



MADRID MICRO-CREDENTIAL STATEMENT

Asking Critical Questions: Leveraging Micro-credentials to Bridge Divergent Paths

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This statement asks a number of critical questions and offers answers relevant to the rapid growth of the micro-credentialing movement in the European context. According to last year's European Commission Higher Education Consultation Group, a working definition for micro-credentials is:

“A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience. These learning outcomes have been assessed against transparent standards. The proof is contained in a certified document that lists the name of the holder, the achieved learning outcomes, the assessment method, the awarding body and, where applicable, the qualifications framework level and the credits gained. Micro-credentials are owned by the learner, can be shared, are portable, and may be combined into larger credentials or qualifications. They are underpinned by quality assurance following agreed standards” (European Commission, 2020, p. 10).

While this working definition goes some way to address the current confusion and lack of common European language there is still debate whether a micro-credential is viewed as an alternative, supplement or extension to existing qualifications and recognition frameworks. This underlying tension is recognised by Oliver (2019) who proposes in a seminal definition predating the European Commission's work that “a micro-credential is a certification of assessed learning that is additional, alternate, complementary to or a formal component of a formal qualification” (p.i).

Importantly, viewpoints differ to what extent the micro-credentialing movement is a disruptive innovation to help reconceptualize what some perceive to be a 19th Century credentialing model that is no longer fit for purpose. Instead of promoting Higher Education Institutions (HEI) to unbundle existing macro-credentials (i.e., degrees) as alternative or supplementary short learning courses, more disruptive conceptions of micro-credentials position them as a means of forging and reimagining new partnership models with industry stakeholders. After all, the term micro-credential may be novel but short courses and the related activities they encompass are long-standing practices (Cedefop, 2021).

These different perspectives and definitions provide an important framing of what we mean when we talk about micro-credentials (McGreal, Mackintosh, & Olcott, 2021). However, given the large and ever-growing literature that exists on the topic, and the great expectancy of what can be achieved with them as “the next big thing” (similar perhaps to the hype/hope of MOOCs back in 2012), anyone who wants to understand this new and emerging type of certification, and assess its applicability in different educational and workplace contexts, will arguably benefit by considering the following questions. As these questions beg a response, this statement also presents brief answers that are intended to support deeper and richer conversations around the role of micro-credentials in Europe and beyond.

1. What are the problems that micro-credentials are trying to solve?

This is a fundamental starting question when thinking about micro-credentials. There are several types of answers to this question. Some of the main answers include:

- To help increase participation rates in lifelong learning
- To respond to the demand for more flexible higher education
- To create credential pathways between formal and non formal education
- To provide pathways to formal credentials for professionals and trades workers
- To increase graduate employability, transition to work, and to develop 21st Century transferable skills
- To help close growing skill gaps resulting from the changing nature of work
- To increase employer capacity, productivity and competitiveness
- To develop new partnerships between higher education providers and industry stakeholders

What is missing from this list? Are all of these drivers in alignment? How would you answer this question in your own educational context? What additional drivers (and attractors) are promoting micro-credentials as an answer to a current educational, employment or societal problem? The crucial point in answering the “why” question, as Brown et al. (2021) point out, is that the development of new micro-credentials should be in the service of big ideas, not as a big idea in itself. What do you see as the big ideas underpinning the micro-credentialing movement?

2. Who do micro-credentials serve?

Micro-credentials are relevant to many different stakeholders with potential benefits for the following people and groups:

- Learners
- Employees
- Employers
- Higher Education Institutions
- Trade Unions and Professional Bodies
- Quality Assurance Agencies
- Governments

It is important to recognise that different types of learners may benefit from micro-credentials for different reasons depending on their situation. A micro-credential may be able to help someone upskill in order to re-enter the workforce. Someone already in employment may wish to complete a micro-credential to get an edge in order to advance their career. They may also stack their micro-credential towards a formal macro-credential such as a Masters degree. Micro-credentials may also benefit people from disadvantaged backgrounds, although “for alternative credentials to be accessible to underserved students they need to be designed with equity in mind” (Morgan, 2020). Micro-credentials may help European employers address the problem that “40% report they can not hire the workers they need” (European Commission, 2020, p.7). We invite you to think about other benefits and answer the question of how the above stakeholders may gain from an investment in micro-credentials.

3. How do you develop and implement micro-credentials?

The European Commission (2020) outlined a number of building blocks required to develop a European approach to micro-credentials. These building blocks include:

- Definitions and Standards
- Credits and Recognition
- Quality Assurance
- Storage, Portability and Platforms
- Successful Uptake

The question of how to develop and successfully implement micro-credentials considering all of these dimensions is not a straightforward matter. Indeed, outside of those offered by the major MOOC platforms there are very few university examples of micro-credentials being successfully implemented where they provide tangible benefits for learners. While some HEIs offer traditional short courses there are few examples where micro-credentials have been intentionally co-constructed with industry partners. How would you go about addressing the above building blocks in order to develop a coherent micro-credential initiative? Who else would need to be involved? How long would it take before you could launch your first micro-credentials? These are all questions for important consideration if you are serious about implementing a sizable, scalable and sustainable micro-credential programme.

4. What problems stand in the way of micro-credentials reaching general acceptance?

Many interrelated elements need to be in place if micro-credentials are to be widely accepted by different stakeholders. As Nic Giolla Mhichíl, Brown, Beirne & Mac Lochlainn (2020) state:

“A multi-stakeholder approach with engagement from national agencies, industry, education and training providers, and employer and employee skill development networks is essential for this to become a reality” (p. 4).

They identify the importance of the 3Cs of “Currency”, “Cohesion” and “Consistency” as being crucial to ensure that any future investment in micro-credentials is ultimately successful (Nic Giolla Mhichíl, Brown, Beirne & Mac Lochlainn, 2021). Knowledge and/or skills that are recognised by micro-credentials need to be described in a clear, homogeneous way, and the process in which the achievement of stated learning outcomes are assessed must to be described in a manner which is meaningful to HEIs, employers and learners alike. A micro-credential delivered after a learner has completed a few short quizzes in a MOOC is a very different animal to one which attests to the concrete application of a given competence, based on an official framework. It is hoped that the clear descriptions associated with micro-credentials, including learning outcomes, credit value, quality assurance processes, and so on, will be adopted by providers.

While there are many challenges to general acceptance this line of discussion beholds us to consider the major enablers. What can be done to overcome these problems and the currently fragmented approach to micro-credentials? What role should governments and quality assurance agencies play in building a more trusted, inclusive and fit-for-purpose 21st Century credential ecology?

5. Will micro-credentials live up to the promise they offer?

A recent HolonIQ (2021) survey found that “Over 85% of institutions see alternative and micro-credentials as an important strategy for their future”. Currently, it appears that most HEIs are applying micro-credentials to short courses as low hanging fruit and easier entry point. With a proliferation of micro-credentials anticipated over the next few years the question is whether they actually result in increased opportunities for employment, career advancement and earnings? We may not have a definitive answer to this question for sometime:

“Because alternative credentials are not identified in the educational attainment component of national labour force surveys or in international surveys of adult skills (such as PIAAC), evidence on their effects on earnings of large-scale populations is unavailable” (Kato, Galán-Muros & Weko, 2020, p.28).

We know from OECD data that government investment in higher education provides both tangible public and private benefits and so one can only speculate at this time that these benefits will extend to micro-credentials. However, this raises the question: how will we document and collect trustworthy evidence to substantiate the actual benefits of micro-credentials? The answer to this question needs to be considered if we expect micro-credentials to establish themselves as credible offerings alongside existing degrees and qualifications.

Summary

This Statement arising in the context of the [2021 Annual EDEN Conference](#) aims to mature discussions and foster critical questions concerning the growth of micro-credentials in Europe. The uncomfortable truth is that due to structural barriers and socio-cultural reasons, more and more people are unable to access traditional macro-credentials offered by HEIs. Moreover, the nature of work is changing and evidence suggests that flexible opportunities for training and continuing professional development will be essential in the future. While they should not be oversold as a panacea as we reimagine the future in the shadow of the COVID crisis, micro-credentials provide a way for people to develop a portfolio of skills and training or acquire a formally recognized list of skills/competencies that can help them professionally. Employers also benefit by hiring or up-skilling current workers to enhance capacity and productivity in the competitive marketplace. In theory, smaller units of learning which lead to micro-credentials should be more accessible and allow employers to develop authentic on the job learning which includes the development of important transversal skills. New digital technologies enable more flexible opportunities for people to learn as they earn, regardless of where they live and work. The underlying assumption of the Madrid Micro-credential Statement is that a one-size-fits-all model of Higher Education for completing traditional qualifications is limited and no longer enough in today’s rapidly changing digital world.

Further Information

There are a large number of organisations, projects and individuals contributing to furthering the understanding and implementation of micro-credentials. Here is a small sample of the ones with direct relation to this statement:

- [European Commission](#) - maintains a dedicated micro-credential webpage that links to major European reports and policy initiatives. Currently there is a [public consultation](#) process underway where you can share your views on the importance of micro-credentials.

