

CHAPTER 3

Creating microcredentials and supporting learners

It takes a team to create and run a microcredential. These are new qualifications, which do not fit neatly into the existing systems set up for undergraduate, postgraduate and vocational courses. Differences in scale, funding, learners and presentation are just some of the factors that mean microcredentials are not typical courses. Setting them up and sustaining them effectively requires thought and change in all areas of the institution, as well as new or extended partnerships with employers and professional organisations. This chapter examines the range of roles that contribute to a successful microcredential, including ways of reconceptualising the role of educator.

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Roles on a microcredential

Educational institutions such as universities have tried-and-tested systems in place for running their courses. They are able to draw on decades, even centuries, of experience in the field, and are supported by national and international frameworks that specify how courses should be set up and run. Teaching staff are familiar with the qualification system, support services are in place throughout the learning journey, and learners arrive with some understanding of the way in which qualifications work and how they relate to each other. New courses can draw on the model of previous courses, with any changes being incremental. Worldwide, the higher education system is robust, withstanding numerous predictions over past decades that it is on the verge of profound disruption (Weller 2014) and even managing to negotiate the rapid pivot to online teaching required by the Covid-19 pandemic.

Microcredentials are not disruptive in the sense proposed by Christensen and his colleagues (Christensen, Johnson & Horn 2008). They are a new product, rather than a radically new business model that will overthrow the old providers. However, they are a new product that is sufficiently unlike previous products to pose a challenge to the systems currently in place to support higher education courses. Significant differences include:

- Microcredentials are typically run online and at a distance, while most higher education providers are set up to run their teaching and assessment with students co-located.
- Microcredentials differ in length but are typically much shorter than other accredited courses in higher education.

The significant levels of work involved in registering and assessing students therefore take a larger proportion of time and resources than they do on longer courses.

- Microcredential learners are based all over the world and their support needs are not the same as those of students based on campus.
- The definition of a microcredential varies significantly between institutions, so learners are not sure what to expect from their course and many staff will also initially be unsure about the similarities and differences.
- Microcredentials aligned with the requirements of employers can be difficult to align with more broadly based academic qualifications.

These are only some of the ways in which microcredentials differ from other courses, but even these differences have significant implications for learners and educators as well as for registration, assessment and support teams. Rossiter and Tynan describe a microcredentials ‘ecosystem’ and note that, ‘If the enterprise is to thrive, it is important always to keep in mind the ecosystem’s players and stakeholders, all of whom must work in harmony, appreciating and agreeing upon the value of the credential’ (Rossiter & Tynan 2019: 4). The EU’s Micro-credentials Higher Education Consultation Group suggested setting up cross-faculty units to offer microcredentials, supported by the university chancellor and board, to ‘stimulate an institutional momentum and drive a cultural change based on a top-down dynamic but involving bottom-up processes’ (European Commission 2020: 23).

Figure 1 sets out the main roles within an institution that will be impacted by the development of these new courses. Six main sets are involved.

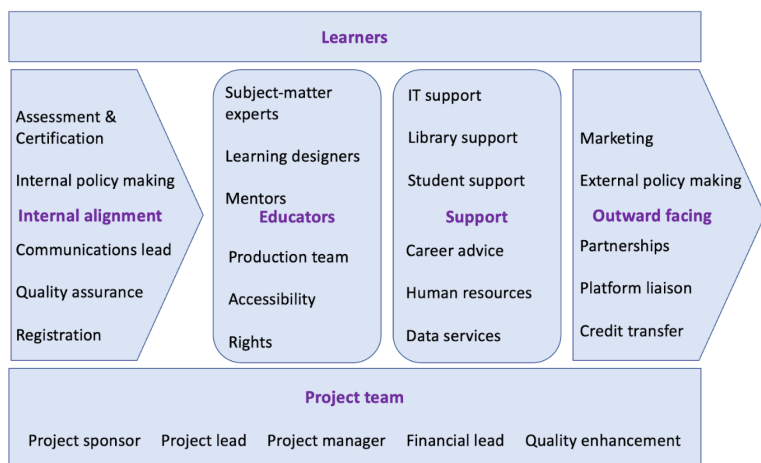


Figure 1: Key roles on microcredentials.

