

Board of Management Learning and Teaching Committee

Date of Meeting	Tuesday 15 February 2022
Paper No.	LTC3-C
Agenda Item	4.2
Subject of Paper	Student Academic Experience Strategy – Microcredentials
FOISA Status	Disclosable
Primary Contact	Siobhan Wilson, Dean - Faculty of Hospitality & Leisure
Date of production	November 2021
Action	For Noting

1. Recommendations

1.1 To note the paper submitted at the Learning and Teaching Committee meeting held on 24 November 2021.

Board of Management

Learning & Teaching Committee

Date of Meeting	Wednesday 24 November 2021
Paper No.	LTC2-D
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1. Recommendations

Note the report which provides a background the micro-credentials project.

2. Purpose

The purpose of this paper/presentation is to facilitate discussion of City of Glasgow College’s rationale and planning for micro-credentials.

3. Key Insights

3.1. To provide the need for the availability of micro-credentials to enable us to respond quickly and directly to upskilling and reskilling

3.2 To provide overview of project so far and intended outcomes.

4. Impact and Implications

4.1. The micro-credentials project has been developed in response to the Cumberford-Little report and the consecutive SFC reviews. It is primarily associated with ensuring the ability of colleges in Scotland to be responsive to immediate upskilling and reskilling needs.

4.2. Continuing improvement of the student experience providing more options for flexible and smaller pieces of learning compared to more traditional routes.

4.3. Without delivering micro-credentials there is a risk that colleges are left behind in the provision of small and immediate upskilling and reskilling removing competitive advantage and access to potential specific funding streams.

Appendices

SCQF report



Co-funded by the European Union



scottish credit and
qualifications framework

Exploration of Recognition for Micro-credentials

Project Group Report- March 2021

Introduction

This project was commissioned by the Scottish Credit and Qualifications Framework Partnership (SCQF Partnership) in November 2020 and has been funded through monies received from the European Commission.

Background

In early 2020 a report commissioned from the College sector by Scottish Government called the *Cumberford Little Report* identified a number of actions to respond to changes in the skills system and the wish from employers to have recognition from smaller pieces of learning.

More recently, economic challenges in the shape of Brexit and Covid19 have resulted in unprecedented change and a negative impact on Scotland's productivity, driving the need for ever greater College partnerships/collaboration with industry. Education and skills reform with the employer voice centre stage is key to ensuring contribution to inclusive economic growth.

Colleges encourage skills mastery underpinned by technological and professional education. Increasingly demand led, colleges play a pivotal role in their respective economy. They are well positioned from the point of engagement thus affecting transformation and this project involves them as key enablers in the introduction of micro-credentials.

The Scottish Funding Council, at the request of Scottish Ministers, launched a consultation in Summer 2020 entitled *Review of Coherent Provision and Sustainability*¹ which provided an opportunity for everyone interested in tertiary education, skills, research and innovation in Scotland, to consider what the future could or should look like at a time of great uncertainty. The Phase one report published in October 2020 summarised the responses from across the education sector and amongst those areas highlighted as essential for an integrated tertiary system were the need for a responsive digital infrastructure and a responsive system which supported flexible entry and certificated exit points, along with **“stackable” qualifications and micro-credentials** with currency across providers and post-graduate offers.

Scotland's economy

In today's world and particularly post Covid-19 the idea of a 'Job For Life' is now unrealistic. Change and disruption are the norm and the impact of global, political health and economic

¹ [Review of Coherent Provision and Sustainability \(sfc.ac.uk\)](https://www.sfc.ac.uk/Review-of-Coherent-Provision-and-Sustainability)

threats have impacted the need for urgent change to the educational system and necessary transitions for both employers and employees. Over 10,000 students report that their time at college has helped them develop knowledge and skills for the workplace, and this need will grow exponentially over the coming years with current economic crisis, BREXIT and Covid-19 implications. Colleges are often first responders when firms/industries collapse addressing mass redundancies and upskilling and re-energising both individuals and communities. Today's world means people are likely to have multiple jobs/ multiple employers/ multiple careers and over longer lifespans resulting in a need for '**Lifetime learning**' and '**Lifetime employability**'²

Micro-credentials Project Scope and Working Group

Any selected micro-credentials proposition needs to have synergy with economic needs - both short and medium term in order to drive innovation for Scotland. The project aimed to investigate the ongoing need/want for micro-credentials, identifying sectors where this type of programme would have maximum impact on the post-pandemic recovery of the Scottish economy benefitting both employers and individuals.

Large employers have already demonstrated their demand for bespoke bite size learning in terms of Flexible Workforce Development Fund (FWDF) usage, which currently sits at 75%-90% of the £10m fund being utilised for employer bespoke training. (Reaching over 1000 employers to date).³

FWDF is indicative of employer desire to step outwith the traditional qualification route and adopt a more agile and flexible training approach more suited to their specific needs.

Building from this, exploring the theme of more tailored short sharp programmes that recognise an individual's skills, knowledge and competence formed the basis for the project group discussions. The feedback from employers suggests that micro-credentials could fill an existing gap in the current educational system in relation to existing smaller pieces of learning which are easily accessible but which are not formally recognised and therefore do not currently encourage job movement or provide a nationally recognised solution to learner transition. A micro-credentials offer as described would assist in addressing an individual's knowledge gaps, could assist in job movement and provide a nationally recognised qualification whilst standardising local agreements regarding prior learning. There was however a recognition that for this to happen fully there were other considerations that would need to be addressed- some of which are highlighted within this report. The group further recognised that any micro-credentials offer through colleges will also need to compete with existing tech 'no cost' learning supplied by Google/YouTube etc and provide a recognised point of difference.

Recognition for bite size learning 'chunks' rather than more traditional protracted learning routes aligns well with socio-economic needs in today's post covid-19 world, helping people transition from unemployment/pre-employment programmes into work, and navigating the ever more likely route of employed, non- employed, at risk status, that has become the current 'norm'- particularly in some hard hit sectors, as well as supporting upskilling/reskilling opportunities.