- CEDEFOP (*European Centre for the Development of Vocational Training*) - maintains an active interest in micro-credentials and is currently engaged in four separate surveys looking at their use and uptake across Europe.
- ECIU (*European Consortium for Innovation Universities*) - has a strong interest in micro-credential development. As the largest funded European University Alliance they are a core deliverable and the ECIU University has published a recent white paper with a micro-credential roadmap for the future.
- ECCOE (*European Credit Clearinghouse for Opening up Education*) - this Erasmus+ Strategic Partnership (2019-1-FR01-KA203-062951) is developing an integrated ECCOE-system for the delivery and recognition of digital credentials based on the Europass learning model.
- MICROBOL - this initiative is exploring the recognition of micro-credentials within existing European qualification frameworks and involves quality assurance agencies from many EU members.
- European MOOC Consortium (EMC) - is strengthening the credibility of Massive Open Online Courses (MOOCs) as a learning approach in higher education by taking a leading role in developing a common approach to micro-credentials in Europe..
- OECD (*Organisation for Economic Collaboration and Development*) - has a strong interest in micro-credentials and has published a number of policy reports and working papers on the topic.
- UNESCO (*United Nations Educational Scientific and Cultural Organisation*) - has commissioned a number of reports to monitor and steer the global development of micro-credentials.
- Micro-credential Observatory - this research observatory maintained by the National Institute for Digital Learning at Dublin City University provides access to a comprehensive database of policy and research publications related to micro-credentials.

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Biographies

Professor Mark Brown is Ireland's first Chair of Digital Learning and Director of the National Institute for Digital Learning (NIDL) at Dublin City University. Mark is an EDEN Fellow and currently serves on the EDEN Executive Committee. He also serves on the Supervisory Board of the European Association of Distance Teaching Universities (EADTU) and is Vice President of the Open and Distance Learning Association of Australia (ODLAA). In 2020, Mark contributed to the European Commission's high-level consultation group on developing a policy response to the growth of micro-credentials. More information... <https://www.dcu.ie/nidl/director-nidl>

Deborah Arnold currently works as national and international projects coordinator at AUNEGe, the French digital university for economics and management. In this role, Deborah leads the Erasmus+ ECCOE project – European Credit Clearinghouse for Opening up Education – which focuses on building trust and recognition for the take up of digital (micro-)credentials. From 2012 to 2017 was the head of the learning technology and distance education unit at the University of Burgundy, before leading the education strand of the institution's digital strategy. Deborah is currently completing a PhD in digital education leadership in higher education at Universitat Oberta de Catalunya. From 2010 to 2016 Deborah served on the Executive Committee of EDEN (European Distance and E-learning Network) and held the position of Vice-President for Communication. She is a Senior Fellow of EDEN, a member of the EDEN Fellows Council Board, and the board of the Media and Learning Association.

Dr. Timothy Read is a Senior Lecturer in the Department of Computer Languages and Systems at UNED. He is also a member of the EDEN Executive Committee and an EDEN Senior Fellow. After leaving England, he has worked at the University of Granada before moving to UNED in Madrid. He is the co-founder of the ATLAS research group and has directed several national and international funded projects on applying Information and Communication Technologies to Languages for Specific Purposes. He is currently working in the areas of Mobile-Assisted Language Learning and Language Massive Open Online Courses, and their applications for social inclusion and employability, and the role of analytics in these areas.

Dr. Don Olcott, Jr., FRSA, is President of HJ Associates (Romania), specialising in global open and distance learning leadership; Honorary Professor of Educational Leadership and ODL at the University of South Africa; and adjunct faculty member of Oldenberg University (Germany). Don is a Senior Fellow of EDEN and Chair of the Council of Fellows for 2021-2022. He is the former president and chairman of the board of the United States Distance Learning Association (USDLA); the 2013 ICDE Individual Prize of Excellence recipient for his global leadership in open and distance learning and the 1998 Charles Wedemeyer Outstanding Distance Education Practitioner in North America. Don brings extensive experience in the design, assessment and certification of competency-based training and education from his roles in continuing and distance education in the United States.

Professor Rory McGreal is the UNESCO//International Council for Open and Distance Education Chair in Open Educational Resources (OER); and Director of the Technology Enhanced Knowledge Research Institute (TEKRI) at Athabasca University. He is also co-Editor of IRRODL (International Review of Research in Open and Distributed Learning). He is the founder of the OER Knowledge Cloud, a repository of research articles on OER. Previous positions include Assoc. VP Research, Director of TeleEducation NB, a Canadian province-wide elearning network and Supervisor, Contact North/Contact Nord in Ontario. He is also the recipient of several national and international awards for open and distance learning.

Professor Mpine Makoe is the Commonwealth of Learning Chair (COL) in OER/OEP and Research Professor in Open Distance eLearning at the University of South Africa (UNISA). She is also an OER Ambassador of the International Council of Distance Education (ICDE), a director of the African Council for Distance Education (ACDE) and she also serves as a higher education expert on the UNESCO's Futures of Higher Education 2050 project. Professor Makoe's research and leadership have been recognised across Africa and globally.