- **Project team** roles drive forward the microcredentials programme, forging links between other roles and developing a long-term strategy.
- **Educators** include the various groups of people responsible for developing and delivering the courses.
- **Support** covers the work of a variety of support teams, including student-focused support such as the library and the careers service, as well as staff-based support from human resources and data services.
- **Internal alignment** is concerned with ensuring that institutional services such as policies and quality assurance are extended to cover microcredentials, and that staff understand this new strategic initiative.
- **Outward-facing** roles make links with external bodies and take responsibility for marketing the courses.
- **Learners** have a role to play in defining what micro credentials become, providing input and feedback, as well

as interacting to form a learning community that extends beyond the cohorts on individual microcredentials.

Project team roles

The **project sponsor** needs to be a senior figure within the institution – the president, vice chancellor, principal or a member of the senior leadership team. Individuals who take on the role of sponsor have many responsibilities, and microcredentials are unlikely to be their only significant project. However, without wholehearted support from a sponsor at this level, it is unlikely that a major initiative such as microcredentials can be implemented successfully. This champion is needed to approve necessary changes, to make high-level decisions that impact the entire institution, and to convince others at senior management level that the project should and will succeed.

A sponsor will define, or approve, a strategic vision for microcredentials that makes it clear why they are being introduced, how they align with existing institutional priorities, and what the aims of the initiative are in the short and long terms. Possible objectives include ‘to respond to student demand for more relevant future skills, to make learning personalised, to break it into smaller, bite-sized chunks, or perhaps to work more closely with industry to ensure graduates gain mastery of work-ready skills’ (Rossiter & Tynan 2019: 4) It is important that project sponsors are well informed and well advised, so they have a clear and realistic view of what can be achieved.

On a day-to-day basis, the **project lead** will be responsible for microcredentials and their success within the institution. Microcredentials are so new that the project lead will need a visionary

approach, looking ahead to what can be achieved in the short and long terms, balanced by the down-to-earth ability to develop deliverable plans that are strategically aligned, working together with senior managers. The project lead will bring together a strong team from across the institution.

That team requires a **project manager** who can map out the elements of the complex process of microcredential development, agreeing goals and deadlines and keeping different individuals and departments on track. This is a challenging job that involves understanding and aligning different working patterns from across the institution. The project manager defines the critical path for the project, identifying all the tasks that must be carried out, the dependencies between those tasks, and the time that each will take to complete. Managing workflow is a major task, particularly in a large organisation where existing tasks are distributed between many people and few individuals have a clear understanding of any process in its entirety. An example of this is the video production process. Academics may send videos to a production team to be edited without being aware that the team then has to wait for rights clearance on images used within the video; for a transcription to be produced, styled and proofread; and for captions to be added.

Depending on the scale of the microcredentials initiative, it is likely there will be several project managers involved, working in faculties, marketing, assessment and production. The range of processes to manage can produce conflict because different areas of an institution are likely to have very different project management styles. One department may employ a 'waterfall' approach, using a structured process with each step completed sequentially, and requirements defined at the beginning. Others might use various 'agile' approaches, working in short sprints, prioritising

as they go, and regularly reviewing progress (Andrei et al. 2019). It will be up to the senior project manager to align these different approaches, so microcredentials can be developed successfully.

Another important role on the project team is the **financial lead**, who will play an important part in the development of the business case for microcredentials, the cost-benefit analysis and ongoing business planning. They will be responsible for the development and implementation of the project's financial model, working with different departments to produce indicative costs for the development of microcredentials.

The finances of an operation of this size, taking into account both internal and external markets, are complex. Financial projections will be very tentative at first because there are so many variables to be taken into account, not least the price charged to learners. 'Consumers expect short extension courses to be priced much lower than components of degrees ... Because a micro-credential is a new and unknown unit of currency, the cost will be a strong consideration for the learner' (Oliver 2019: 26). Pricing of microcredentials is a delicate balance between the cost of production, the price of other credentials offered by the institution, the amount that potential learners can afford, and the need to appear competitive.

Although microcredentials may be offered worldwide, those produced by Western countries based on Western budgets are likely to be out of the price range of potential learners in many countries. On the other hand, learners may associate low prices with inferior quality. In countries where state support means that higher education is normally free or very cheap at the point of delivery, any course for which learners have to pay the market price themselves will appear expensive.