² Reference; Covid19: Measures to mitigate the labour market impacts report July 2020

<https://www.gov.scot/publications/report-enterprise-skills-strategic-board-sub-group-measures-mitigate-labour-market-impacts-covid-19/>

³ Ref: Scottish Government update November 2020 [Flexible Workforce Development Fund 2019-20 \(sfc.ac.uk\)](https://www.gov.scot/publications/flexible-workforce-development-fund-2019-20/pages/default.aspx)

Three initial external reports⁴ have formed the foundation of this project which aimed to identify employer demand for micro-credentials, and college capacity to fulfil that demand. Understanding the importance of recognition for these micro-credentials, and in particular, any wish for SCQF recognition, is a key outcome for the project.

The Project outline required identification of common themes from the 3 reports in relation to skills recognition. Key commonalities from the reports⁴ that align with any potential micro-credentials recommendations include:

- Need to support upskilling/reskilling for continuum of work
- Need to support jobs-focused economic recovery and resilience
- Tackling inequalities, including gender economic inequality
- Need to be employer led, but a collaboration between businesses, social enterprise, trade unions, third sector, our enterprise and skills agencies and public sector
- The need for micro-credentials in STEM subjects
- Mitigate the worst impacts on rising youth unemployment
- Develop more opportunities for lifelong learning
- Aid Social and job mobility
- Support unprecedented change resulting in mismatch of skills supply and demand
- Support Digitalisation transformation and innovation
- Improved collaboration between employers and tertiary education
- Address demographic changes, de-population and aging population
- Are seen as a vehicle to enable transition and employment mobility
- Flexibility for a localised/regional approach where appropriate to support local economies
- Improving leadership and management skills- particularly in a remote environment

Micro-credentials overview

Micro-credentials are referenced frequently within the educational sector and there are varying descriptors of the use of this terminology dependant on who has referenced the term, and for what purposes. There appears to be little agreement in the definition and concept of a 'micro-credential', with scope and detail varying hugely.

Micro-credentials are also referenced as nano credentials, micro degrees and micro credits/ open/digital/e-badges or even micro-masters, dependent on the study area and who has produced the resulting report. Some of these are accredited (and part of, or aligned to, national qualification frameworks) and some are non-accredited, with some stakeholders

⁴ **Cumberford Little report**

<https://view.pagetiger.com/inlhij/1?fbclid=IwAR3VItHXS8UJshZEFXbz7I7xqgiopPFCb4REbrN5VGvs7ocLcl1eruAluGO>

Scottish Economic Recovery Report September 2020 [Economic Recovery Implementation Plan: Scottish Government response to the Advisory Group on Economic Recovery - gov.scot \(www.gov.scot\)](#)

Covid19: Measures to mitigate the labour market impacts report July 2020

<https://www.gov.scot/publications/report-enterprise-skills-strategic-board-sub-group-measures-mitigate-labour-market-impacts-covid-19/>

acknowledging the difference between accredited and non-accredited programmes and some not.

Currently there is no common understanding or an agreed national or European definition of micro-credentials. This causes some concern that micro-credentials could lead to fragmentation of the qualifications system and/or even the possibility of a parallel credential system.

Other micro-credentials projects

Scotland's universities and HE sector are conducting research into micro-credentials, and their descriptor indicates significantly larger pieces of learning than the project group identified for the terms of this project.

QQI- National and European Micro-credentials Study Overview Quality and Qualifications Ireland (QQI) has engaged in significant research regarding micro-credentials and recognise 2 key drivers: labour market/employability and inclusiveness. QQI aims to build learner and public understanding of micro-credentials and where they fit in the National Framework of Qualifications. QQI is actively engaged in a number of European initiatives related to micro-credentials in order to promote coherent, robust and consistent approaches. This includes participating in

- a) the Erasmus+ funded Bologna MICROBOL project and
- b) the development of a European Approach to Micro-credentials through its role in the European Qualifications Framework (EQF) Advisory Group.

QQI also note that:

- The interest in micro-credentials is an implicit recognition that learning happens lifelong and life-wide
- Learning often happens in small chunks including after individuals have obtained a full qualification.
- Micro-credentials also have a strong link with validation of non-formal and informal learning/Recognition of Prior Learning.⁵

International/European dimension (EU Skills Agenda, EHEA, LRC, EUROPASS)

overview- The chosen definition of a micro-credential again references a small volume of learning (not defined by hours) but that has learning outcomes against certain standards and agreed quality principles. It discusses referencing this to National Qualification Frameworks and the EQF and how this will support learners' needs for upskilling/reskilling.⁶

MICROBOL – Micro-credentials linked to the Bologna Key Commitments – is a two-year project, commenced in 2020, co-funded by Erasmus+ KA3 Support to Policy reform, and more specifically “Support to the implementation of EHEA reforms”. QQI and the International Underwriting Association (IUA) are participating in the MICROBOL project. Currently the project is undertaking a survey as to the state of play of the development of micro-credentials in the EHEA. The findings will highlight the similarities and differences between participating countries.

