



# Session 4 – Reflections for the Future

# Emergence of Online Alternative Credentials in Higher Education and Quality Assurance

#### **Professor Mark Brown**

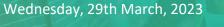
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- 1 What is a micro-credential?
- **2** The growth of micro-credentials
- **3** Quality assurance of micro-credentials







### 1. What is a micro-credential?



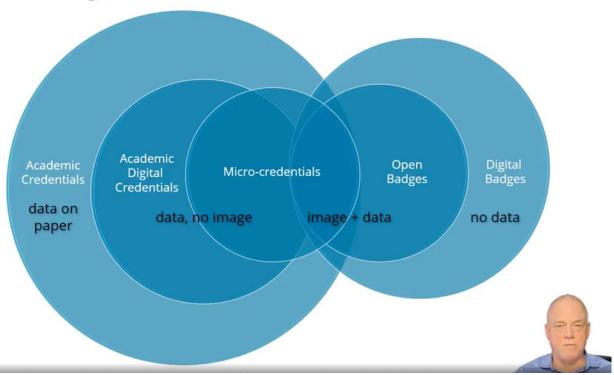






# 1. What is a micro-credential?

### Spectrum of recognition





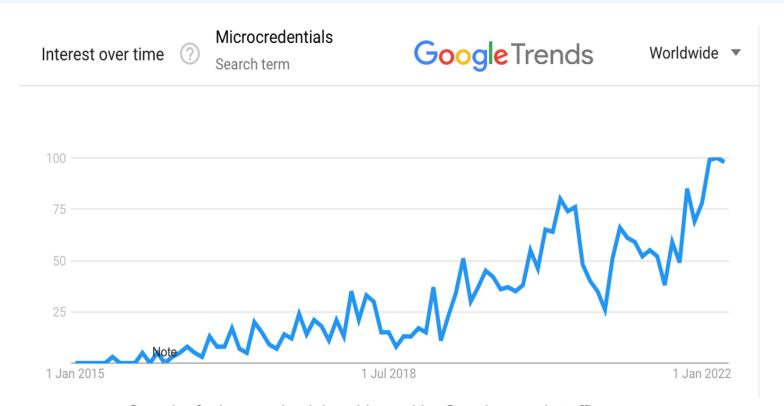




# 1. What is a micro-credential?

'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 (European Commission, 2022).





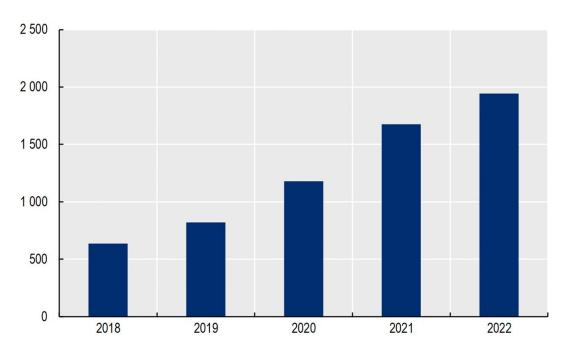
Growth of micro-credentials evidenced by Google search traffic







Figure 1. The number of micro-credentials offered on six major learning platforms (2018-2022)





### Micro-credentials for Lifelong Learning and Employability: Uses and Possibilities

Figure 2. Examples of context in which micro-credentials are expected to play a role