The international reach of microcredentials means the financial lead must also take into account financial and tax regulations in

countries around the world. Education is often exempt from tax but the definition of education varies from country to country. For example, in the UK, online courses with little human intervention (tuition), no assessment and no academic credit are liable for value-added tax (VAT) at the standard rate, whereas courses with some human intervention, assessment and credit are exempt. That could mean, for example, a different tax treatment for a microcredential that a university offers on an external platform without awarding any academic credit other than the potential for it to be accredited as prior learning at some point in the future.

If the institution's intention is to attract learners based around the world, the financial lead will need to draw on the knowledge of a tax manager or tax adviser. They will be experienced in issues of tax compliance and will consider whether the institution needs to comply with these on a country-by-country basis. These decisions will be informed by the scale of activity expected in each country and by assessing that country's tax regime with its associated tax risks and issues. This will involve completing tax registration and tax returns wherever necessary, as well as collecting and paying any tax due.

Overall, the initial costs of setting up a microcredentials unit or ecosystem will be high, as many of the change processes need to be completed early on, before there is any certainty about revenue generation. The financial lead needs to be aware of the scale of the endeavour and should have reasonable expectations about how long it is likely to take for these courses to break even and begin paying for themselves.

The final role in the project team is **quality enhancement** (see Chapter 8 for a detailed consideration of this area). Developing microcredentials is a large-scale strategic initiative for any institution, and including work on evaluation and quality enhancement

provides opportunities to assess progress and adjust ambitions. An evaluation lead can bring these existing approaches together and incorporate them into a structured consideration of the initiative as a whole that can be used by those working on the project to improve practice. More generally, evaluation work can be used by the communications lead to share progress more widely across the institution.

Internal alignment roles

In any educational institution, courses of study are underpinned by policies and regulations that define the rights and obligations of both learners and institution. These ensure that ‘the learner enrolls with a clear understanding of their commitment, including the effort, time, mutual obligations, benefits, costs, and terms and conditions’ (Rossiter & Tynan 2019: 8). This includes ‘the obligations of students and their liabilities to the higher education provider including expected standards of behaviour; access to current academic governance policies and requirements; access to services and support; resolution of grievances; information to assist international students’ (Oliver 2019: 41).

In most cases, policies and regulations already in place will have been drawn up on the basis that students are intending to complete a course of study that lasts a year or more and that they will be based near the institution. This means the regulations may include timescales or attendance requirements that are unsuitable for microcredentials. They may also make commitments about resources, library access, language support, counselling or student community that are unrealistic for learners on short courses.

These regulations need early attention because they set out binding legal commitments. Policies are often numerous, lengthy and

interconnected, with numerous cross-references. Some changes can be made unilaterally; others will have to go to one or more committees and may require decisions at the highest level, all of which takes time. Some revisions will need to be made by specialists in a particular area (such as accessibility, or safeguarding those who are young or vulnerable); others will need input from a lawyer. Issues will be particularly complex if the regulations for microcredential learners differ from those for other students at the institution. For example, if full-time students supplement their course with a microcredential aligned with their chosen career, it must be clear which regulations apply at which point.

Those involved in **internal policymaking** will therefore need a good understanding of the existing regulations and the wider considerations (for example, internal strategy and national law) that frame these. They also need to be clear about the ways in which microcredentials differ from other courses on offer. This means they will be reliant on the work of the **communications lead**.

It is the communications lead who has the responsibility for sharing the microcredentials vision and strategy across the institution. Why is the initiative being set up? What are its goals? What benefits will it bring, and to whom? As well as these high-level issues, staff also need more practical information. What exactly are microcredentials? Which of the many definitions and approaches have been selected by the institution? And, more concretely, how will this be implemented? Who is leading the project and who are the main contacts? Where is information about the initiative available? Ideally, this communication with staff should be an ongoing, two-way process that will engage them, inspiring some to become microcredentials champions and enabling everyone to understand the microcredentials initiative and how it is progressing.

Eventually, microcredentials will become part of ‘business as usual’. However, in the short term, they need to be incorporated within the institution’s key administrative processes. The first step is **registration**. This is a key stage in the learner’s journey, which triggers a series of other processes. It will take time to understand all the dependencies of the registration process, how these are set up, and how they need to be changed for microcredentials. Examples include:

- Assignment of a unique ID to the learner. Have they already registered with the institution in another capacity, perhaps many years ago? If so, their records of academic achievement need to be linked.
- Collection of payment. Standard information about student grants, loans or bursaries is unlikely to apply. Policies on refunds or re-registration may be different.
- Collection of information required by the state. For example, in the UK the Higher Education Statistics Agency (HESA) requires institutions to collect and report a wide range of information about students (HESA 2000).
- Links to student regulations and policies. Links must be supplied to the revised, or newly written, regulations. Before fees are accepted, learners should be informed of their rights and obligations, including any charges or possibilities of refunds.
- Access to resources. This access may be set, by default, to a period of years. Contracts (for example, journal access, counselling services, or student discount schemes) must be checked with external providers to ensure these cover short-term learners.
- Course notifications and reminders. Defaults may need to be changed, taking into account course length.