⁵ Reference: *Micro Credentials - National and European developments: Briefing Document 2020* [no link]

⁶ Reference: 2020 Communiqué of the ministers of education in the European Higher Education Area (EHEA) [Achieving the European Education Area by 2025 - Communication | Education and Training \(europa.eu\)](https://www.europa.eu/achieving-the-european-education-area-by-2025-communication-education-and-training)

A European Approach to micro-credentials overview (2020) states that a micro-credential is a proof of the learning outcomes that a learner has acquired following a short, transparently-assessed learning experience awarded upon the completion of short stand-alone programmes (or modules) undertaken on-site or online (or in a blended format). Micro-credentials open education up to more people because of their flexible, short-term nature and are open to all types of learners. They can be particularly helpful for people who:

- Are looking to build on their current knowledge rather than get a full degree
- Want to bridge a gap between degrees or their initial formal education and emerging labour market skills
- Want to upskill or reskill

The EU Skills report recognises the far-reaching benefits and believes a larger uptake of micro-credentials could foster educational and economic innovation contributing to a sustainable post-pandemic recovery. The EU Skills report also acknowledges that short programmes can be delivered by varying types of education providers who are able to provide quick responses to labour market needs for specific skills- particularly relevant given the challenges posed by the economic crisis due to the COVID-19 pandemic.⁷

The European Skills Agenda- Why a European approach is needed

Micro-credentials were announced in the **European Skills Agenda**, published on 1 July 2020, as one of its 12 flagship actions to support the quality, transparency and uptake of micro-credentials across the EU. They were included in the **September 2020**

Communication on achieving the European Education Area by 2025 to emphasise higher education's key role in supporting lifelong learning and reaching out to a more diverse group of learners. They were also included in the September 2020 **Digital Education Action Plan**⁸.

Key points from this research include:

- To bring down barriers to learning and improve access to quality education, underlying the relevance of lifelong learning.
- European labour markets are transforming rapidly, especially influenced by the COVID-19 pandemic and the twin digital and environmental transitions.
- More flexible learning opportunities are needed at all stages of life and across disciplines and sectors.
- It will help to substantially widen learning opportunities and further shape the lifelong learning dimension in higher education, as it offers more flexible, learner-centred forms of education and training
- a larger take-up of micro-credentials will serve social, economic and pedagogical innovation

To provide flexible, modular learning in a comparable manner throughout Europe, while ensuring agreed quality standards.⁸

⁷ *A European Approach to micro-credentials overview (2020)* https://ec.europa.eu/education/education-in-the-eu/european-education-area/a-european-approach-to-micro-credentials_en

⁸ taken from [A European approach to micro-credentials \(europa.eu\)](https://ec.europa.eu/education/education-in-the-eu/european-education-area/a-european-approach-to-micro-credentials_en)

A further study worth noting is **Thomas Gauthier report- The value of micro-credentials: The employer's perspective**. Gauthier states that Competency-based hiring is beginning to catch on as employers insist on having a clearer understanding of an applicant's abilities before extending an offer of employment, and that micro-credentialing offers employees a mechanism to articulate their competency, whilst offering employers a profound way to certify an applicant's abilities. Gauthier looks at seeking an understanding of the value of a micro-credentialing structure through employer perspectives by use of a qualitative case study using Skill Acquisition Theory. Twenty-two industry professionals from various sectors, primarily from the early childhood education industry participated, with results acknowledging that industry is not satisfied with employee skills, and that competency is the new currency. A micro-credential offers a good fit for this recognised skills gap. In conclusion it is deemed that micro-credentials would be beneficial to both the holder and employers.⁹

The above studies demonstrate appetite and commonality for a micro-credentials offer, but a full cohesive approach is still not confirmed in terms of a descriptor, offer, accreditation or overall approach. All studies however do bear similarities in terms of smaller pieces of learning designed to upskill an individual's competence, and which suggest a variation from the existing educational offer.

⁹ *Thomas Gauthier report- The value of micro-credentials: The employer's perspective*, Department of Trade and Industry- Palm Beach Florida [The value of microcredentials: The employer's perspective - Gauthier - 2020 - The Journal of Competency-Based Education - Wiley Online Library](#)

SCQFP Micro-credentials Project Outcomes

The project was identified as 3 separate work streams for the project to reach conclusion, with a short report at the end of each stage:

Work Package 1

Initial Scoping Exercise

- To review all three reports to identify the common themes around skills recognition
- Identify key players cited as central to this work
- Highlight key considerations in terms of delivery, assessment and quality assurance
- Review the SCQF database to identify existing provision with less than 5 credits,

Work Package 2

Identification of key sectors to pilot the work

- To ensure that the work is targeted at the sectors most in need/most ready
- Identify a small group of colleges to take forward a pilot
- Identify other key organisations/stakeholders for input/ involvement

Work Package 3

Review potential model for skills recognition

- To explore the need for recognition and any credit rating requirements
- Establish a working group of identified colleges/ stakeholders
- Identify the type and nature of programmes and whether these need to be developed or if any are in existence
- Consider delivery methods, assessment and quality assurance online
- Review certification options
- Review the principles and quality assurance requirements of the SCQF and whether any changes or adaptations may be required

Having concluded work packages 1 and 2 through data gathering from a substantial employer survey, the project group was keen to ensure that the employer voice drove any suggested final recommendations. Further detail regarding the methodology and employer response follows.

For the purposes of this project the following descriptor was utilised:

'Micro-credentials are identified as short courses or training programmes- between 10- 60 hours, which would result in recognition of a particular skill. It is also proposed that a micro-credential would be formally recognised, so that an individual has evidence that they have achieved a certain standard of learning on that particular subject area. A micro-credential would be delivered and assessed mostly online to effectively support employers and upskill learners in the current post Covid -19 climate.

It is believed that Micro-credentials would allow for more individuals and employers to access training, due to the shorter timescales for delivery and specific nature of the programmes intended.'

To fit within project scope and timescales, the working group initially agreed that a small number of sectors should be identified for any potential development work and that any sectors chosen for the introduction of micro-credentials would need to be:

- Ready to accept a change in the traditional qualification route
- largely 'non- regulated' in order for bite size learning to be a viable alternative
- Preferably key sectors as recognised in 3 reports⁴
- Impactful to Government economic growth/ recovery strategy

Working group participants

Initial discussions were undertaken between City of Glasgow College, Edinburgh College and the SCQF Partnership. This discussion group was then extended to include a larger group in order to widen and strengthen the project ensuring further college geographic representation, as well as organisations giving access to multiple groups of employers.

Invitations were extended to a number of colleges as well as a variety of stakeholders with successful/significant employer networks. Final group representation¹⁰ included 6 of Scotland's colleges with good geographical representation, as well as stakeholders from Scottish Training Federation and Glasgow Chamber of Commerce.

