Micro-credentials are the latest shiny new thing attracting educators' increasing attention. Indeed, 2021 may become known as the year of micro-credentials. On the surface, the micro-credentialling movement offers great promise in helping to redesign and even reimagine more future-fit and complementary credential frameworks to enhance employability, continuous professional development, and the goal of a thriving learning society. But is there a danger that the micro-credential may be a wolf in sheep's clothing?

Introduction

In June 2021, Google announced 1,000 scholarships for free study for Dublin jobseekers (O'Dea, 2021). Successful recipients can complete a range of online courses delivered through Coursera. Google has a stated goal of disrupting established education models through its new Career Certificates, which it claims will be recognised as the equivalent of a full bachelor's degree for recruitment purposes (OECD, 2021a). Other highprofile companies are also offering new types of learning experiences that both challenge and complement the traditional university degree.

Removing the sheepskin

There is a growing sense that 'skills, rather than occupations or qualifications, form the job currency of the future' (Deloitte, 2019, p. 19). The 'sheepskin effect' of higher education, where its intrinsic worth has little to do with the time and effort that students devote to their studies but rather the parchment obtained at the end, is believed to be losing its employability value (Technológico de Monterrey, 2019).

Whether or not this is true, it is one of the reasons cited that higher education institutions (HEIs) need to develop a micro-credential strategy. There is evidence from around the globe that an increasing number of institutions are rushing to follow early micro-credentialling pioneers by repackaging their traditional offerings to prepare more work-ready graduates (Brown et al., 2021a). Cote and White (2020, p. 8) expand on why HEIs need to embrace micro-credentials:

First, traditional teaching and learning models have not adapted adequately to changing student demands and labour market needs. Higher education – particularly the university sector – has been confronted with a growing Microcredentials Untethered: A Wolf in Sheep's Clothing?



Mark Brown

Director of the National Institute for Digital Learning, Dublin City University

Mairéad Nic Giolla Mhichíl

Director of Microcredential Strategy and Innovation, Dublin City University list of critiques to the still-dominant, campus-focused program models: long and relatively inflexible programs; inadequate recognition of prior learning; slow or limited innovation in pedagogy; insufficient student supports for career-readiness; weak alignment to labour market needs; and a limited commitment to online and digital-enabled learning.

Beware of the wolf

Is it just another fad? In a stinging critique of micro-credentials, Ralston (2021, p. 83) argues that they are nothing more than a case of 'learning innovation theater'. At a deeper level, he argues that HEIs are selling their soul to business interests and market forces by unbundling the degree to quickly bolster their profits. According to Ralston, the emphasis on future skills is at the expense of educating the whole person:

The craze represents a betrayal of higher education's higher purpose and a loss for students and faculty who continue to see university learning as more than vocational training (ibid., p. 92).

The concept of micro-credentials is not new... For decades, short courses have been an essential part of adult education and have had a prominent role in continuing professional education in many professions. This line of critique argues that the drive to unbundle the traditional degree can be traced to the forces of the 'neoliberal learning economy' (ibid., p. 83). From this viewpoint, higher education has become a form of a commodity, marketed and sold and acquired like any other. Wheelahan and Moodie (2021, p. 1), similarly, argue that micro-credentials are 'gig qualifications for a gig economy'.

While critique is usually a valuable source of insight, sweeping generalisations are unhelpful. Micro-credentials are being developed in multiple contexts with a variety of objectives, from fulfilling lifelong learning to broadening participation. They should therefore not be treated as a single uniform entity.

Charting the field

The field of micro-credentials is complex, and there is no global consensus on the term (Oliver, 2021). Confusing matters further, several other labels are commonly used instead of it or interchangeably with it. Despite this problem, many governments have been attracted to micro-credentials as part of their strategy to get people back to work after Covid-19 (OECD, 2021b).

In November 2020, for example, the provincial government in Ontario, Canada, announced \$59.5 million over three years for a major microcredential development programme (Government of Ontario, 2020). The previous month an exciting Irish initiative was launched, with €12 million available under the Human Capital Initiative to develop a national multicampus micro-credential (MC2) system over five years (IUA, 2020). The growing investment in this area is evidence that 'micro-credentials are seen as a valuable tool by institutional leaders' (OECD, 2021b, p. 3).

Interestingly, Usher (2021) describes the current attraction of microcredentials as being like 'catnip to politicians'. While cats might be less dangerous than wolves, there is a degree of memory loss in some of the claims about the potential of micro-credentials. After all, they are already 'huge and hiding in plain sight' (Matchett, 2021). An Australian study found there were 2.6 million people already enrolled in non-qualification 'training bundles', primarily to meet regulatory requirements in workplace safety, emergency preparedness, and authority to operate (Palmer, 2021). It also found that this market is largely 'private', with largely no government contribution.

