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Micro-credentials: concepts, debates, experiences – towards a common understanding in different parts of the world

ACQF Thematic Brief 13

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This Thematic Brief explores the main concepts, debates and experiences from policy and research initiatives related with micro-credentials and their contextualisation in the frame of education and training systems, national qualifications frameworks, new eco-systems of certification, upskilling and reskilling to meet the needs of the digital and green transitions and employability in a context of skills shortages. The attention to micro-credentials in the research and literature, and in policy documents has increased in 2020-2022, as countries, regional communities, international organisations explore features of a common understanding of trusted and relevant micro-credentials. Chapter 6 looks into results of a limited ACQF survey (March 2021), which included a section on trends in micro-credentials.

The Thematic Brief is part of the collection of the ACQF Capacity Development Programme.

1. Micro-credentials: what defines them?

The number and diversity of micro-credential offerings have expanded substantially in recent years, accelerated by the onset of the COVID-19 pandemic. A large part of all employees will need reskilling by 2025 and the urgency of getting people back to work gives new momentum to "micro-credentials". Micro-credentials hold promises and challenges, and the common understanding on the role and potentialities of micro-credentials in the era of digital learning and economy is central to the debate.

1.1 Common traits in international definitions

Existing definitions (from OECD, European Commission, UNESCO, Australian Government) point to key common characteristics of micro-credentials:

- Referring to learning over a limited time period and/or in a specific area
- May form part of or adding to formal qualifications
- Potentially 'stackable' over time, adding to individual learning careers
- Given their limited size and focus, more flexible than traditional qualifications
- Based on assessed learning
- Frequently delivered in a digital form

1.2 A country perspective: Australia

The Australian Government (2021) adopted the <u>National Micro-Credentials Framework</u>, which uses the following definition:

"A microcredential is a certification of assessed learning or competency, with a minimum volume of learning of one hour and less than an Australian Qualifications Framework (AQF) award qualification, that is additional, alternate, complementary to or a component part of an AQF award qualification".

What can constitute a microcredential?

Vocational education and training (VET) skill sets or units of competency.

- Modularised, assessed components of existing higher education curriculum or subjects.
- Industry learning that is assessed (such as vendor certifications, professional learning).
- Other forms of assessed learning or competencies (e.g. Vocational Education/ Higher Education /Industry courses not currently accredited by a regulatory authority, and those by other providers).

What does not constitute a microcredential?

- Unassessed learning or courses, including work-integrated learning without an assessment.
- Badges which are obtained through participation only (i.e. without an assessment).
- Formal qualifications within the AQF and macro-credentials, including diplomas, certificates and masters degrees.

2. Changing world of work and learning

The future of work arrived ahead of schedule. At least four mega drivers of change are boosting the dynamics of this transformation and adaptation: digitalisation, automation and artificial intelligence; greening of the economy and society; Covid-19; and societal movements. In this context of transformation of work, reskilling and upskilling become urgent, as more workers transition to jobs that are based on a changing mix of tasks and skills.

People need to continuously update their knowledge, skills and competences to be adaptable to new roles and tasks in the rapidly changing world of work. A strong skill set opens up opportunities to individuals, provides a safety net in uncertain times, promotes inclusion and social advancement and provides the economy with the skilled labour force needed to grow and innovate.

New types of qualifications and of modalities of assessment and recognition of learning emerge and the concepts of micro-credentials and digital certificates are becoming part of policies and practices of education and qualifications systems.

3. Acknowledge and talk about micro-credentials is important

Acknowledge and talk about micro-credentials in the eco-system of learning, certification, and work is an important step to gradually build common language and understanding and harness the full potential of good micro-credentials for lifelong learning.

Micro-credentials came about as a result of the digital age and the rise of massive open online courses (MOOCs). The term 'micro credentials' has since become more and more widely known. But what are microcredentials and why are they so important? Microcredentials are a way to give visibility and value to shorter learning courses and experiences. They are evidence of practical, flexible, on-demand, and brief learning experiences. Many see them as a way to recognise learning outcomes acquired outside education institutions, for example at work, others see them as an integrated way to recognise smaller modules or units of formal education and training. (Cedefop, 2021).

While qualifications and degrees from initial education and training play a key role in Europe, alternative credentials (including digital badges, microcredentials, nano-credentials, minor awards, etc.), are increasingly seen as a way to add to, and/or reform, existing qualifications systems.

Micro-credentials are frequently portrayed and promoted as a new way for individuals to build their own skills-profile (portfolio) by collecting and 'stacking' learning in a flexible way, at their own pace and according to their own priorities.

However, while many qualifications authorities and stakeholders acknowledge that micro-credentials (already) play a role in supporting lifelong learning, and in re- and upskilling of individuals, there are different interpretations, views and debated questions on the place micro-credentials ought to have in education and qualifications frameworks and systems.

3.1 Research and debate on micro-credentials is growing

The rising appeal of micro-credentials is visible in the large range of research activities and publications, and policy initiatives addressing micro-credentials from various angles.

The Research Observatory on Micro-credentials (ROM) is an initiative of the National Institute for Digital Learning (NIDL, Ireland) in partnership with the European Consortium of European Universities (ECIU University). The aim of ROM is to provide a curated and regularly updated collection of major reports, policy initiatives, events and conferences, and research-related publications on the growth of micro-credentials in higher education and lifelong learning more generally.

Interested stakeholders, students, and researchers can access a large number of sources, articles, reports, policy documents, and videos at Research Observatory on Micro-credentials, published since 2016 on the subject.

Figure 1: Video - Unboxing Micro-Credentials. https://youtu.be/Yo8BkzF513k



The NIDL is playing a leading role in helping to shape the rapidly evolving micro-credentialing movement, such as:

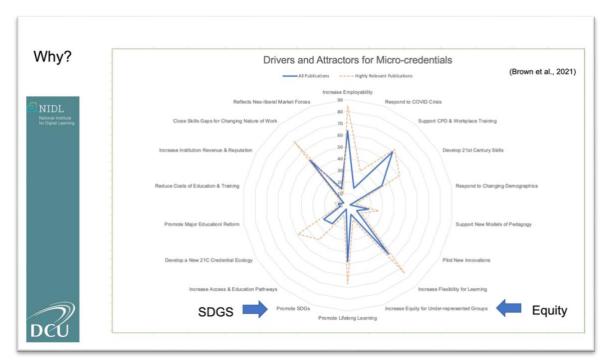
- Strategic <u>partnership</u> with Digitary to support development of micro-credentials using this leading international platform.
- Launch of credit-bearing, stackable micro-credentials on the FutureLearn platform.
- Leading development of a new MOOC, "<u>Higher Education 4.0: Certifying Your Future</u>", on microcredentials on the FutureLearn platform.

In his fundamental <u>presentation</u> to ACQF Training Week (18-22 April 2022), Mark Brown (ROM) highlighted the growing place of micro-credentials in the literature and research, emphasizing that 2021-2022 are potentially the years of micro-credentials. In his communication, M. Brown analysed the drivers and attractors for micro-credentials according to the literature (Figure 2).

Top ranking drivers and attractors for micro-credentials according to the literature are:

- Increase employability
- Support continuous professional development and workplace training
- Increase flexibility for learning
- Close skills gaps in response to changing nature of work
- Promote lifelong learning
- Develop 21st Century transversal skills

Figure 2: Overview: drivers and attractors for micro-credentials in all publications and in highly relevant publications.



Source: M. Brown (2022). Presentation to ACQF Training Week (18-22/04/2022).

3.2 UNESCO

In 2019-2021 UNESCO promoted a global debate towards a common definition of micro-credentials, based on extensive expert consultation, analysis of definitions from 15 countries and literature review. The key proposals and underpinning reflection were discussed in September at an international conference (UNESCO, 2021). The author of the report (Oliver, 2021) concludes "When it comes to micro-credentials, micro is the distinguishing feature, but to be accepted and trusted, micro-credentials must be seen to bear the quality hallmarks of credentials".

The related concepts mentioned in (Oliver, 2021):

- **Credentials** verify, validate, confirm, or corroborate a person's learning achievements, knowledge and preparedness for performing tasks. Credentials are diverse with regard to their scope, status and purpose.
- A large subset of credentials can be referred to as macro-credentials: generally, these include degrees, diplomas, certificates and licences, often awarded by accredited, recognised or regulated educational and other institutions or organisations. They indicate learning achievement of a broad body of knowledge, transferable skills or technical proficiency and may take a number of years to complete. While some are pursued for personal or general educational advancement, others are associated with qualifying to practice a particular profession or to follow a particular career path.
- Another large subset of credentials can be referred to as micro-credentials: these are typically focused on a specific set of learning outcomes in a narrow field of learning and achieved over a shorter period of time. Micro-credentials are offered by commercial entities, private providers and professional bodies, traditional education and training providers, community organisations and other types of organisations. While many micro-credentials represent the outcomes of more traditional learning experiences, others verify demonstration of achievements acquired elsewhere,

such as in the workplace, through volunteering, or through personal interest learning. Microcredentials are often promoted as an efficient way to upskill workers across the lifespan.

The proposed definition (Oliver, 2021) states that a micro-credential:

- 1. Is a record of focused learning achievement verifying what the learner knows, understands or can do:
- 2. Includes assessment based on clearly defined standards and is awarded by a trusted provider;
- 3. Has stand-alone value and may also contribute to or complement other micro-credentials or macro-credentials, including through recognition of prior learning; and
- 4. Meets the standards required by relevant quality assurance.

4. Micro-credentials – some cases and experiences in higher education

OECD (2021) analyses the quality and value of micro-credentials in higher education. This research provides numerous cases illustrating existing experiences as well as new perspectives emerged from the responses to the Covid-19 crisis.

OCED (2021) compares two systems of micro-credentials predating the Covid19 crisis: Ireland and New Zealand.

Ireland: In 2011, the Government of Ireland launched Springboard (and, subsequently, Springboard+), a national upskilling and reskilling initiative offering free and heavily subsidised higher education programmes to the labour force, with priority given in many cases to unemployed individuals. Springboard+ aims to complement the provision of traditional higher education programmes and to support individuals to develop skills highly in demand in the labour market. It combines shorter and longer higher education programmes within the same initiative, recognising that reskilling and upskilling requirements may vary according to the field of study. The Springboard+ programmes are developed at different education levels (between Ireland's National Framework of Qualifications - level 6 and 9, equivalent to International Standard Classification of Educational Qualifications (ISCED) level 5 to 7. They differ in credit size (from 10 to 100 ECTS) and can be full-time or part-time. Notably, the Irish government also envisages the future development of micro-credentials as a stand-alone education product that is widely recognised across the system, and integrate industry collaboration, in a similar way to the New Zealand model.

New Zealand has been one of the frontrunners in national policy making around micro-credentials. The system authorities view micro-credentials as a complement to traditional higher education, although, in contrast to Ireland, their micro-credential programmes are defined as a stand-alone education offering and feature compulsory employer involvement. The New Zealand Qualifications Authority (NZQA) created a quality assurance system for micro-credentials in 2018, by defining them in specific regulations and setting their quality standards. The New Zealand Tertiary Education Commission started providing funding to higher education providers for the development and delivery of micro-credential programmes in 2019. Fees may be charged to learners, but a maximum ceiling of NZD 60 (around USD 40) per credit is specified in regulations. Recognition of micro-credentials by the NZQA requires providers that they demonstrate their programmes do not duplicate existing higher education programmes, and address unmet skill needs in the labour market and society. The providers are also required to prove their capacity to deliver quality education. The micro-credential programmes approved by the NZQA are reviewed annually against the quality criteria. There are currently about 150 NZQA-approved micro-credential programmes offered by higher education institutions and other training providers, with the education level ranging from New Zealand Qualifications Framework (NZQF)

level 2 to 8, equivalent to ISCED level 3 to 6. The workload of micro-credentials ranges between 5 and 40 credits (equivalent to 2.5-20 ECTS).

OECD (2021) suggests perspectives on the future of micro-credentials: potential, challenges, and solutions.

a) Potential

- Micro-credentials can increase the flexibility of education and training provision, and improve its alignment to labour markets
- Micro-credentials can widen and deepen collaboration among educational institutions, professional bodies, and firms

b) Challenges ahead

- There is a risk that micro-credential innovations will deepen existing inequalities in access to higher education and lifelong learning
- Learners lack information about micro-credential offerings and benefits
- Widespread recognition of micro-credentials by academic institutions is not yet well-established, limiting their portability and stackability

c) Some solutions

- Micro-credentials and the challenge of equivalence: to recognise a learning experience from a micro-credential and incorporate it into a degree programme, higher education institutions must first solve a problem of equivalence: what is this learning experience equivalent in curriculum?

