This article explores the growing interest in micro-credentials in Ireland and internationally. These credentials or microqualifications are increasingly attractive to learners, funders, and policymakers because they can be highly focused on known areas of specific skill shortage and can be obtained in a relatively short time. They have taken on greater importance as they are seen to have a role to play in the response to the Covid-19 pandemic.

Introduction

Micro-credentials are a means of recognising comparatively small amounts of learning. They are attractive to learners, employers, funders, and policymakers because they can be highly focused on known areas of specific skills shortage and can be obtained in a relatively short time. Micro-credentials are sometimes referred to as alternative credentials; micro- or nano-degrees; open, digital, or e-badges; or even micro-masters. Some are accredited and are part of or aligned to national qualification frameworks, and some are non-accredited.

Currently there is no common understanding or agreed national or European definition of micro-credentials. This causes some concern that micro-credentials can lead to fragmentation of the qualifications system or even the possibility of a parallel credential system. Recent efforts to address this include a UNESCO webinar on moving towards a common language on micro-credentials (UNESCO, 2021). The webinar noted that the 'lack of a common definition, shared and understood by all users, has a number of negative implications, particularly when it comes to the transparency, portability, and cross-border recognition of micro-credentials'.

The value that micro-credentials, and indeed other qualifications, have for stakeholders is linked to the trust given to the credential and to the provider who offers it. It is also linked to the 'recognition' mechanisms between the education and training system and the labour market.

Labour market relevance is a key driver for microcredentials. Micro-credentials are not a new concept: awards, badges, and certificates to mark achievements have been issued by organisations in industry, business, and education, and by volunteering bodies. Learners want evidence of having acquired new or additional knowledge and skills as a response to the demands of the labour market, while employers are keen to ensure that

Microcredentials: Hope or Hype?

A look at the growing interest in and opportunities offered by micro-credentials in Ireland and internationally



Dr Padraig Walsh Chief Executive of Quality and Qualifications Ireland (QQI) employees can access new skills, in flexible and convenient ways, as the business requires.

Micro-credentials offer learners the opportunities to learn in a way and at a time that suits their diverse and complex lifestyles. At the same time, providers are adapting and updating their courses to provide greater flexibility for learners, including more innovative and diverse modes of delivery. The ability to stack micro-credentials towards a larger qualification is attractive to learners, providers, and employers.

A major driver in the development of micro-credentials has been the Covid-19 pandemic. The significant number of people who have become unemployed or furloughed since March 2020 has generated a market for upskilling or re-skilling for new jobs, particularly away from sectors hardest hit by the pandemic.

Currently there is no common understanding or agreed national or European definition of microcredentials.

Whereas micro-credentials were once mainly the province of private online education providers, over the past 18 months all education providers, public and private, have been forced into the online teaching and learning space. Many are finding that their clients are now less concerned about proximity to a campus and may indeed be unwilling or unable to commit the time required to complete, say, a traditional master's degree.

Micro-credentials and higher education

Europe

Across Europe, educational authorities and institutions are keen to ensure that there is quality oversight over micro-credentials (ENQA, 2021). Efforts are in place to ensure standardised and consistent approaches, particularly in the context of the European Qualifications Framework (EQF) and European Higher Education Area (EHEA), with an emphasis on complementing frameworks rather than proposing alternative (and possibly contradictory or confusing) processes.

In April 2021, the European Commission launched a public consultation on a European approach to micro-credentials for lifelong learning and employability. It sought to collect ideas for the development of a common definition for micro-credentials, European Union (EU) standards for their quality and transparency, and the next steps to be taken at the institutional, national, and EU levels (European Commission, 2021a).

Recovery from the Covid-19 pandemic and the need to accelerate the green and digital transitions also require individuals to upskill or re-skill. However, without common standards ensuring quality, transparency, cross-border comparability, recognition, and portability, the Commission concluded that micro-credentials cannot reach their full potential. It is therefore seeking to develop a common definition and European standards for micro-credentials independent from the awarding body, building on existing tools as far as possible. The Commission intends to prepare a

Council Recommendation on micro-credentials for lifelong learning and employability by the end of 2021.