In Canada, the St John's Ambulance has been offering fee-paying short courses in basic first aid for well over a century. In fact, these courses were first offered in 1833, and now more than half a million Canadians annually seek to complete St John's certificates (Toronto Workforce Innovation Group, 2021). In 2020, over 10,000 jobs posted online in Toronto were found to have required some form of first aid training.

Though we have limited data on similar courses in Ireland, the key point is that smaller formal and non-formal training bundles have existed for many years. The concept of micro-credentials is not new (Oliver, 2019). Hudak and Camilleri (2021, p. 5) reiterate this point:

For decades, short courses have been an essential part of adult education and have had a prominent role in continuing professional education in many professions. In diving instruction, vendor-led IT certification, and in medical continuing professional development, they are even the dominant form of education. The idea of 'unbundling' Higher Education into smaller parcels, functions and courses has been frequently mentioned in literature since at least 1975, while in European policy making the idea of offering short courses for reskilling has been present since at least 2001.

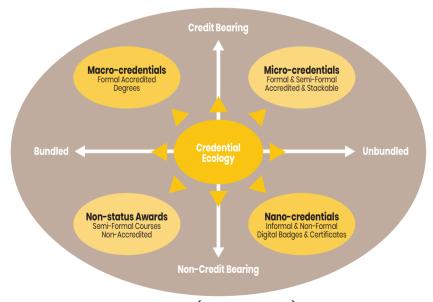


Figure 1: The new credential ecology (Brown et al., 2021a)

Remapping the landscape

An important distinction needs to be made between older and newer types of micro-credentials. Importantly, many of the older types appear to serve different purposes from traditional macro-credentials. They are often awarded by different types of organisations based on different standards, professional frameworks, or quality-assurance processes.

To illustrate the relationships between different types of credentials, Brown et al. (2021a) attempted to map the new and emerging landscape. Figure 1 presents four credential quadrants across two axes. At one end of the y-axis, we position traditional macro-credentials and credit-bearing micro-credentials. On the x-axis, we show the degree to which credentials and related units of learning are bundled together by the awarding body - in contrast, at the other end, to the level of personal choice that learners have over the make-up of their own learning bundle.

In this typology, micro-credentials are differentiated from other types of credentials on the basis of their unbundled, credit-bearing, and stackable

> nature. However, the distinction between quadrants is not as clear-cut in reality. To add clarity, the European Commission's Higher Education Consultation Group on Micro-credentials proposed the following truncated definition:

> 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. (European Commission, 2020, p. 10)

This definition makes it explicit that a micro-credential is a documented award by a trusted body to signify that a learner, upon assessment, has achieved learning outcomes of a small

volume of learning against transparent standards and in compliance with agreed quality-assurance processes (Brown et al., 2021a).

Ideally, micro-credentials should be referenced to, or embedded in, the European Qualification Framework (EQF) and in National Qualification Frameworks (MICROBOL, 2021). However, our Irish national survey of employers shows that this definition needs to take greater account of industry settings and workplace training (Nic Giolla Mhichíl et al., 2021).

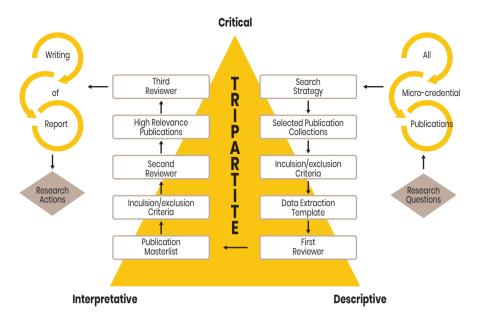
Better plotting the literature

While progress has been made on the definition front, there remains a lack of data on the value of both older and newer types of micro-credentials. Micro-credentials are largely data deserts when it comes to understanding tangible individual and societal benefits.

Accordingly, in 2021, we undertook a 'state-of-the-art' literature review on micro-credentials for the European Commission (Brown et al., 2021b). After following a tripartite methodological approach (Figure 2), we identified 149 relevant publications. A second set of inclusion criteria was then developed to screen those publications most relevant to Europe. This subsample (n =45) is presented alongside the larger sample for comparison.

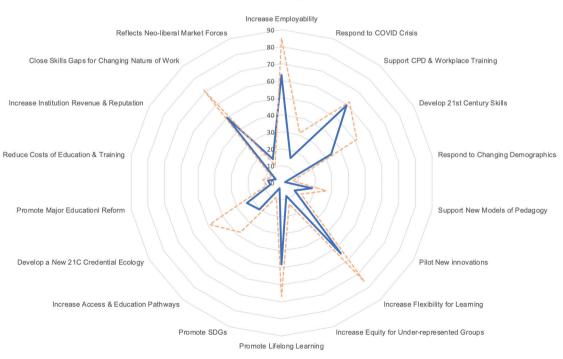
A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience.