Upskilling and reskilling

© Employability

Lifelong Learning

More flexible, learner-centred education

Access to and completion of education and training

Student international mobility

\*† Social inclusion

Active citizenship and well-being

OECD, 2023

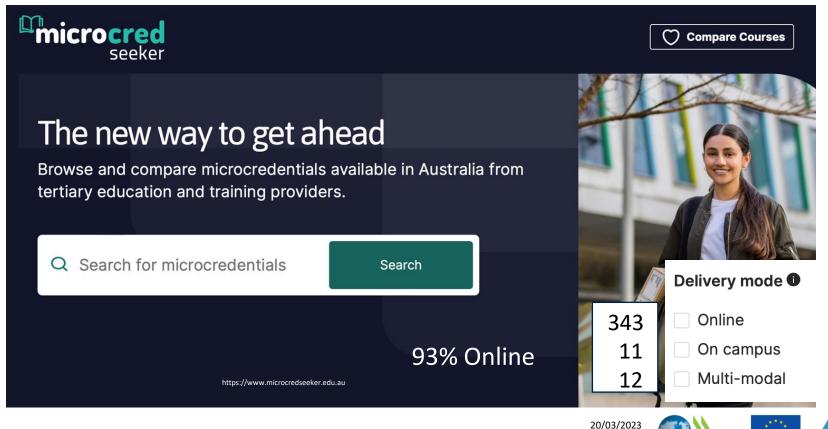














DIGITAL TRANSFORMATION IN HIGHER EDUCATION

#### Holon |

88% see alternative and micro-credentialing as an important strategy for the institution's future; sentiment moderating slightly vs 2021

Our institution/ organization sees alternative and micro-credentialing as an important strategy for our future.









DIGITAL TRANSFORMATION IN HIGHER EDUCATION

#### Holon |

**Poll 2**: The top barrier to the adoption of micro-credentials at scale is:

Complexity of micro-credential offerings



36% -

Constraints in the recognition and quality assurance of microcredentials

33% -

Lack of understanding of what micro-credentials are

Lack of trust in some micro-credentials







# 3. Quality assurance of micro-credentials

# (How) do the quality assurance principles apply to micro-credentials?





OECD Education Working Papers No. 281

Digital higher education: Emerging quality standards, practices and supports François Staring,
Mark Brown,
Paul Bacsich,
Dirk Ifenthaler

#### Table 5. Key principles for the quality assurance of digital higher education

Description	The institution has clear objectives in all its areas of activity, as well as clear policies and processes for QA and development. These are developed with the participation of the relevant stakeholder groups, set out in writing and communicated transparently. Quality-related decisions are evidence-based, recorded in writing and communicated clearly. The implementation of measures takes place in dialogue with the departments involved and is discussed as part of follow-ups. The results flow into the revision of goals, principles and processes and the "Plan-Do-Check-Adjust" cycle begins again.					
Principles	Vision, mission and strategy for digitalisation and innovation					
	2. Organisational quality culture centred on digitalisation, innovation and collaboration					
	Digital education infrastructure					
IMPLEMENT: Imp	elementation of quality assurance processes and supports for digital teaching and learning					
Description	Whenever possible, QA and development processes are carried out on a decentralised basis, by the directly responsible unit. The university supports the QA and development processes centrally, through professional services and the provision of the necessary resources.					
Principles	Digital course content, design, delivery and assessment					
	5. Supporting and incentivising staff professional development					
	6. Preparing and supporting students for digital learning					
MONITOR: Feed	back and performance monitoring of digital teaching and learning quality					
Description	Information obtained through the QA and development processes is communicated to relevant stakeholders at all university levels within the framework of feedback loops. In addition to the quality of the services provided, the institution regularly reviews its QA and development system based on qualitative and quantitative evidence, external reviews, and/or benchmarking.					
Principles	7. Monitoring the quality of digital teaching and learning					
	Strengthening feedback and monitoring practices					

https://www.oecd-ilibrary.org/education/digital-higher-education\_f622f257-en







# 3. Quality assurance of micro-credentials

**3** 1 Regulatory context for micro-credentials



**3.2** External quality assurance of micro-credentials



3.3 Institutional quality assurance for the development of micro-credentials



3.4 Supports, resources and infrastructure for micro-credentials development









# 3.1 Regulatory context for micro-credentials

Ensure that micro-credentials are embedded in regulations and definitions + qualifications framework.







# **Embedding MCs in national regulation (Australia)**



2022

#### **Definition**

The framework defines microcredentials as a certification of assessed learning or competency, with a minimum volume of learning of one hour and less than an AQF award qualification, that is additional, alternate, complementary to or a component part of an AQF award qualification.