It was recognised that initial thoughts from the group were largely representative of the provider view, and therefore the group were keen to ensure that recommendations were based predominantly on employer feedback rather than their own 'hunches'. The increased membership of the group ensured contact with a wide range of employers and training providers; the colleges reaching mostly large employers already engaged in Flexible Workforce Development Funding contracts (FWDF), and Scottish Training Federation and Chamber of Commerce filling the gap of SME/ micro business feedback.

Gaining employer input became a significant part of the intelligence behind the group's proposals. Subsequently, 2 x surveys were designed and distributed amongst the group's employer network;

1. An initial survey explaining 'micro-credentials for the purposes of this project' and asking for general views and opinions, as well as asking if the respondent was willing to assist in further research
2. A follow on survey with targeted questions to elicit feedback on specifics of what an employer might want from a micro-credential.
3. A third combined version was also produced covering both of the above questionnaires to be sent out to additional respondents identified after the initial survey had been circulated.

¹⁰ Detail available annex 1

Key Thoughts from working group discussions

Between the working group representatives, it is perceived that over 2000+ employer specific training programmes are already in existence. (According to average data received from college participants). Many of these existing programmes are short programmes giving the learner the necessary skills to perform effectively within their role, but do not facilitate transition between employers or alternative sectors. The group considered that with some manipulation and re-working, (and recognition) these could become an initial micro-credential offering- without the need to develop completely new provision.

A further key thought, reinforced by the employer feedback, was that micro-credentials should be 'stackable' enabling further employment mobility and progression, and for individuals to work towards bigger programmes/qualifications over time and therefore supporting the 'lifetime learning' ethos referenced within the Cumberford Little report.⁴

It was also the opinion of the group that micro-credentials should be agile, flexible and aligned to support recognised skills gaps and shortages- particularly supporting sectors hit by significant change (Brexit and post covid-19). Discussions also took place as to how funding could support a micro-credentials offer- particularly if measured against local skills/demand data. However, whilst it was recognised that funding is important (if not critical) to the success of any new initiative or offer, and it would be good to get employers' views on the importance of funding, the group also recognised that any decision on funding is not in the gift of this group.

The employer questionnaires designed by the group aimed to elicit thought and commentary around a micro-credentials offer for Scotland- exploring whether this would be viewed positively and whether it could fill any existing /perceived gaps in the current education/training system. The aim was to gauge employer appetite and subsequent detail for a micro-credentials offer proposal.

A few key quotes have been pulled out from the employer responses:

"Short term courses would really help in boosting skills and are easier to manage than lengthy courses in terms of 'absence'

'We have a gap and a huge appetite for "softer skills" short courses'

'Would be interested in seeing what was on offer, with particular reference to Business management / office skills'

'The offer should be concise and relevant'

'An interest in areas such as Planning, capacity modelling and certain aspects of Basic HR'

'We have a number of new processes that now require our staff to be upskilled'

'Coping with stress of customers/service users'

'Lateral thinking around change requirements Service user engagement in a VIRTUAL WORLD' 'Understanding types of staff returners following COVID'

Key employer survey response highlights to date

- 118 employer responses were received from employers offering some type of short term training solution
- Most respondents fell into the large employer category with 73% having over 100 employees. Responses to date are largely representative of this group but do include responses from SME market.
- A wide range of employers and sectors have responded, with multiple business types represented. The care sector and third sector in particular had a good response rate indicating a good interest from these areas.
- Training is currently developed and delivered by a mix of colleges, private training providers, suppliers and in house teams with a mix of accredited/non accredited offer
- 63% (53 respondents) currently deliver in-house bespoke training
- 73% (64 respondents) confirmed they would want formal external recognition for micro-credentials
- 77% (69 respondents) confirmed a definite interest in offering micro-credentials if that offer is the correct one for their needs
- 61% (72 respondents) indicated their training offer is non-mandatory
- 89% (77 respondents) confirmed a largely online delivery is preferred
- A mix of in-house funded (67 respondents) and FWDF funding (53 respondents) supports the current training
- A recurring interest for micro-credentials in leadership & management was evident
- 64% (20 respondents) have confirmed changes to their work processes following the pandemic

Employer results confirm the key messages of:

That employer would like programmes to be externally and formally recognised

That online delivery is appealing. This is understandable given the current pandemic in

A desire for a 'stackable offer' that can be clustered together towards attainment of a bigger qualification level regardless of where, or from who the learning was/is obtained

The following statements achieved over 83% positive employer response with either 'quite important' or 'very important' being the chosen option. All will form part of final micro-credentials recommendations and proposal:

- 83% (27 respondents) agree micro-credentials could address existing skills gaps
- 93% (30 respondents) agree they could help in dealing with new processes / business change
- 90%(29 respondents) agree they would result in standards of consistency
- 87% (28 respondents) agree that making these 'stackable' is important
- 96% (31 respondents) agree that micro-credentials could aid learner progression
- 84% (27 respondents) agree that government funding is important

- 64% (53 respondents) Training has been developed by 'in house' teams (with further respondents stating colleges/external partners/ manufacturers)
- 78% (69 respondents) Have support for interest in offering micro-credentials
- 89% (77 respondents) Have a need to be delivered and assessed largely online

Less definite answers were received in relation to the following questions:

- 72% (23 respondents) agreed that micro-credentials could motivate existing staff
- 50% (16 respondents) agreed they want potential staff to have a micro-credential – a further 43% being unsure
- 72% (23 respondents) said time/length of training was unimportant if the subject was well covered