5



All Publications





Drivers and Attractors for Micro-credentials

---- Highly Relevant Publications

Figure 3: Drivers and attractors for micro-credentials

-5

Figure 3 illustrates the drivers and attractors identified in analysing the literature. We found inherent tensions, mutually nested connections, and competing worldviews in the positioning of micro-credentials. On the premise that 'it is theory that decides what we can observe' (Stachel, 2002, p. 238), the literature serves to remind us that education systems consist of palettes with conflicting ideological, epistemological, and pedagogical assumptions. Though simplistic, at the root of these assumptions are two broad worldviews: the tradition of the learning society, and the influence of the knowledge economy.

Not surprisingly, a strong discourse on knowledge economy is woven throughout our analysis of the wider sample of literature covering areas related to employability (64%), closing skill gaps in response to the changing nature of work (50%), and supporting continuous professional development (CPD) and workplace training (60%). These drivers were often supported by publications making bold predictions; for example: 'around 85% of the jobs that today's learners will be doing in 2030 haven't been invented yet' (Institute for the Future, 2017, p. 14).

At the same time, understanding the rapid growth of the micro-credential movement requires a type of double vision, because imbued in the discourse are efforts to support new models of pedagogy (18%), increase flexibility for learning (54%), enhance access and new pathways to formal education (20%), and promote lifelong learning (48%).

From a learner perspective, micro-credentials are posited to provide the alternative approach to promoting flexible, accessible learning that today's learners increasingly require, because:

Frontloading skills and competencies through our schools and universities is not sufficient to prepare active and well-educated citizens for the rapidly changing nature of work and to actively participate in building a more sustainable future. (Brown, et al., 2021a, p. 2)

What is clear from the above drivers is that the competing languages of persuasion associated with the micro-credential movement are part of a complex milieu of change forces and social, cultural, and economic influences. Notably, explicit neoliberal economic drivers were evident in less than 15% of publications. While micro-credential drivers in the highly relevant sample centred on a wide range of societal issues, particularly employability (85%) and lifelong-learning-related agendas (67%), other key policy areas such as the Green Deal, equity, and social inclusion were only sparsely mentioned.

In search of greener grass

The answer to the question of whether micro-credentials are a wolf in sheep's clothing depends to a large extent on which underlying drivers you choose to emphasise. The lesson for Irish HEIs is to clearly define their own drivers and the outcomes they seek, rather than blindly following the rest of the flock.

A stronger focus needs to be placed on the demand side of microcredentials, rather than adding to the supply with limited understanding of the emerging market. It follows that deeper consideration of possible, probable, and preferable futures is required, because there are risks of unintended consequences, and the grass may not end up being greener.

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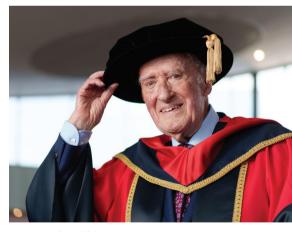
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Seán de Fréine receives honorary doctorate from DCU

On 1 December 2021, Dublin City University conferred the award of Doctor of Philosophy (Honoris Causa) on Seán de Fréine. Receiving this award from DCU, Seán joins noted figures from politics, sport, literature and industry. They include Jim Gavin, Paula Meehan, Micheál Ó Muircheartaigh, Sonia O'Sullivan, Bill Clinton, Seamus Mallon, David Trimble, and most recently Annette Kennedy and Vivien Lusted.

Seán de Fréine is a scholar and a public servant whose work has been of fundamental importance in the cultural sphere in Ireland for six decades. He has been a foundational influence on the sociolinguistics of Irish society and on



questions of language policy. Since the 1960s onwards, his published work has been central to academic and public discussion of issues of language, society and identity in Ireland.

Prof Daire Keogh, President of Dublin City University, said:

"Seán de Fréine in his profession and passions has embodied the DCU mission to 'transform lives and societies'. Through his extraordinary scholarship and exemplary public service, Seán has made a unique contribution to the preservation and promotion of the Irish language, and to the development of Ireland's cultural life."

The small celebratory event took place in the Helix on DCU's Glasnevin Campus with a small group of Seán's family and friends in attendance. Traditional Irish music group Na Casadaigh composed and recorded a piece of music, 'Ómós to Sheán', to celebrate Seán and to mark the occasion.