# National Microcredentials Framework

November 2021

2022







# **Embedding MCs in national regulation (Spain)**



### **MICROCREDENCIALES**

FORMACIÓN INCLUSIVA EN TODOS LOS FORMATOS Y PARA TODAS LAS EDADES

ANECA presents a framework document for quality assurance of microcredentials in the Spanish University System

September 5, 2022

### Internal quality of micro-credentials in Spanish universities

Spanish university legislation is being updated and provides a framework for the lifelong learning programs developed by universities, including micro-credentials, through the entry into force of Royal Decree 640/2021, of July 27, on the creation, recognition and authorization of universities and university centers, and institutional accreditation of university centers, and Royal Decree 822/2021, of September 28, establishing the organization of university education and the procedure for assuring its quality, together with the draft legislation of the Organic Law of the University System (LOSU).







### **Embedding MCs in national qualifications framework (Ireland)**









# 3.2 External quality assurance of micro-credentials

Develop specific indicators for [online] microcredentials where appropriate and embed them in existing quality assurance frameworks.







# How are quality assurance agencies responding?

1 No specific quality assurance standards for micro-credentials



In **25+ countries**, we found no national framework, standards or guidelines for micro-credentials. In many cases, however, there is evidence of a plan or commitment in the future to integrating quality assurance standards for micro-credentials within existing requirements.

**2** Common standards and quality assurance processes apply for micro-credentials



In **Australia, Canada (x3), United Kingdom, Estonia, Spain** and **The Netherlands** we found common standards already apply for micro-credentials, and tangible evidence of a decision to extend the application of existing standards for their quality assurance.

3 Specific standards and quality assurance processes developed for micro-credentials



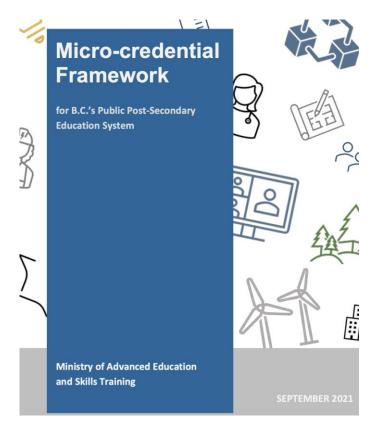
In **New Zealand, Malaysia** and **Ireland,** we identified a framework or specific standards or guidelines for micro-credentials to address particular issues related to their quality assurance.







### Common standards for QA of MCs (British Columbia, Canada)



#### **GUIDING PRINCIPLES**

For Micro-credential Development and Implementation in B.C.'s Public Post-Secondary Education System

#### ACCESS:

Micro-credentials should increase access to post-secondary education and be accessible to a range of potential learners. They should provide flexibility, reduce barriers and increase opportunities for employment and life-long learning. Tuition and fees should align with the duration, skill level, learners targeted and expected outcomes of a micro-credential.



#### QUALITY:

Micro-credentials will be developed and assessed through a process that assures learners of their value and facilitates recognition by employers and other post-secondary institutions.

#### **Quality Assurance\***

Micro-credentials will be developed, approved and periodically reviewed, through an institutional process that aligns with existing post-secondary standards and policies, for credit and non-credit offerings, to ensure value to learners in meeting education or employment goals.

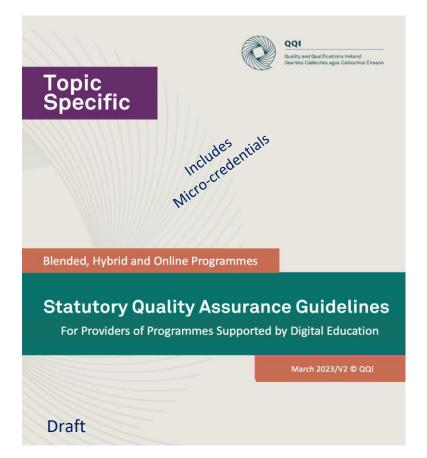
https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/micro-credentials/mc\_framework.pdf







# **Specific standards for QA of MCs (Ireland)**



### Specific QA issues for online [MC]

#### **Organisational context**

- Business continuity
- Access to IT infrastructure
- Learners outside of country

#### **Programme context**

- Online teaching experience
- Training and professional development
- Synchronous vs asynchronous delivery

#### Learner context

- Learner readiness
- Access to online resources
- Equivalency of learning support







# 3.3 Institutional quality assurance of micro-credentials

Increase institutional autonomy to develop and offer [online] micro-credentials but require internal quality assurance processes to 'plan and adjust', 'implement' and 'monitor' their quality.