Micro-credentials were referenced in the 2020 communiqué of the ministers of education in the EHEA to respond to learners' needs for upskilling and re-skilling (Ministers for Higher Education, 2020). A key development in the EHEA is the MICROBOL project – Micro-credentials linked to the Bologna Key Commitments – a two-year project, commenced in 2020, co-funded by Erasmus+ KA3 Support to policy reform (European Commission, 2021b). The project focuses primarily on micro-credentials provided by higher education institutions (HEIs) or in conjunction with them, but also touches upon those provided entirely by companies or non-profit organisations, the system of 'open badges', and other bits of 'micro'-learning that might be recognised by HEIs. The project will explore whether and how the existing EHEA tools can be used or need to be adapted to be applicable to micro-credentials.

The new version of Europass, launched by the European Commission in 2020, includes a digitally signed credentials framework and platform that provides an environment in which to address the challenges related to quality assurance, mutual trust, and recognition of micro-credentials. The platform will facilitate the uploading of all types of qualifications, accredited and non-accredited. Learners will be able to evidence, demonstrate, and share all their varied credentials (degrees, diplomas, micro-credentials) in digital portfolios.

A recent study by the European University Association (Cirlan and Loukkola, 2020) noted that the rising cost of university education has been a key driver particularly in the US, Australia, and New Zealand, where the phenomenon of alternative credentials has been more present. But in many European countries, where tuition fees are low or non-existent, the difference of price for students taking micro-credentials is not big, while the cost for a micro-credential offered outside formal degree programmes can be higher.

Many of the developments in micro-credentials emanate from the United States.

United States

Many of the developments in micro-credentials emanate from the United States. Among the reasons for this are concern at the runaway costs of the traditional four-year residential university degree and the prevalence in the market of several large online providers such as Coursera, edX, and Udacity (Hechinger Report, 2020).

In an article for the BBC, Purbasari Horton (2020) examined whether microcredentials could replace or merely supplement traditional degrees in the US. Some micro-credentials popular in the US, such as so-called 'coding bootcamps', might have been developed to fill the gaps that universities cannot, and in turn might be perceived in relevant sectors as good alternatives to traditional degrees.

But according to Sean Gallagher of Northeastern University, that does not mean that traditional university degrees do not have significant value (Gallagher, 2018). His survey on the use of educational credentials in hiring found that 'college and university degrees are still valued and demanded in the job market' and 'continue to give their earners economic returns'. While he found that more organisations were moving towards skills-based hiring, many applicants were already degree-holders who were using microcredentials to supplement their basic qualification, rather than looking to stack certificates or bootcamp credentials as an alternative. Even when looking at coding bootcamps, these tended to be favoured by graduates looking for a shorter version of a master's degree.

United Kingdom

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A recent study by the Quality Assurance Agency for Higher Education in the UK (QAA, 2021) concluded that a significant barrier to the increased take-up of micro-credentials in the UK relates to the funding system. A key recommendation from the Augar Report (Augar Report, 2019) would 'provide individuals with a loan entitlement to the equivalent of four years' worth of post-18 education to use over their lifetime'. However, this will require a significant change to the system of student finance, not yet approved by the UK Treasury. Without this funding, there are doubts about whether learners who have not yet had an opportunity to engage successfully in higher education or are from lower socio-economic backgrounds will take up micro-credentials.

Micro-credentials and training

Europe

While the role of micro-credentials in higher education has received much attention, their influence on further and continuing training in the labour market is less understood. In 2020, Cedefop (the European Centre for the Development of Vocational Training) launched a study on the role of micro-credentials in upskilling or re-skilling in a fast-changing work environment (Cedefop, 2020). It seeks to examine how the technology-driven growth in micro-credentials and online badges interacts with existing certification systems serving enterprises, sectors, and technology areas. The study will look at whether the increased attention to micro-credentials is linked mainly to their digital delivery form or to a genuine change in the way we recognise knowledge, skills, and competences.