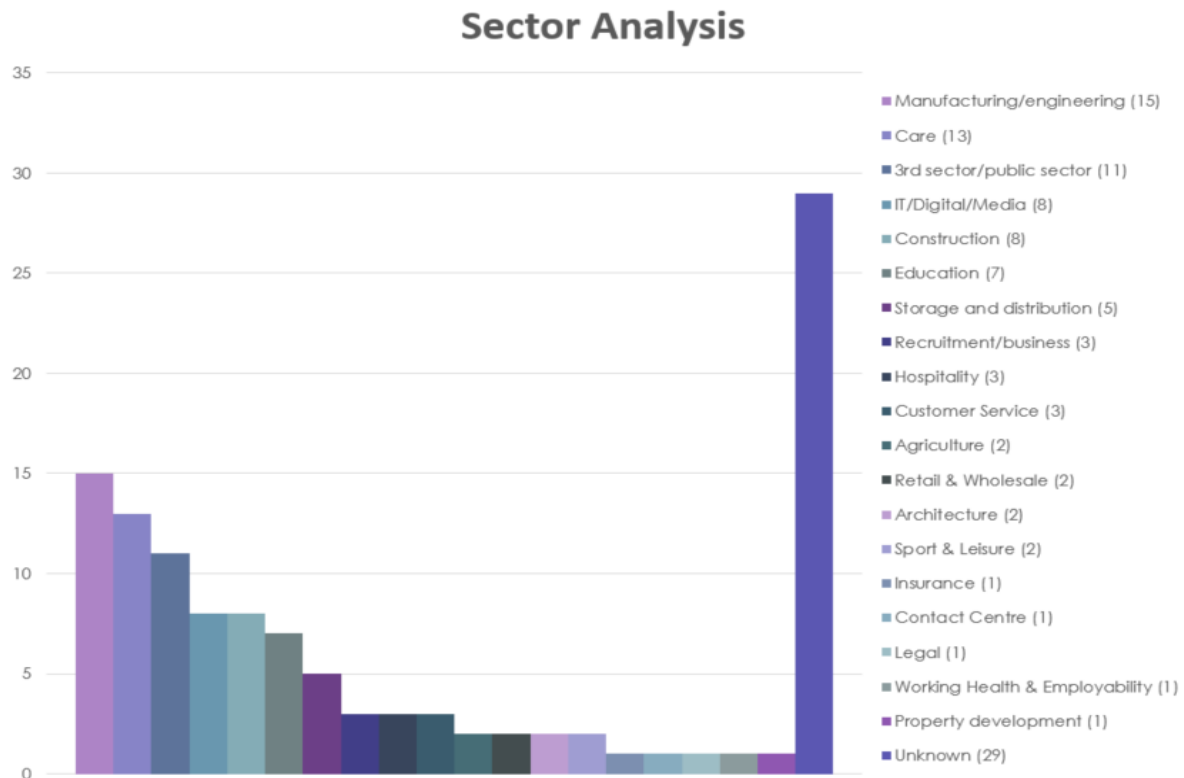
These responses are less conclusive and will not form part of the final recommendations/proposal from the working group.

The employer responses also stated some specific requests for consideration for the potential micro-credential offer. These was discussed within the project group for part of final proposals taking into consideration the sector readiness and economic impact.

- Planning and prioritising
- Basic HR
- Soft Skills Microsoft Office packages
- Health & Safety
- Customer Service
- Basic Retail
- Coping with death and grief
- Mental Health Awareness
- Confidence building
- Non-verbal communication skills
- Sign Language
- Business Management/Office skills
- Day care children support
- Tool box talks (Construction)
- Electrical Safety
- CAT scanning/abrasive wheels

Sector analysis

Respondents were fairly wide ranging with the following sectors securing responses (in order of number of employer responses)



To conclude- Each of the following statements had a minimum of 80% agreement of all respondents, and are therefore considered of key importance to recommendations

- Will help address skills gaps for existing staff
- Will support dealing with change
- Will achieve consistency
- Will show recognised standard of achievement
- Should be 'stackable'
- Could help learners progress
- Attracts funding

What was clear from the survey is that employers do want a micro-credential to be externally formally assessed and certificated and believe that this would be important to individuals too. Interestingly this was deemed to be more important to the employer than the individual by the survey respondents, but this might be expected from employers with a focus on their business needs.

Taking the employer response and working groups thoughts into account, a focus on the following priority subjects would be most supportive to employers and to economic recovery:

- Leadership & Management
- Soft Skills
- Employability
- Digital skills
- Change management
- Covid 19 requirements and changing circumstances- return to work
- Health and Safety
- Customer Service Excellence
- Remote working support
- Mental Health support /Awareness
- Assertiveness

In order to agree a set of recommendations for a micro-credentials offer the group debated the 4 potential ways forward:

1. To identify any existing programmes already on the SCQF owned by colleges (and potentially others) that might fit into the micro-credentials space in its current format, and to explore if the owner of any such content be willing to share this.
2. To repurpose existing short programmes offered by colleges to fit into the micro-credentials proposed space.
3. To put together a collaborative college sector team for development of a new offer, rather than try to manipulate the existing programmes/ qualifications to fit needs.
4. To explore further the methods of providing formal recognition and certification for micro-credentials offered by colleges, including the utilisation of the colleges existing authority as SCQF Credit Rating Bodies.

After a series of meetings and reviewing the survey feedback, the group were keen to explore further the repurposing of existing college short programmes to fulfil both the micro-credential offer and the recognition requirements that employers have stated is preferred.

The following points were also identified as requiring careful consideration in terms of final recommendations

- **Deliverability:** Who/ how/when?
- **Value For Money:** Economic Impact/target audience/ volume of learners
- **Affordability:** Funding/Existing Government initiatives
- **Private sector buy in:** Employers/training providers/commercial viability
- **Suitability:** employers indicated that offer had to be one which met their needs

It is also recognised that the **availability of funding** will influence both the delivery and take up rates of any micro-credentials proposals

Funding

Whilst not part of the project scope it is recognised that the consideration of how a micro-credentials offer would be funded is of high importance and will influence the number of providers who might be willing to offer these programme should they be developed, and may also affect the uptake by employers and others. The group felt that that any micro-credentials offer should be no cost/low cost to the individual.

The working group discussed if the National Transition Training Fund (£25 million) could potentially support micro-credentials as it has been introduced to support key sectors where employment has been affected by the coronavirus (COVID-19) pandemic.