# Some key indicators for the institutional QA of MCs

### **Plan and Adjust**

# Strategy, Quality Culture and Infrastructure

- Institutional leadership
- Organisational structures
- Business models and resource allocation
- Policies, regulations and pathways, including global
- 11 Systems and platforms
  - Flexible enrolment
  - Virtual learning environment (VLE)
  - Digital badging/certificate

### **Implement**

# Quality Assurance Processes and Supports

- Internal approval processes
- Appropriate workload models
- Professional learning and support for MC development
- Peer review of learning design
- Appropriate assessment and learner feedback strategies
- Study disclosure and learner readiness for success
- Availability of learning support and library resources

#### **Monitor**

# Feedback and Performance Reporting

- Learning analytics data on student engagement
- Retention, progression and completion data
- Student experience data
- Employer satisfaction data
- Meets professional accreditation requirements
- Graduate employment data
- Cyclic institutional review of micro-credential offerings







### Institutional leadership and structures for MC development

# JOURNAL OF INTERACTIVE MEDIA IN EDUCATION

#### A Strategic Institutional Response to Micro-credentials: Key Questions for Educational Leaders

Mark Brown<sup>1</sup>, Rory McGreal<sup>2</sup> & Mitchell Peters<sup>3</sup>

<sup>1</sup>Dublin City University, <sup>2</sup>Athabasca University, <sup>3</sup>Universitat Oberta de Catalunya

#### **Abstract**

This article responds to the rise of the micro-credential movement. It evidences the heightened attention politicians, policy-makers and educational leaders are giving to micro-credentials by framing the discussion in several recent high-level policy developments, an expediential growth in the number of academic publications and the increasing level of interest shown by popular media. It follows that micro-credentials appear to be high on the change agenda for many higher education institutions (HEIs), especially in the post-COVID-19 environment. However, the emergence of the micro-credential raises several crucial questions for educational leaders, set against fear of missing out. Importantly, the paper identifies a significant gap in the literature regarding leadership and strategic institutional responses to micro-credentials. Indeed, there is a dearth of literature. Leadership is crucial to the success of any educational change or innovation, so five key questions are presented for institutional leaders. They challenge institutions to make strategic decisions around how they engage with and position micro-credentials. If micro-credentials are part of a HEI's change agenda, then serious consideration needs to be given to the type of leadership and internal structures required to develop and execute a successful micro-credential strategy. Consideration must also be given to fit-for-purpose business models and how to mitigate potential risks. We hope to bring these strategic questions to the table as institutions plan, envision and develop their micro-credential strategies.

#### Members of a micro-credential design team

(Bigelow, et al., 2022)

**Initiative lead:** The lead is the lynchpin of the micro-credential development (is this you?). This person should be engaged about the initiative and be a good problem solver, able to navigate the internal processes.

**Employer engagement lead:** Getting employers on board early is critical. This person should have a track record of successful employer engagement and be able to talk their language and get calls returned.

**Subject matter expert (SME):** The SME co-creates content and advises on delivery in collaboration with industry or employer partners.

**Pedagogical and edTech support:** This is an instructional designer or educational developer who can help shape the learning plan and content, possibly in partnership with your institution's teaching and learning centre.

**Visual design support:** That first glance is crucial to respect and understanding. This person should be able to go beyond making the design attractive and correctly branded. The job is about how visual design can support the meaning of your micro-credentials.

**Leadership champion:** Sooner or later you're going to need this person—someone at the director, dean, or vice-president level who believes in what you're doing and can advocate at high levels.