Table 1: Instruments enabling transparency and management of credentials – overview from Europe and USA.

Instrument	Owner	Description
Credential Transparency Description Language	Credential Engine (USA)	It provides a common, unified, consistent and transparent vocabulary for describing credentials, making it possible to compare that credential's data across all other credentials in the registry.
Credentify	MicroHE Consortium	It is an API service that enables universities and students to issue and receive micro-credentials that can be stacked into ECTS.
Digital Credentials Initiative	Consortium of universities coordinated by MIT (USA)	It is a central platform for storing students' achievement records based on key infrastructures, public ledgers and blockchains that aims to become the standard for storing and verifying the authenticity of credentials.
Digitary	Digitary	It is an online platform used to verify the authenticity of degrees, transcripts, or other academic records.
Diploma Supplement	Council of Europe, European Commission and UNESCO	It is designed as an aid to support the recognition of academic qualifications. It contains information such as the holder of the qualification, the qualification type, the content and the results of the qualification, as well as some details on the national higher education system).
European Digital Credentials	European Commission	It is a set of standards, services and software that allow institutions to issue digital, tamper-proof qualifications and

		other learning credentials within the European Education Area.
Open Education Passport	OEPass Consortium	It is a standard format for describing open education and virtual mobility experiences in terms of ECTS using a project segmented in five steps.

Source: OECD, 2021: 20.

The bottom line: Micro-credentials can be integrated in diverse and flexible ways into higher education systems to support a range of policy goals.

5. Micro-credentials in vocational education and training

Research on micro-credentials in vocational education and labour market (company) context is less developed than in higher education.

Cedefop initiated a large-scale research strand on <u>Micro-credentials for Labour Market education and training</u> in Europe. A related international conference on 25 and 26 November 2021 offered a platform for debate, gathered participants from over 40 countries. This research area addresses:

- The potential role of microcredentials in vocational and professional education and training, in companies and labour market sectors.
- Learning more about the characteristics of microcredentials, their added value to individual learners, employees and employers, as well as their impact on existing qualifications and recognition systems.
- Understand whether we are observing a revolution in the way learning is being valued or whether microcredentials are just a new name for something that existed all along.

The first report of this research was published in October 2022 (Cedefop, 2022b)¹. While the topic has gained in importance in the context of higher education, focusing on vocational education and training does justice to the complexity of microcredentials in education, training and learning for the European labour market. Results show that microcredentials have only recently become prominent in Europe-wide policy-level debates, despite the existence for many decades of short courses and credentials that support labour-market-related education and training. Although there is uncertainty linked to the naming and function of microcredentials, clear benefits with regards to their flexibility and responsiveness to labour market needs can be observed.

Key findings of the first study of this research point to:

- Uncertainty linked to the naming and function of micro-credentials in many countries.
- Micro-credentials emerging mostly in areas such as ICT, engineering, manufacturing, and construction, but also in sectors such as hospitality, human health, and social work.
- Clear benefits of microcredentials with regards to the flexibility and responsiveness to labour market needs.
- Need for a wider awareness of microcredentials.

¹ Cedefop. (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. http://data.europa.eu/doi/10.2801/351271

- Quality assurance of microcredentials is one of the most important aspects. However, quality assurance processes differ and not all micro-credentials are quality assured based on the nationally established quality standards.

The report analyses the links between concepts and views on partial qualifications versus micro-credentials:

"Parts of qualifications or modules are often considered to be equivalent to microcredentials in some VET systems. In this context, the trend towards modularisation is highly relevant. Increasingly, traditional VET programmes that are designed for, and lead to, a specific qualification are being replaced by modularprogrammes that use sectoral standards and are expressed in terms of learningoutcomes and grouped into smaller units. The main purposes and objectives of microcredentials echo the goals of modularised learning, which helps explain why many stakeholders identify microcredentials as partial or module certificates. However, there are also opposing opinions, explaining that microcredentials should not only be identified as deconstructed qualifications, but should also refer to something supplementary to the existing system. Despite these diverging opinions, microcredentials are largely seen as not posing any major threats interms of replacing or substituting for formal qualifications because they serve different purposes and target different markets. Full qualifications most often target the young and young adults either before they begin, or at the beginning of, their careers; microcredentials more often target people who already have full qualifications or experience of working life. Microcredentials are largely seen as complementary to the traditional education and training systems that are not always ready to quickly respond to the rapid changes taking place in the labourmarket and society at large." Cedefop, 2022b: 14.

The study mentions a trade-off between flexibility and regulation: "Microcredentials are evidence of practical, flexible, on-demand, and short learning experiences. This is what makes them so attractive. Common European standards must preserve this attractiveness and not limit it through over - regulation and - formalisation. It is thus central to find an appropriate balance between fostering trust and transparency as part of a common approach without compromising the flexibility of microcredentials" (Cedefop, 2021b).

6. Micro-credentials in Africa

Specific research and data on the features, role, and trends of micro-credentials in Africa is still scarce as this brief is being updated. Information and data on part qualifications, and short-term courses for employment and lifelong learning can be found in analyses and specific web resources such as registers of qualifications. Although proxies of micro-credentials are well established in the context of labour market-oriented training and in digital and innovative skills development eco-systems, most countries are only undertaking the initial steps to better define and manage their variations of micro-credentials. A common approach to micro-credentials in the context of regional economic communities and at the wider level of the African Union is yet to be initiated. The ACQF implementation process in the period from 2023 is well placed to initiate and support reflection on micro-credentials and their role in national qualifications frameworks and systems.

A survey among members of the ACQF Advisory Group carried out by the ACQF project in March 2021, included a section on micro-credentials. The scope of the survey was limited, as it aimed to collect information of qualitative nature, and had no ambition to reach a representative sample of responses.

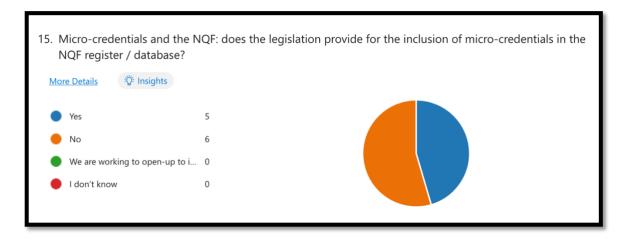
The results of this survey show that (responding) countries are aware of developments related with microcredentials in their education and training systems and markets (figures 3 and 4), and most respondents provided definitions used / accepted in the respective countries (table 2).

Figure 3: ACQF survey on NQFs in Africa – section on micro-credentials. March 2021.



Source: ACQF project. Database.

Figure 4: Micro-credentials and the NQF: does the legislation provide for the inclusion of micro-credentials in the NQF register / database?



Source: ACQF project. Database.

Table 2: ACQF survey on NQFs in Africa: What is the definition of micro-credentials in your NQF and other relevant policies and regulations?

	Responses
-	Part qualifications
-	Short weighted up CDP that cumulatively should be recognized as a qualification
-	A digital record of focused learning achievement verifying what the learner knows, understands and or can do.
-	They are evaluated as credits towards an NQF Level
-	There are two concepts used: part qualifications and credit bearing short courses
-	No policy yet
-	This is the sanction obtained at the end of a short training course
-	Not yet established
-	Not applicable at the moment
-	Micro-credentials are understood as modules of a qualification; or stand-alone modules not mandatory in any qualification, and registered in the National Catalogue of Professional Qualifications, having at least 2 credits (20 notional hours).

Source: ACQF project. Database.

Summing-up the results of this limited survey:

- It is worth noting that there is a growing trend in the diversity and provision of micro-credentials, especially by institutions of the sector of vocational education and training and professional associations. Higher education appears as less involved in the provision of short training courses providing micro-credentials.
- However more than half of respondents acknowledge that the existing legislation has no clear provisions concerning the inclusion of micro-credentials in the NQF register / database.
- The range of definitions of "micro-credentials" is not highly dispersed, as they gravitate around the concepts: a) part qualifications; b) short courses credit bearing; c) digital record of focused learning achievement; d) modules of a qualification and stand-alone modules of a transversal nature and with a minimum size of 2 credits. One of the responses differentiates between two different concepts: part qualifications versus credit bearing short courses. The common traits of these different definitions are essentially three: small size qualification (a module or a part qualification); short training; assessed learning achievements. None of the responses mentioned stackability of existing proxies / micro-credentials, although the notion of "credit bearing short courses" could be provide possibilities for individual pathways and progression towards larger qualifications.
- A small number of respondents acknowledged that there is no definition and policy on microcredentials yet.

7. Improving lifelong learning and employability in the European Union: common approach to Micro-credentials

The European Union is working to enhance lifelong learning. In this context the European Union adopted in June 2021 two Council Recommendations: a) on micro-credentials; on b) on individual learning accounts.

These proposals were announced in the <u>Skills Agenda</u> and in the <u>European Education Area Communication</u> of 2020. They will help tackle challenges related with upskilling and reskilling of the population, by opening up more opportunities for people to find learning offers, and employment opportunities. European Union Member States set a target of 60% of adults taking part in training by 2030.

For more information and access to the policy proposals (Council Recommendations) visit the <u>website</u>, view the <u>infographic</u>, and read the <u>Brochure</u>.

Micro-credentials

Definition of Micro-credentials in the <u>Council Recommendation</u> on A European Approach to Micro-credentials fir Lifelong Learning and Employability, 2022:

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 standalone or combined into larger credentials. They are underpinned by quality assurance following agreed standards in the relevant sector or area of activity.

The European approach to micro-credentials is a key flagship to achieve a <u>European Education Area by 2025</u>. They can be part of the learning offer included in individual learning accounts. This Council Recommendation seeks to make micro-credentials work across institutions, businesses, sectors and borders.

The European approach to micro-credentials aims at providing a clear definition and European standards, allow for the learning outcomes of these small experiences to be easily recognised and understood by employers, learners and, education and training institutions, as well as guiding principles to consider when designing or issuing high-quality micro-credentials. It aims at:

- a) Enabling individuals to acquire, update and improve the knowledge, skills and competences they need to thrive in an evolving labour market and society, to benefit fully from a socially fair recovery and just transitions to the green and digital economy and to be better equipped to deal with current and future challenges.
- b) Supporting the preparedness of providers of micro-credentials to enhance the quality, transparency, accessibility and flexibility of the learning offering in order to empower individuals to forge personalised learning and career pathways.
- c) Fostering inclusiveness, access and equal opportunities and contributing to the achievement of resilience, social fairness and prosperity for all, in a context of demographic and societal changes and throughout all phases of economic cycles.

Principles to be considered

When designing and issuing micro-credentials some principles are recommended. They highlight the key characteristics of the European approach to micro-credentials. They are may be applied in any area or sector.

1. Quality: Micro-credentials are subject to internal and external quality assurance by the system producing them (e.g. the education, training or labour market context in which the micro-

credential is developed and delivered). Quality assurance processes must be fit-for-purpose, be clearly documented, accessible, and meet the needs of learners and stakeholders.

- 2. Transparency: Micro-credentials are measurable, comparable and understandable with clear information on learning outcomes, workload, content, level, and the learning offer, as relevant.
- 3. Relevance: Micro-credentials should be designed as distinct, targeted learning achievements, and learning opportunities leading to them are updated as necessary, to meet identified learning needs. Collaboration between education and training organisations, employers, social partners, other providers and users of micro-credentials is encouraged to increase the relevance of the micro-credentials for the labour market.
- 4. Valid assessment: Micro-credential learning outcomes are assessed against transparent standards
- 5. Learning pathways: Micro-credentials are designed to support flexible learning pathways, including the possibility to stack, validate, and recognise micro-credentials from across different systems.

Stackability: Micro-credentials are designed to be modular so that other micro-credentials may be added to create larger credentials. Decisions to 'stack' or combine credentials lie with the receiving organisation (e.g. education and training institutions, employers, etc.), in line with their practices, and should support the goals and needs of the learner. Stacking does not create an automatic entitlement to a qualification or a degree. Such decisions are made by regional and national authorities or institutions in line with their awarding processes.

Validation of non-formal and informal learning: Obtaining micro-credentials is possible following assessment of learning outcomes, obtained either through a specific course leading to a micro-credential, or on the basis of assessment of learning outcomes resulting from non-formal and informal learning.

- 6. Recognition: Recognition has a clear signalling value of learning outcomes and paves the way for a wider offer of such small learning experiences in a comparable way across the EU. Micro-credentials are recognised for academic or employment purposes based on standard recognition procedures used in recognising foreign qualifications and learning periods abroad, when dealing with micro-credentials issued by formal education providers
- 7. Portability: Micro-credentials are owned by the credential-holder (the learner) and may be stored and shared easily by the credential-holder, including through secure digital wallets (e.g Europass), in line with the General Data Protection Regulation. The infrastructure for storing data is based on open standards and data models, This ensures interoperability and seamless exchange of data, and allows for smooth checks of data authenticity.
- 8. Learner-centred: Micro-credentials are designed to meet the needs of the target group of learners. Learners are involved in the internal and external quality assurance processes and their feedback is taken into account as part of the continuous improvement of the micro-credential.
- 9. Authentic: Micro-credentials contain sufficient information to check the identity of the credential-holder (learner), the legal identity of the issuer, and the date and location of issuance of the micro-credential.
- 10. Information and guidance: Information and advice on micro-credentials should be incorporated in lifelong learning guidance services and should reach the broadest possible learner groups, in an inclusive way, supporting education, training, and career choices.

European standard elements to describe a micro-credential include a set of mandatory elements:

- Learner identification,

- Title of the micro-credential,
- Country(ies) / region(s) of the issuer,
- Awarding body,
- Date of issuing,
- Learning outcomes,
- Notional workload needed to achieve the learning outcomes,
- Level of the learning experience leading to the micro-credential, if applicable;
- Type of assessment; form of participation in the learning activity;
- Type of quality assurance used to underpin the micro-credential.

The Recommendation also introduces recommendations on micro-credentials in education and training and in labour markets policies. This should enable people to learn new or additional skills in a tailored way, inclusive for all.

8. Sources

Australian Government – Department of Education, Skills, and Employment. 2021. National Micro-Credentials Framework. https://www.dese.gov.au/download/13591/national-microcredentials-framework/26500/document/pdf

Brown, M., 2022. The Spinning of the Micro-Credential – a Wolf in Sheep's Clothes. Presentation to ACQF Training Week (18-22/April 2022). https://acqf.africa/capacity-development-programme/training-modules/presentations-ppt-for-the-training-courses-english/session-16-micro-credentials

Cedefop, 2021a. Conference on micro-credentials for labour market education and training – opening speech. 25-26 November 2021. https://www.cedefop.europa.eu/files/00. opening address - juergen siebel.pdf

Cedefop, 2021b. Micro-credentials - a new opportunity for lifelong learning? Presentation at conference. https://www.cedefop.europa.eu/files/01. session 1 microcredentials for labour market education a nd training - a. pouliou j. bjornavold g. kirdulyte.pdf

Cedefop. (2022a). *Briefing Note: Are Micro-credentials Becoming a Big Deal?* https://www.cedefop.europa.eu/files/9171 en.pdf

Cedefop. (2022b). 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. http://data.europa.eu/doi/10.2801/351271

European Commission. Website on European approach to micro-credentials. https://education.ec.europa.eu/levels/higher-education/european-approach-to-micro-credentials

European Commission, 2021. A European approach to micro-credentials. (brochure). https://education.ec.europa.eu/sites/default/files/2022-01/micro-credentials%20brochure%20updated.pdf

European Commission, 2021. A European approach to micro-credentials. Output of the micro-credentials higher education consultation group: final report. https://op.europa.eu/en/publication-detail/-publication/7a939850-6c18-11eb-aeb5-01aa75ed71a1

European Union. Council Recommendation of 16 June 2022 on a European Approach to Microcredentials for Lifelong Learning and employability. https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32022H0627(02)&from=EN

OECD, 2021. Quality and value of micro-credentials in higher education. https://www.oecd-ilibrary.org/education/quality-and-value-of-micro-credentials-in-higher-education-gc4ad26d-en

Oliver, B., 2019. Making micro-credentials work for learners, employers and providers. https://dteach.deakin.edu.au/2019/08/02/microcredentials/

Oliver, B., 2021. Presentation at UNESCO Conference: A conversation starter: Towards a common definition of micro-credentials. https://en.unesco.org/news/defining-micro-credentials-opportunities-and-challenges-shaping-educational-landscape

UNESCO, 2018. Digital Credentialing: Implication for the recognition of learning across borders. https://unevoc.unesco.org/home/Digital%20Cred%20Report

UNESCO, 2021. Defining micro-credentials: Opportunities and challenges in shaping the education landscape. https://en.unesco.org/news/defining-micro-credentials-opportunities-and-challenges-shaping-educational-landscape