The fund will support retraining projects for careers in areas particularly hard hit, including aviation, construction, hospitality and tourism. It will also help with career transition into areas of the Scottish economy with most potential for future growth, such as digital and green technologies, aligning well with the micro-credentials aims identified within this project.

“The National Transition Training Fund plays a key role in this and is targeted at those who have either lost their job or are at risk of redundancy as a result of COVID-19. It will help up to 10,000 people across Scotland retrain and develop the skills they need to secure their future employment.

“Crucially, this fund will not only help those working in sectors most affected by the pandemic and whose livelihoods are at risk, it will also support people to take advantage of jobs available in growth areas of the Scottish economy, which will help us in our transition to net zero.”¹¹

The group has confirmed that further discussions around the employer survey responses are required in order to focus final recommendations and identify key areas for development of micro-credentials.

Further discussions required include:

- The need for /and appetite for a college sector micro-credential offer
- Format for delivery, assessment, quality assurance and recognition if development of an offer is to go ahead
- Development of an initial set of proposals/recommendations
- Possibilities of a Consortium Group each taking ownership of one micro-credential- and sharing a ‘pick and mix’ availability

Of note: Unlike many qualifications frameworks around the world, the SCQF already allows for shorter programme lengths (a minimum of 10 hours) to be recognised and included in the Framework thus giving a greater degree of existing flexibility compared to that currently existing in some other countries.

Providers in Scotland could already in theory be delivering a credit rated ‘micro-credential offer’ under the flexible system that SCQF provides. As such, the need for a defined micro-credential offer in Scotland may be of less significance than in other countries as a unique development, and this is explored this further in the group’s final recommendations and conclusions.

¹¹ SDS National Transition Funding document 2020

<https://www.skillsdevelopmentscotland.co.uk/media/47128/ttf-guidance-document.pdf>

The project group presented an update to the College Development Network Vice Principal Group in January 2021. Several questions/concerns were raised as follows:

Concern/question	Detail of concern	Potential Solution
Ownership/sharing of developed content	It was acknowledged that whilst there have been a number of offers of micro-credentials in the HE sector and elsewhere there does not seem to be a co-ownership approach in existence which means that there is not a model for the college project to build on in this respect. The project group will need to explore potential ownership and sharing of content further	An agreement would be required between all delivery organisations should the offer be a 'pick and mix' proposal in order to facilitate a timely and multi-faceted offer. The group consider that it may be that it will be useful to explore a more 'national' approach with other stakeholders to ascertain whether this would be an alternative approach.
BREXIT- Any continued recognition of SCQF throughout Europe or has this been compromised?	Would SCQF credit rating be of equal value to pre-BREXIT in terms of potential worldwide recognition and ability to 'sell' to other nations.	SCQF referencing to the European Qualifications Framework (EQF) was last updated in 2019 and is still a valid comparison of levels. However, the impact of Brexit on this moving forward as the referencing becomes older and the ongoing use of EQF levels in relation to UK programmes/qualifications was unknown at the time of writing this report. This does however not impact the framework comparisons (contained within 'Qualifications Can Cross Boundaries' leaflet) across the UK and with Ireland. This also has no impact on the use of levels and credits within Scotland for learner progression and achievement.
'What makes a micro-credential different from any existing offer'	Imperative to get buy in from both providers and employers	A concise definition and set of options will be required from the project group in order to provide and make clear the difference

The above questions have been addressed and further considered by the group as part of the final recommendations. In particular, there has been significant discussion around 'What makes a micro-credential different from any existing offer' and the group agrees this is the critical part of any proposal.

Explaining 'what is different' to any existing offer within Scottish educational system is essential if buy in from both providers and employers is to be ensured and discussions to progress relating to possible funding streams and a national approach. As part of the need to differentiate micro-credentials from any existing educational offer, consideration and discussion for the following 3 areas is key.

Unique features

- 'Stackability' towards a bigger qualification with a focus on a 'building blocks' approach towards job movement.
- A focus on addressing skills gaps /imbalance of skills and job availability
- Provide a solution to address change both quickly and without bureaucracy
- Includes a digital offer in both delivery and assessment
- Quick to market
- Accessible regardless of personal circumstances- in work/unemployed/wishing to retrain
- Flexibility in terms of start date, mode and format of delivery and assessment, and completion times
- Personalisation of offer for employers

Benefits

- Allowing individuals to show commitment and basic skills and knowledge to employers
- Enabling an individual to transition from one job to another/one sector to another in a manner that should be compatible whilst already in work.
- Enabling job mobility and progression aligning with the key theme within the Cumberford/Little report, and subsequent Social Economic Recovery Report and Covid19 economic recovery update.
- Promoting an alignment with Government skills gaps agenda and social mobility as measures of success, a flexible and agile form of training helping promote inclusiveness and accessibility for all.
- Allowing for those not in work to access a career pathway into their chosen job, showing a potential employer their interest and commitment, as well as starting to show competence and knowledge within their subject area.
- Small time commitment only increasing access for all in a busy work/life environment
- Upskilling/reskilling opportunities
- Positively impacting staff morale

Challenges

- It is essential that any offer is implemented with speed and the journey from initial discussion through to implementation phase is quick.
- It is acknowledged that post pandemic may not be the best time to try and introduce/ implement a new product.
- Agreement on a funding mechanism to support/promote a national micro-credentials and allow in certain circumstances for it to be low (or no cost) to the individual (eg access to PTFWG, FWDF)

Stackability

One of the key areas cited as a desirable outcome from employers was the area of 'stackability'. Further discussions regarding what this could mean to an individual in real terms highlighted that a micro-credential offer could provide the perfect bridge to enable individuals to achieve small pieces of learning at their own pace and in various locations by different providers, and then be able to 'stack' these towards a larger qualification (this could be seen as a form of full credit transfer).