- (Faculty Staff)
- Finance Office
- LMS/VLE Support Unit
- Teaching Support Unit
- Learning Support Unit
- Library Support Unit

- Quality Office
- IT Support Unit
- Marketing Department
- Admissions Team
- International Office

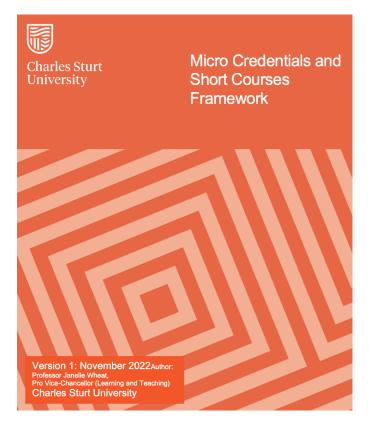
- Alumni Office
- Graduation Office
- Student Union
- Employers







## Policies and regulations for MCs (Charles Sturt University)



#### Types of micro credentials and short courses

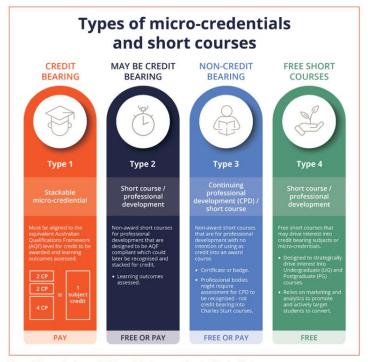


Figure 1. Types of micro credentials and short courses offered at Charles Sturt







# Internal approval process for MCs (Trinity College Dublin)





# Professional learning and support for MC development



for Digital Learning

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Online Courses / Teaching









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# Student experience and employer satisfaction data

#### Reported Benefits of Taking the Courses





Table 2. Reported Benefits of Completing a MicroMasters (MM) or a Specialization (Sp)

Benefit Reported	% of all completers	% of Sp completers	% of MM completers		
Learned something new	90%	91%	89%		
Improved performance in current job	(38%)	39%	35%		
Improved my English	22%	21%	26%		
Networked with other professionals in this field	16%	17%	13%		
Helped me start my own business	15%	20%	4%		
Improved application to a first job	11%	7%	18%	6%	
Improved application to a new job at different employer	10%	9%	12%	070	
Improved application to a formal degree program	9%	7%	19%	nav rise	
Helped in being moved to different job at same employer	7%	6%	7%	pay 1100	
Improved my application to a formal degree other than	7%	7%	7%	<b>+</b>	
related MA at same university offering MM or Sp	<b>—</b>				
Helped me get a pay raise	6%	6%	5%		
Helped me get a bonus	6%	7%	2%		
Supplemented a formal degree program	5%	2%	12%		
Important to my employer in getting first job	(3%)	3%	5%	(Hallanda 9 Ka=; 2010)	
Helped me get a job promotion	4%	4%	2%	(Hollands & Kazi, 2019)	
Improved application to formal degree other than related	3%	2%	6%		
MA at other university					

*Note.* The first column in this table represents responses out of the full sample of 262 respondents. The next 2 columns report percentages out of 180 Sp respondents and 82 MM respondents respectively. Numbers in bold indicate a statistically significant difference between Sp and MM.





# 3.4 Supports, resources and infrastructure for MC development

Support and coordinate the development of national resources, infrastructure and communities of practice to help Higher Education Institutions (HEIs) develop and offer high-quality micro-credentials.







# **Guidance for institutional MC development (Ontario, Canada)**



eCampusOntario's
Micro-credential Toolkit

2022



#### **QUALITY ASSURANCE**

Quality assurance is critical to the success of microcredentials within the system. While the term "quality assurance" is hard to define, all stakeholders agree that it is foundational to growth and acceptance of microcredentials as a valid component within the educational landscape.

Both learners and employers rely on trusted providers who have demonstrated quality, and this is borne out by research reported by the European Union (Orr et al., 2020). However, while the importance of quality assurance may be recognized, this is new territory, and in many cases existing quality assurance frameworks are still being adapted to facilitate and monitor micro-credentials.

peing adapted to facilitate and monitor micro-credentials.

Several possibilities for assuring quality can be



identified in the current ecosystem. Ontario higher education institutions are subject to specific quality and accreditation requirements within provincial jurisdiction, and micro-credentials may fall into existing administrative and governance processes for degree- bearing credits. In other cases, a specific professional organization (e.g., colleges or associations for nursing, engineering, health care, etc.) may be responsible for auditing recognized programs. Another scenario is applying a quality framework driven by one already established in industry (e.g., ISO, W3C).







