management.** Quality assurance should be integral to the internal management system of the provider and supported by appropriate resources to ensure its effectiveness.
 - **accessibility of results.** The results of evaluations should be easily accessible, particularly in electronic form, to ensure transparency and accountability.

The core principle is that the internal quality assurance system of micro-credential providers must undergo external evaluation, ideally by an independent entity, to ensure objectivity and credibility.



Quality assurance in the European Framework

The Recommendation of the European Council of 24 November 2020 on Vocational Education and Training for sustainable competitiveness, social equity and resilience, strengthen the strategic role of Member States in promoting **Peer Review** and self-assessment as effective **tools for quality assurance**, not only at the providers level but also at the system level.

***Peer Review** is a type of voluntary mutual learning activity with the objective to support the improvement and transparency of quality assurance arrangements at system level not leading to accreditation procedures, based on a specific methodology to be developed (...) for quality assurance*

European Council Recommendation, 2020

- **Peer Review at providers' level** is based on a European methodology consisting in a combination of self-assessment by providers and external evaluation by Peers.
- **Peer Review at system level** is an important procedure to increase transparency and consistency in quality assurance arrangements and to strengthen mutual trust among Member States. The **main aim** of the peer review process is to support the country hosting the peer review (= the host country) to reflect on its **practice of quality assuring the national/regional system**.



One of the core insights from the research and analysis done by INAPP is that **quality assurance is not an accessory to micro-credentials — it is essential** to their credibility and portability.

Without robust Quality Assurance systems:

- learners face uncertainty about the value of their credentials;
- employers may hesitate to recognise them;
- education and training systems struggle to integrate them into National Qualification Frameworks (NQFs).

Effective Quality Assurance must ensure:

- transparent assessment based on defined learning outcomes;
- alignment with national and European Quality Assurance standards (EQAVET, ESG, EQF);
- fit-for-purpose, risk-proportionate methodologies adapted to the specific nature of micro-credentials;
- learner and stakeholder involvement in Quality Assurance processes.

Nowadays, terminology and implementation remain in progress, and national coherence is still in development. There is a need for shared definitions, clear governance structures, and better alignment between regional and national systems.





THANK YOU FOR YOU ATTENTION

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