However, this would mean that any micro-credentials offer would need to be wider than the college sector alone and aim to allow individuals to transition from sector to sector seamlessly. Whilst local agreements can allow for this currently (for example articulation pathways between HNCs and HNDs to degree programmes or some local RPL agreements), there is no national approach to facilitate this in a wider sense, and to provide a range of programmes which an individual could embark on where they would know that these could lead to the award of a larger qualification if successfully achieved and 'stacked'. If micro-credentials could bridge this gap it would bring significant value to the Scottish educational offer.

There is also recognition that the term 'stackability' could imply that progression would always be upwards in terms of progression and levels and that the term 'connectedness' may be more reflective of the need, in some cases, for people to gain a broader knowledge for work purposes which might be at a similar level (for example, a greater range of IT solutions, a development of a range of tools to manage remote working).

Options proposal

Subsequently, the Group has identified three options for consideration which could further develop the conversation around the development and use of micro-credentials in Scotland. Each of these options would require further research and investigation of some of the key challenges and would also need to develop a "proof of concept" to be able to demonstrate the key features of a micro-credential

Option 1	Colleges could form a consortium, or could develop a hub and spoke model to produce a stackable (connected) suite of programmes which would be considered to meet the project's definition for a micro-credential. These could be credit rated by either one college (taking responsibility of credit rating and monitoring for all programmes in the suite) or a small number of colleges taking on responsibility for one or two programmes (sharing the responsibility for carry out the credit rating and the ongoing monitoring).
Option 2	A national body takes on the development and ownership of a suite of stackable (connected) micro-credentials and gets these credit rated by a CRB (this could be a college or another body such as SQA Credit Rating Service) and then offers these to the colleges for delivery under an agreed arrangement. This would mean the national body would take on the work associated with the development, cost of credit rating and the quality assurance with the CRB taking on the annual quality assurance monitoring responsibility.
Option 3	SQA could be approached about the likelihood of a national offer of stackable micro-credentials through SQA Awarding of micro-credentials owned and credit rated by them and offered through the usual mechanism of SQA Centres.

Each of the above options needs considered analysis to decide if it is a potential way forward. Risks should be assessed and stakeholders concerned approached as required. In

addition, any option would need to be underpinned by a digital infrastructure which supported online delivery, assessment and potentially certification. The world of education has been changed dramatically by the Pandemic and huge gains have been made in digital connectivity and in digital engagement by students in that process. It is important that this is capitalised on that if both employers and learners are to be provided with an offer that is both attractive and effective.

In order to avoid frustration for employers any option would need to be implemented in a timely manner. Both development and approval of any offer would need a responsive approach that addressed sector/employer needs quickly, and were brought to fruition in months, rather than in years. Micro-credentials have been discussed for several years now, and to make these a reality that can be marketed and delivered to support post covid19 world would give maximum impact to economic recovery.

Discussions have also ensued around whether a post-pandemic world is the right time to implement a new proposal to our education system, however the group also acknowledges that the timing 'will never be right' and the introduction of micro-credentials would support recovery and change and as such should be pursued as soon as possible.

In light of the above feedback regarding timing and also the questions around what a micro-credential would look like, it is proposed that following on from the completion of this project that a small group comprising of a sub set of the existing college working group be established to explore the development and credit rating of a micro-credential(s) in order to provide a working example(s) of a micro-credential.

In order to explore the options proposal further it is proposed that a group is formed to:

- a. Review/amend some existing college offer (already close to matching the micro-credentials criteria) in order to illustrate what a micro-credential may look like within the college sector – so a “proof of concept”.
- b. Further explore the options proposals for viability and practicability in terms of priorities and maintaining momentum, and taking into account the definition and features highlighted in this report.
- c. Explore 'stackability' or 'connectedness' options and utilisation of micro-credentials as a tool for Recognised Prior Learning (RPL), as opposed to a required new product type.
- d. Ensure that the offer is supported by the appropriate digital infrastructure

The working group has provided further information around the proposed group in terms of possible output, structure and key questions that it may wish to consider.

Phase 1 proposed output

4 colleges have confirmed their commitment to be part of the group to take forward the first phase for the work, these being:

- Edinburgh College
- City of Glasgow College
- Dundee & Angus
- Dumfries & Galloway (from outside the project working group)

The group intention is to identify existing pieces of mainly online or blended learning which have the potential to fit into the micro-credentials definition previously identified and take these forward for SCQF credit rating- therefore producing an actual micro-credentials initial offer that can be taken to stakeholders and employers for further discussion (proof of concept). In many instances, this is likely to involve identifying existing programmes with Learning outcomes and assessment, but currently with no SCQF level or credit attached.

It is also recognised by the group that several stakeholders would be interested in the project, and would wish to have sight of the findings, so further phase 1 work extending beyond the scope of this project, and that includes an example micro-credential will be a significant step forward. It was also recognised by the group that there have been a number of initiatives launched recently and that it was felt strongly that introducing a group where an example of a micro-credential can be shared will gain more traction with stakeholders and employers alike-

It is also proposed that micro-credentials should mirror FWDF guidelines in the respect that the training provision should be developed in line with National priorities and be informed by local Market intelligence, Regional Skills Assessments and Skills Investment Plans.

The Employer Skills Survey (ESS) reports that 16% of Scottish employers reported skills gaps and an estimated %% of their workforce lacked full proficiency. Among these both technical and personal skills were cited. For example, 59% suggested that specialist skills were needed, while 46% suggested the ability to manage and prioritise.¹²

The group also plan to gain insight into the success of Micro-credentials as introduced in the HE sector and hopes to be able to source some indicative information on this from a recent Glasgow University initiative offering micro-credentials.