- Triggering events later in the student journey such as careers advice, leavers' surveys, invitations to graduation ceremonies, or government reporting about completion and success rates. Each of these triggers requires review.

The task becomes more complicated if registration is outsourced to an external platform. This raises data protection issues, as information about learners is transferred between the platform and the institution. It may also introduce complications related to refunds, depending on when or why learners drop out of the course, and how they initially paid for it.

At the other end of the learner journey, assessment and certification processes are also important and will loom large in the learner experience. Pedagogic aspects of assessment and some of the practicalities of identity verification are covered in detail in Chapter 7, but there will also be a team at institutional level with responsibility for amending and administering assessment processes. Some of this work relates to putting assessment into practice on a day-to-day basis, a subject covered in some detail by Rossiter and Tynan (2019) in their practitioner guide. 'An essential requirement is to determine how the issuance of the credential will be triggered, at what point in the learning-and-earning journey, and from which technology platform or application within the system' (2019: 10).

Rossiter and Tynan also deal with the practicalities of designing a badge or other form of digital certification:

The design of the badge should reflect the brand of the issuing organisation. The shape, colour, font and use of iconography to represent a skill are influential factors but should be chosen in the context of institutional brand guidelines and with a critical eye to determining whether these elements will contribute positively to the

impact of the badge. Badge design can also reflect the taxonomy or structure of the micro-credential portfolio. For example, the badge design may represent – through colour, shape, the use of icons or logos, etc. – the skills, the weighting or the levels of competency indicated by a micro-credential, or the relationship with industry partners. (Rossiter & Tynan 2019: 10)

Part of quality assurance work (see Chapter 8) is to ensure there are processes in place to demonstrate that a microcredential credit requires a similar amount of work at a similar standard to those required by qualifications on offer within the institution and more widely. The more robust these methods are, the more helpful they will be for the credit-transfer process, which is one of the outward-facing aspects of the microcredential initiative.

Outward-facing roles

Credit transfer is one of the concepts that underpins microcredentials, and is associated with the idea that they are – or will in future be – stackable. The intention is that microcredentials can be counted as prior qualifications that act either as a gateway to other qualifications, or can be counted towards those qualifications.

In the European context, the MICROBOL project was set up to ‘explore the possible adaptation of the ECTS [European Credit Transfer and Accumulation System] Users’ Guide to emphasise how ECTS can be used in the context of micro-credentials’ (European Commission 2020: 27). In 2019, the Malaysia Qualification Agency launched microcredential guidelines that enable higher education providers to recognise microcredentials via credit transfer or accreditation of prior experiential learning (Ahmat et al. 2021). And, in Canada, the British Columbia Council on Admissions and Transfer (BCCAT) commissioned a detailed

report that identifies and reviews both current and emerging practices in developing and accepting micro-credentials in admission and transfer (Duklas 2020).

The Canadian report notes that:

If a micro-credential is to be considered as a bona fide credential ... expectations typically exist that the learning experiences (including those represented by micro-credentials) have been structured, delivered, and assessed by trusted entities in accordance with accepted and recognized quality assurance expectations and frameworks. (Duklas 2020: 15).

Despite these national and international initiatives, Duklas found few examples of microcredentials being used for credit transfer, noting that Thompson Rivers University had announced in 2020 that it was 'among the first in the world to recognize micro-credit transfer towards a university-level qualification' (Young 2020). Whether that claim is accurate depends on the definition of micro-credit, but there are certainly few HEIs that are currently involved in credit transfer of microcredentials.

Part of the microcredential endeavour must be to develop the reputation of these courses so they are widely recognised by employers and educational institutions. Providers therefore need to take up the challenge of finding ways not only to accept their own microcredentials as academic credits that can be counted towards a qualification but also to accept microcredentials issued by other providers. This is currently a tough challenge for institutions, partly because an internationally accepted definition of microcredentials has yet to be agreed, and partly because international standards for these courses are still under development. Nevertheless, if microcredentials are to gain currency, these credit-transfer issues require serious attention from the institutions that offer them.