# **Guidance for inter-institutional MC development (EADTU)**





February 26, 2022

Book Open Access

#### Models and guidelines for the design and development of a joint micro-credential programme in higher education

Henderikx, Piet; (5) Ubachs, George; (5) Antonaci, Alessandra

This eBook provides pedagogical guidelines for designing and developing joint micro-credential programmes, to be published on the BLOOM hub. The hub will present a series of models and guidelines for key educational digital formats for digital higher education courses and programmes, international collaboration and mobility.

The development of micro-credentials in a lifelong learning perspective is a top priority of the European Commission, as expressed in the Proposal for a Recommendation to the Council of Ministers on Micro-credentials. In the preparatory documents of the European Commission's Micro-credentials in the register of the European Commission's Micro-credentials in the Indight Education Consultation Group, the offer of micro-credentials can vulner any in learning volume from 1 ECTS to any volume amignet than a degree at the same ECT of the Council Coun

In this document, we cover micro-credentials of 4 to 5 ECTS and larger programs of in formal higher education settings and consisting of more than one course, such as joint CMF micro-credential programmes, undergraduate/postgraduate certification programmes, consisting education programmes, expert programmes, specialison programmes, focus diplomas, MOOC pathways, gradeos, MicroMasters or nano-degrees. A qualification is awarded after following such a reference detailed in programmes.

Single micro-credential courses of 1 to 3 ECTS have different design guidelines, therefore they are explained in another eBook. Individual online courses are already rewarded with ECTS credits. Stand-alione micro-learning units are smaller than 1 ECTS and are covered in the same document. In many cases, they are awarded with a badge.

The qualification structure of micro-credentials will be discussed in the near future at the level of the EU Council, national governments and within higher education institutions.

The quality assurance for a joint micro-credential programme is a common responsibility of the partnership. In this respect decisions have to be taken about:

- Connect with institutional quality assurance frameworks in the partnership;
- Connect with the European Standards and Guidelines for Quality Assurance and its guidelines for e-learning;
- Connect with quality concepts and frameworks within your European University alliance (EUI) or network
- Use evidence-based quality assurance instruments;
- Prepare for accreditation.





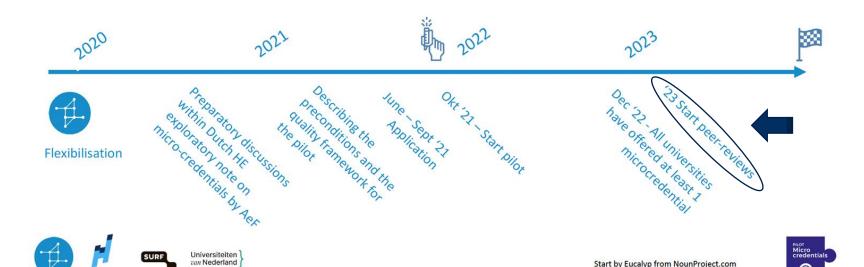


### Support for HEIs to pilot micro-credentials (Netherlands)

#### 32 HEI's in NL

22 Universities of Applied Sciences (61%)

Universiteiten 10 Research Universities (71%)





Finish by Adrien Coquet from NounProject.com







Deep Dive Opinion Library Events Topics >

# Employers value microcredentials but don't know how to assess their quality

Published Feb. 23, 2023



Natalie Schwartz Editor











https://upcea.edu/employers-are-all-in-on-microcredentials-survey-shows-inside-higher-ed/

#### Survey of 510 US employers

- Although a majority of surveyed employers say they value alternative credentials, many also harbor concerns over assessing the quality of education and understanding the skills and competencies they represent.
- That's according to a recent survey of 510 employers from the University Professional and Continuing Education Association, also known as UPCEA, and Collegis Education, a technology services provider for colleges.
- · Despite their concerns, 23% of respondents said the greatest benefit alternative credentials provide is giving workers real-world experience. Also, 16% of respondents said alternative credentials help employees develop specialized skills and 13% said they improve performance.









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