¹² Employer Skills Survey 2020 <https://www.gov.scot/publications/scottish-employer-skills-survey-2020/#:~:text=The%20Employer%20Skills%20Survey%20%28ESS%29%20is%20the%20principal,random%20sample%20of%203%2C500%20business%20establishments%20across%20Scotland.>

Suggested structure for the group to take forward Phase 1

Purpose/aim

Primary aim

As previously identified the purpose of the group is to produce a small number of tangible programmes fitting the micro-credentials descriptor, to take forward to stakeholders and employers to stimulate further discussions. It will be important that the micro-credentials developed should hit both employer wants/needs as identified, as well as Scottish Government agenda for maximum economic impact.

The group should attempt to work within the guidance as cited below which stems from both employer feedback and economic recovery requirements.

Secondary aim

Following development of the micro-credentials, to also consider:

- Ownership of Content/Intellectual Property Rights
- Who will be allowed to access the micro-credential in terms of being allowed to deliver- Is this just those involved in development or could this be opened wider?
- The preferred delivery options as per options proposal
- Quality assurance and accreditation requirements- who and how

Multiple options for content development have been considered (as documented above), and regardless of the ultimate decision around where development and ownership sit, the considerations remain unchanged. Frequent reference to the economic and employer considerations is vital and recommendations should aim to hit multiple points from the considerations lists.

Economic considerations

- Micro-credentials chosen subject areas should try to have maximum impact on economic recovery post covid-19- essentially in sectors with multiple change/challenges
- Wherever possible, promoting environment and green solutions
- Supporting job/sector transition
- Helping recognise individual's commitment to a job choice
- Upskill/reskill requirements in a changing landscape
- Dealing with process changes as a result of the pandemic
- Addresses inequalities including gender inequality
- Supports digitalisation transformation and innovation
- Support jobs-focused economic recovery and resilience
- Encourage environmentally considered transformation
- Address known skills/jobs mismatch on a regional/national level

Employer considerations

- Supports potential new staff as well as upskilling existing staff
- Improves soft skills
- Supports remote working- challenges for leaders i.e morale
- Supports remote working- - challenges for workers i.e planning & prioritising
- Stackable towards a bigger qualification
- Promotes emotional intelligence/resilience
- Enhances an individual's capability
- Increases motivation and confidence
- Contextualise learning
- Support possible career development
- Impacts on a learner's productivity and ability
- Is of a length that ensures good coverage of topic
- Requirement of online delivery

The group may also wish to consider the following questions which arose during this project when developing their offer.

Key questions for Phase 1

What do we mean by Stackable (Connectedness)?

Employers have identified that they wish for individual micro-credentials to be stackable towards a bigger piece of learning.

This could mean that on completion of an identified selection of micro-credentials, that these could be exchanged for a bigger qualification (like an identified set of units can translate into a diploma)

OR

That micro-credentials could be a record of recognised prior learning that is recognised nationally, rather than the current local type agreements that are in existence (i.e between local colleges and universities)

Programme ownership

As micro-credentials are developed the group will need to decide who owns the programme.

Alongside this will be the question of who can use/access these materials, who will be able to deliver and what the approval process for this would be together with the quality assurance processes needed to support this wider delivery.

What is the preferred delivery option? (see options proposal as above)

Project conclusion

The project has produced an options proposal for the group to take forward including recommendations and evidence based on employer feedback, with the intent that the group develop an initial micro-credential offer.

Employer feedback is fairly conclusive in terms of an appetite for a micro-credentials offer from the Scottish College sector and this needs to add both value and opportunity to the existing educational offer. Utilising micro-credentials as a vehicle for an individual to progress from one piece of learning to the next in a flexible and time managed way will aid life /working balance and aid non- discriminatory learning in terms of flexibility of delivery and varying life commitments. Avoiding duplication of the existing educational offer is key. However, there is the thought that micro-credentials could form an alternative and 'new' form of a recognised Scottish training offer providing consistency and fairness in terms of prior learning considerations, assisting employers and individuals in upskilling and reskilling aiding job mobility and facilitating routes into work. Other benefits recognised address economic crisis issues in terms of a flexible and agile system to benefit employers and individuals. In addition, this development would fit well with the themes emerging from the current SFC Review and could provide one solution to some of those themes.

Whilst SCQF already has the facility for the recognition of small chunks of learning from 10 hours, there is bite size learning which is offered by colleges but not credit rated. Many of these address skills and knowledge gaps, but do not give formal recognition for this learning, thus potentially disadvantaging an individual when trying to secure work, or transition in work. As this learning could, at the present time, be recognised through SCQF credit rating the question has been what would be the unique features of a micro-credential compared to existing provision.? The report has identified a number of key features and it is hoped that the phase 1 development proposed to go forward will help in producing an example of a micro-credential which will demonstrate these features and aid further discussion about the appetite for such awards and the practicalities of delivery, assessment, certification and quality assurance as well as the questions of stackability and connectedness.

Annex 1

Working Group Representation

Borders College	Katherine Mathison	Interim Director of Business Development
City of Glasgow College	Siobhan Wilson	Dean of Faculty- Hospitality and Leisure
City of Glasgow College	Jacqui Massie	Head of Business and International Development
Dundee and Angus College	Kirsty Paterson	Head of Sector
Edinburgh College	Kerry Heathcote	Head of Curriculum Planning and Performance
Edinburgh College	Jane Grant	Head of Commercial Development
West Lothian College	Beth Brownlee	Head of Quality, Student Support and Learning resources
Chamber of Commerce Glasgow	Susan McKay	Commercial Director
Scottish Training Federation	Stuart McKenna	CEO
SCQF Partnership	Aileen Ponton	CEO
SCQF Partnership	Sheila Dunn	Head of Quality and International Development

Proposed Group for Phase 1 Representation

City of Glasgow College	Siobhan Wilson	Dean of Faculty- Hospitality and Leisure
City of Glasgow College	Kerry Bamber	Business Development Officer
Edinburgh College	Kerry Heathcote	Head of Curriculum planning and Performance
Dumfries & Galloway College	Douglas Dickson	Vice Principal Learning, Skills and Student Experience
Dundee and Angus College	Kirsty Paterson	Head of Sector
SCQF Partnership	Sheila Dunn	Head of Quality and International Development