Australia

The review of the Australian Qualifications Framework in 2019 explored the importance of micro-credentials and recommended that policy guidelines be developed to allow micro-credentials to be recognised for credit (Australian Government, 2019). A more recent review by the National Centre for Vocational Education Research (NCVER) analysed the role of micro-credentials in vocational education and training (VET) in Australia (Palmer, 2021). These reviews highlighted how micro-credentials can support opportunities for flexible learning and training and could help

modernise Australia's training landscape, as part of broader reform work in the VET system (Australian Government, 2019). NCVER noted how much of the development of micro-credentials in training related to the response to Covid-19, with a range of new skills being identified to respond to areas of critical workforce training and skills needs, particularly related to infection-control skills in retail, food handling, transport, logistics, and health.

New Zealand

New Zealand was one of the first countries to look at placing micro-credentials as an integral part of its regulated education and training system. In 2018, the New Zealand Qualifications Authority developed a process for the approval of tertiary education organisations wishing to offer regulated micro-credentials (NZQA, 2018). Once approved by NZQA, a micro-credential is published on a micro-credential register (NZQA, 2021). Micro-credentials in New Zealand can stack to qualifications. Programmes leading to qualifications may include micro-credentials as components of learning. The micro-credential application must state which qualification the micro-credential would be 'stacked' towards.

The recognition of a micro-credential in the NFQ gives some assurance to funders, learners, and employers that programmes are well designed and delivered and assessed to high standards.

Micro-credentials in Ireland

Background

The Irish National Framework of Qualifications (NFQ) was launched in 2003. The recognition of a micro-credential in the NFQ gives some assurance to funders, learners, and employers that programmes are well designed and delivered and assessed to high standards. Awards in the NFQ must be assigned a level, and the programme must be judged to meet the learning outcomes relevant to that level.

However, not all micro-credentials need be included in the NFQ to be recognised and useful. Qualifications as small as 1 ECTS (25–30 hours of total learner effort) are in use. Their credit can be accumulated towards NFQ qualifications through procedures operated by providers for the recognition of prior learning. Also, smaller micro-credentials can be bundled or stacked to construct a compound award eligible to be included in the NFQ.

In a report on the views of recruitment professionals in Ireland on qualifications, QQI (2019) noted that of over 5,000 training and education programmes delivered by Skillnet Network in 2017, more than half were non-formal and offered industry-specific micro-credentials.

One of the main drivers in increasing the availability of micro-credentials in Irish higher education has been though the financial incentive of the government's Human Capital Initiative (HCI) (HEA, 2020). The HCI is a response to the targets outlined in the National Skills Strategy, Technology Skills 2022, and other government strategies. It seeks to enable the higher

education system to respond rapidly to changes in both skills requirements and technology.

One of the main projects funded under the HCI is a five-year (2020–2025), €12.3 million multi-campus micro-credentials project led by the Irish Universities Association (IUA) with funding drawn from the National Training Fund (IUA, 2020). Learners will be able to choose to undertake a micro-credential as a standalone award or stack their learning towards a larger award. Under the project, Ireland aims to be the first European country to establish a coherent national framework for quality-assured and accredited micro-credentials.

Micro-credentials and QQI

QQI is actively engaged in several European activities and initiatives, including the MICROBOL project, related to micro-credentials to promote coherent, robust, and consistent approaches. In June 2020, QQI published a Green Paper on the Qualifications System (QQI, 2020a) whose purpose is to begin a national conversation on FET and HE qualifications, including the value and usage of non-major awards now and into the future.

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In November 2020, Ireland presented its NFQ Updated EQF Referencing and QF-EHEA Self-Certification Report to the EQF-Advisory Group. The original 2003 NFQ Award Type Descriptors were viewed as appropriate and visionary. The Irish NFQ is being cited by our European partners as a good example of a flexible framework that is designed to meet a diverse range of needs in a robust, quality-assured context.

Also in June 2020, QQI launched the Irish Register of Qualifications (IRQ) (QQI, 2020b). This statutory listing of all FET and HE qualifications included in the NFQ will provide greater visibility on the range and type of qualifications offered and available in the state, including small qualifications and micro-credentials. As of September 2021, there are 1,383 courses according to the IRQ in the level 6–9 NFQ range with 30 ECTS credits or less.