This is an area in which **external policymaking** is key. Institutions offering microcredentials can choose either active or passive engagement with this process. Either they can contribute to the development of national and international policy on microcredentials – discussing and agreeing on standards and regulations – or they will end up being held to the standards developed by others.

Another area of outward-facing activity is in **partnerships**. Microcredentials are intended to be aligned with professional skills and employment opportunities, so they provide an opportunity for higher education to forge new alliances with companies, industries, professional bodies, unions and service providers. Such partnerships could enable the development of microcredentials directly relevant to the needs of employers, as well as enabling both partners to develop reasonable expectations of what is possible and where responsibility lies. The possibility of building such partnerships has attracted attention at both national and international levels.

The European Commission noted that external partnerships are critical to ensuring microcredentials are responsive to employers' needs. They can help to understand market requirements, run pilot projects, bring in field-relevant expertise and reduce risk.

Partnerships with labour market actors, including social partners and companies themselves are seen as key to the development of micro-credentials. They can reduce investment requirements and risks for individual institutions and ensure dialogue occurs around needs and priorities. External partners can contribute with expertise, and can be seen as a way forward to the uptake and promotion of micro-credentials. (European Commission 2020: 24)

In Australia (Government of South Australia 2020), a series of consultation workshops resulted in a report that called for

the development and assessment of microcredentials to be co-designed and/or endorsed by industry. It also noted that the needs of industry change rapidly, so microcredential development requires rapid decision-making in order to respond to the current and anticipated demands of industry, as well as a regular review mechanism to ensure microcredentials remain current.

In New Zealand, a report commissioned by a government engineering initiative noted:

the narrower focus of the micro-credential means that educational, industry or other organisations can develop and implement micro-credentials more easily and quickly in response to new industry needs. In the employment process, micro-credentials provide a more detailed record of a holder's actual competencies which can help them differentiate their abilities from other applicants and allow employers to identify people whose competencies match their organisation's needs. (Wilson & Hay 2018)

However, the report also identified risks associated with the narrow scope of microcredentials. If courses focus on a single competency, there is a risk that learners will only learn individual competencies without developing an understanding of how they interconnect or how the whole system works. These short courses may not offer learners opportunities to develop the higher-order thinking skills – such as analysing and synthesising information – that can be developed on longer courses that include more complex assignments. An industry/HEI partnership has the potential to make use of the benefits of microcredentials while avoiding the flaws inherent in an approach that focuses on a limited skillset that may soon be outdated.

Apart from building new partnerships, the microcredentials initiative may also be working with an external platform, such

as one of the MOOC providers, which will host and publicise its microcredentials. In some cases, **platform liaison** is relatively straightforward. edX launched its MicroMasters in 2016 and Coursera piloted its first MasterTracks in 2018. There has therefore been sufficient time for these platforms to adjust their processes and assumptions to take microcredentials into account and smooth the liaison process. Other platforms have made the move more recently, host a diverse range of offerings, or have a rigid model that must be followed. In these cases, work on platform liaison becomes more time-consuming. Throughout this process it is important to be aware of where the interests of the platform and the institution align, and where they diverge. Some providers are doing little more than providing a hosting service but others have larger scale plans related to the disruption of education.

Disruptive innovation is defined as ‘the process by which an innovation transforms a market whose services or products are complicated and expensive into one where simplicity, convenience, accessibility, and affordability characterize the industry’ (Christensen, Johnson & Horn 2008: 11). The ideas behind disruption are set out in Christensen’s influential book, *The Innovator’s Dilemma* (Christensen 1997) in which he proposes that market processes are driven by two approaches: a dominating regime that defines the rules of the game and develops slowly, and a disruptive regime that uses cheaper and simpler technologies and eventually overtakes the dominant approach. The book distinguishes between sustaining technologies that are used to improve the existing market and disruptive ones that help establish a new market.

There are problems with Christensen’s theory. It is not clear that any technology is inherently disruptive, or that a theory developed using case studies of companies producing disk drives can be

transferred to a social endeavour such as higher education (Weller 2014). Nevertheless, the idea of ‘disruption’ has proved to be powerful, and education is seen to be an extremely lucrative worldwide market. If undergraduate and postgraduate degrees are the dominant market, then microcredentials could be seen as the plucky little underdogs that overcome the lumbering old university dinosaurs. It is this thinking that underpinned the edX decision to trademark MicroMasters and Udacity to trademark Nanodegrees (Young 2016). Control of the name is associated with control of the product, the standards it adheres to, and the way it is run.

This intention – to disrupt education and make a profit in the process – shapes the thinking of some of the major platforms offering microcredentials. edX, which was launched by Harvard and MIT in 2012, was sold nine years later for US\$800 million (Shaw 2021). Coursera, launched in the same year, was valued at US\$7 billion in 2021, despite losing nearly US\$69 million in the previous year (Adams 2021). The interests and visions of platform and institution are therefore likely to be very different when it comes to microcredentials. This means that partner liaison is not a simple matter of negotiating a way of working with a technology provider. Instead, it is a process of balancing two sets of priorities and working to ensure that it is learners who benefit from this process.

One of the teams closely involved in this process is the **Marketing** team, responsible for attracting learners to these new courses, as well as to the institution’s wider offering. This team faces two big challenges. The first is developing public understanding of microcredentials. The second is offering microcredentials online, to a global market.

While reporting of learners in the millions may give the impression that the market is vast, consumers of microcredentials have a great deal of choice, there is evidence

that despite micro-credentials and degrees being available online, institutions such as universities still have strong geographical pull. (Oliver 2019: 29)

By far the biggest current challenge is developing public understanding, because if people have no idea what a microcredential is they are not going to be searching for one or making informed decisions about which one is best. There is currently no established microcredential marketing, no consistent proposition or labelling. This means that any marketing strategy needs to build awareness of microcredentials, create understanding of what they are, and help potential learners to understand their value. This needs to be done in the face of multiple competing visions of what microcredentials are.

Some microcredentials, such as the Relay/GSE ‘Checking for Understanding Using Gestures’, are extremely micro (four A4 pages), while others are substantial sections of master’s degrees. Some offer academic credit; others do not. Some are considerably cheaper than other university study; some are more expensive, and some are eligible for government funding. Some are clearly aligned with industry or even run by multinational corporations, while others are only loosely linked with skills for employability. An analysis of 450 microcredentials by ClassCentral found little consistency, with estimates of cost and effort varying widely, and variability within each microcredential type as well as across types (Pickard 2018).

The platforms offering microcredentials do not significantly reduce the confusion because they have such a wide variety of offerings. Coursera offers MasterTrack certificates, professional certificates and university certificates alongside more conventional undergraduate and postgraduate degrees. FutureLearn offers short courses, expert tracks, microcredentials, and

programmes alongside degrees (some of which are postgraduate certificates, rather than full degrees). edX offers MicroMasters, XSeries programmes, professional certificates, master's degree programmes and MicroBachelors programmes alongside its other courses.

The marketing team therefore needs to be clear what is on offer, how it is distinct from the myriad other courses on offer, and what value it offers learners. The strategic vision of the micro-credentials initiative is important here because it can be used to shape marketing campaigns, emphasising aspects that the institution considers important. Microcredentials might be positioned, for example, as a gateway to wider learning opportunities; as a chance to gain skills prized by major employers; as a low-cost way of gaining high-quality education; or as a well-supported step up from using open educational resources and MOOCs.

Support roles

The main sources of support for learners on microcredentials will be their educators and mentors. However, like full-time university students, microcredential learners do not only require help with the academic side of their studies and so the microcredentials initiative must consider how their other needs will be supported and how the university's various support teams will be briefed to do this.

Online study necessarily involves queries about the use of information technologies (IT). Some learners will have basic technical needs due to lack of familiarity with the equipment they are using, outdated technology or operating systems, or limited internet connectivity. Others will regularly make use of the latest technology but only in a work or social context, so will struggle to

navigate unfamiliar resources. More specifically, some will struggle to access the course, forget which email they have signed up with, fail to check their in-box for notifications, or lose their login details. Submitting assignments is a major stress point that is likely to produce a string of last-minute queries.

The **IT support team** needs to be aware of microcredentials, how they differ from other qualifications on offer in terms of their technical requirements, how many students are registered on them and when they can expect most queries (registration and submission dates). The team also needs to know where the responsibility lies for different types of query – with the institution or with the platform. