DIGITALEUROPE's recommendations for a European approach to micro-credentials

Executive Summary

Up to 59 million jobs in Europe are at risk due to COVID-19.[1] Large-scale upskilling and reskilling efforts can help to minimise the impact of job losses. Micro-credentials can help these activities by lifting individuals' employability while creating flexible and inclusive learning paths to accommodate an increasingly diverse population. Just in 2019, there were more than 820 MOOC-based micro-credentials available world-wide.[2] Education technology companies, online learning platform providers and many other businesses contributed to a great share of those. Comparing to conventional degrees and certificates, micro-credentials offer shorter, more targeted and flexible ways to fill the gap between academic programmes and skills required in a fast-changing labour market. 80% of individuals in OECD countries found professionally useful the non-formal education and training activities they undertook.[3] To drive the successful uptake of micro-credentials, we need **a clear definition of micro-credentials** that will forge a more common and clearer understanding of the content and quality of these new learning possibilities, their different digital or physical storing options, as well as usage modalities.

We welcome the Commission's recent effort to define the concept of micro-credentials in its recent "European approach to micro-credentials" publication, and look forward to helping it to officially adopt a definition in 2022. We also strongly believe the success of this initiative will depend on:

▸▸ **A focus on minimum levels of objectivity and standardisation** in the skill certified by micro-credentials;

▸▸ **Clear differentiation between traditional degrees and micro-credential certificates** delivered upon completion of a learning programme;

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[1] McKinsey, Charting the path to the next normal, 2020
[2] OECD, The Emergence of Alternative Credentials, 2020 (p. 11)
[3] OECD, The Emergence of Alternative Credentials, 2020 (p. 25)

▶▶ **Quality assurance,** through the establishment of an EU register of trusted issuers open to non-formal education providers, like industry, regardless of their headquarters' location**;**

▶▶ **Interoperability** across learning management systems and promotion of learning content standards;

▶▶ **Financial support** to leverage content from various micro-credential providers;

▶▶ **A future-proof European Digital Credentials Infrastructure (EDCI)** envisaging badging/recognition of skills validated in professional networking online platforms**.**

1. Benefits of micro-credentials and the need for a clear definition

Micro-credentials are new types of qualifications and short-study courses that are emerging as a prominent way to align workers' skills with Europe's digital and green transition. Their case is strengthened by the current COVID-induced economic crisis. Micro-credentials offer flexible learning paths to adapt to shifting economic circumstances. Yet, today in Europe we miss standards about their delivery mode, duration, assessment process, validation, accreditation or indeed incorporation into larger credentials, also known as ''stackability''[4].

We welcome the Commission's first attempt to define the concept of micro-credentials along with proposed EU standards for constitutive elements of micro-credentials.

In doing so, we also urge it to ensure:

Formats and delivery modes in micro-credentials

▶▶ **Formats:**
- Academic credits
- Alternative credentials
- Boot camps
- Certificates
- Complements to degree programmes
- Digital badges
- Micro-certificates
- MicroMasters
- Nano-degrees
- Professional/industrial certificates
- Sequences of courses
- Stand-alone units of learning
- Verified certificates

▶▶ **Delivery modes:**
- Online
- Face-to-face
- Blended

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[4] The European Consortium of Innovative Universities (ECIU) describes stackability of micro-credentials as "certification of learning that can accumulate into a larger credential or degree, be part of a portfolio that demonstrates individuals' proof of learning, or have a value in itself."

▶▶ Minimum levels of objectivity and standardisation in the skills certified by micro-credentials;

▶▶ Clear differentiation between traditional degrees and micro-credential certificates delivered upon completion of a learning programme.

Getting consensus on terminology is critical to gather support around micro-credentials. Employers currently struggle to understand their value, and how they stack up against more conventional qualifications, due to a lack of clarity on the meaning of micro-credentials. In the US, just 1 in 10 HR executives was aware they had hired individuals that acquired micro-credentials.[5] For similar reasons, students fail to grasp the opportunities of micro-credentials to improve their competitive position in the labour market. We need to change this, especially considering what micro-credentials offer to several stakeholders:

▶▶ **Higher education institutions**: micro-credentials offer a way to provide more targeted, specialised and transversal training than conventional degrees. 53% of higher education institutions surveyed in Europe, for instance, expect growing demand for short non-degree courses provided in fully online mode.[6] Micro-credentials also allow for better visibility and reputation by reaching a wider geographical audience and attracting more diverse groups of learners. They enable, too, cost reduction and income generation, as higher education institutes can experiment with new pedagogies and technologies.

▶▶ **Students:** micro-credentials sharpen students' interdisciplinary knowledge and skills, which increase their employability and value in the labour market. They are a stepping-stone to traditional study programmes while allowing more flexibility in planning studies and access to more focused content than conventional degrees. Their strength lies in offering practical learning experiences, up-to-date information, personalised learning as well as open access to knowledge.[7] 86% of respondents in a US survey found micro-credentials helpful in getting a job.[8]

▶▶ **Businesses:** recruitment and training are two key areas where micro-credentials can bring tangible benefits:

▪ In recruitment, they bring transparency and speed in the hiring process, especially when combined with industry-certified programmes. They allow firms to tap into a wider range of talents with diverse and evolving skills and qualifications, all acquired

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[5] OECD, The Emergence of Alternative Credentials, 2020 (p. 28)

[6] MICROBOL European project, Micro-credentials linked to the Bologna Key Commitments, 2020

[7] MicroHE, Challenges and Opportunities of Micro-Credentials in Europe, 2019

[8] OECD, The Emergence of Alternative Credentials, 2020 (p. 25)

without the need to join lengthy study programmes. 95% of surveyed employers would use or be open to using digital badges to evaluate the skills of recent college graduates.[9] If coupled with technologies like blockchain and artificial intelligence, micro-credentials can respectively enable quicker, [10] more cost-effective insights into the profiles of job candidates as well as better predict future skills needs in the labour market.[11]

- In training, micro-credentials can generally improve labour productivity. They give flexibility to individuals to participate in workshops or short programmes while being employed. 70% of adults in an OECD survey that participated in non-formal education and training did so through job-related programmes. Half of them were motivated by the need to improve their job performance and/or career prospects.[12] Micro-credentials ideally cater to these needs because they equip individuals with the skills to work in different and evolving fields.

2. A Framework for innovation

Strict standards tailored to formal education systems limit the innovation capacity that micro-credentials can bring. We must change that. The Commission's intention to link micro-credentials to the European Credit Transfer and Accumulation System (ECTS) wherever possible is a good first step. It will encourage Member States to include micro-credentials in national qualification frameworks. These efforts will enable micro-credentials to be portable in academic contexts. They will make it easier for individuals to store and showcase acquired micro-credentials.

However, encouraging the uptake of micro-credentials also requires building a certain level of trust and confidence in the quality of the credential provider and the credential itself, which industry can help to provide. **We agree with the Commission's suggestion to establish a register of trusted issuers at European level. It will improve external quality assurance. Importantly, the register should not limit to formal micro-credential issuers only. It should**

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[9] UNESCO, Digital credentialing: implications for the recognition of learning across borders, 2018 (p. 25)

[10] Blockchain can verify the accreditation status of the universities from which candidates have obtained their diplomas, sparing employers from dedicating resources to that, all while complying with relevant GDPR provisions

[11] In an analysis of the Belgian labour market, the "Be The Change" study led by Agoria predicted that equipping people with the right skills can lead to 268,000 vacancies being filled by 2030. Micro-credentials can support these efforts.

[12] OECD, The Emergence of Alternative Credentials, 2020 (p. 25)

also be open to relevant non-formal issuers from across the globe, such as businesses active in training and education. This is fundamental since non-formal education providers offer alternatives to traditional degrees where micro-credentials tend to be more prevalent. They cannot be left out of the register's scope.

2.1 Cross-platform portability of content for micro-credentials

The usage of interoperable approaches and platforms for micro-credential-based training and education courses should be a key aspect of the European approach to micro-credentials. This is especially relevant now that many leaners have moved to technology-based learning platforms because of social-distancing rules. Advancing interoperability requires:

▶▶ Use of Application Programming Interfaces (APIs) to enable import/export of micro-credential content across learning management systems.

▶▶ Use of learning content standards (such as LTI[13], SCORM[14]) to label, index and exchange the content of micro-credentials.

▶▶ Use of international specifications to provide a standard format to express credentials on the web, such as the W3C Verifiable Credentials Data Model[15]

2.2 Financial incentives

DIGITALEUROPE encourages the provision of grant funding to education and training institutions for adopting micro-credentials and creating joint programmes. This will help leverage content from a range of providers, including businesses. These incentives should cover activities like:

▶▶ Creating micro-credential supported course offerings, including translation/localisation

▶▶ Providing online course platforms for teaching/learning around micro-credentials

▶▶ Assessment of skills resulting from micro-credentials (e.g. remote examination solutions, costs of third-party assessment integrated into the institutional assessment process, etc.)

▶▶ Enabling partnerships across education, training, the private sector and others to create joint offerings

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[13] LTI stands for Learning Tools Interoperability
[14] SCORM stands for Shareable Content Object Reference Mode
[15] More info here

2.3 Europass Digital Credentials Infrastructure

The Europass Digital Credentials Infrastructure (EDCI) [16] has increased the visibility and transparency of micro-credentials, as it allows the creation and storage of third-party certified, digitally-signed credentials. To further align it with digital technology innovation, **the EDCI should enable badging/recognition of skills validated in professional networking online platforms commonly used by employers, employees and job-seekers.** This will enable badging/recognition of skills endorsed in such online services.

The Europass Digital Credentials Infrastructure offers several advantages over paper-based certificates, which include:

▶▶ Reducing administration work for students as well as education and training providers and businesses;

▶▶ Decreasing the impact of credential-fraud and contributing to paperless documentation;

▶▶ Supporting instant verification;

▶▶ Allowing automatic verification of information such as the identity of the awarding body or the quality assurance of a qualification;

▶▶ Providing a legal presumption of authenticity across the EU as well as equivalence to paper-based credentials with an e-Seal signed authentication mechanism.

▶▶ Issuing, storing, verifying and viewing credentials in users' existing software in a format supported across all EU and EEA Member States as well as compatible with other digital wallet services;

▶▶ Facilitating interoperability of credentials among various EU languages

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[16] More info here

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About DIGITALEUROPE

DIGITALEUROPE represents the digital technology industry in Europe. Our members include some of the world's largest IT, telecoms and consumer electronics companies and national associations from every part of Europe. DIGITALEUROPE wants European businesses and citizens to benefit fully from digital technologies and for Europe to grow, attract and sustain the world's best digital technology companies. DIGITALEUROPE ensures industry participation in the development and implementation of EU policies.

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