QQI currently has national standards for 1,500 FET 'component awards' linked with course elements of 50 hours and upwards. Many of these components are stand-alone and can be regarded as VET micro-credentials. Micro-credentials in FET are also offered here by well-known UK vocational awarding bodies, such as City and Guilds. The 2019 Qualifications and Quality Assurance (Amendment) Act, when the relevant section is commenced, will allow QQI to include such awards in the NFQ.

A recent QQI paper (QQI, 2021) provides an early exploration, starting with QQI certification data for 2014–2020, on how best to examine the state of play in the supply and uptake of higher-education micro-credentials in Ireland.

Private HEIs have shown their flexibility and responsiveness to calls to the national Springboard upskilling initiative over the past decade. They have competed successfully with bigger, longer-established public sector institutions. QQI has supported this work through external validation, monitoring, and review of these programmes. In some cases, the programmes were put together by providers from existing modules that were part of previously validated programmes.

However, in all cases, there must be a determination that the resulting programme is coherent and allows learners to acquire the knowledge, skill, and competence required for an award at the desired level in the NFQ. QQI has had to refuse validation on occasions when expert panels advised that the 'pick-and-mix' programme proposed did not meet real labour market needs.

In summer 2020, when public funding was made available for higher education and training (HET) 'micro-credentials', QQI undertook a pilot process for validation of those programmes to which this term has been applied (QQI, 2020c). With the cooperation of private HET providers, a process was developed whereby the providers could submit, for a streamlined validation process, stand-alone programmes of 5–30 ECTS which led to QQI special purpose awards. All these programmes comprised single modules drawn from previously validated programmes of larger volume and ranged from 5 to 20 ECTS. Since the programmes had already been through a larger validation process, QQI applied a streamlined model for evaluation while ensuring that the fundamentals of the validation process were maintained.

There is continued demand from the provider sector that the model for micro-credentials be extended further to include new programmes with no connection to a previously validated programme and modification of modules which had been taken from previously validated programmes.

The way forward

In her keynote address at the QAA Quality Insights conference in 2021, Beverley Oliver concluded that 'by 2025, depending on how we proceed, micro-credentials will be seen as a fad that disappointed us, or a key step towards reimagining lifelong learning for thriving and surviving'.

A recent paper (Wheelahan & Moodie, 2021) contends that micro-credentials are 'gig credentials for the gig economy' and that 'rather than presenting new opportunities for social inclusion and access to education, they contribute to the privatisation of education by unbundling the curriculum and blurring the line between public and private provision in higher education'. They further argue that micro-credentials 'accelerate the transfer of the costs of employment preparation, induction, and progression from governments and employers to individuals.'

Credibility will remain a challenge for micro-credentials, even if they are credit-bearing awards from a higher education provider. They will involve a significantly different learner experience. There has been much media coverage in the last 18 months about the impact of the pandemic on the student experience. One conclusion has been that the initial emergency pivot to online learning was a huge challenge for staff but may have been less of an issue for students. What has affected students was the loss of access to campus and support facilities and that wider traditional student experience.

There is a strongly held view that there is value from students having a largely uninterrupted, linear, and immersive experience of higher education. A higher education experience comprising small units of learning such as micro-credentials, gained over a long period, is very different from the traditional residential campus experience.

In Ireland, renewed national interest in micro-credentials provides the opportunity for further engagement and dialogue on standards and quality. QQI plans in 2021 to establish the Irish Quality and Qualifications Forum (IQQF) as a stakeholder consultation and advisory group on qualifications matters. QQI also plans to start a national dialogue on the themes and topics outlined in the Green Paper on the Qualifications System (QQI, 2020a).

QQI is committed to working with providers to ensure the streamlining of the QA processes and improving the speed to market of desired microcredentials. As part of our new Statement of Strategy 2022–24, we commit to building learner and public understanding of micro-credentials and where they fit in the NFQ.

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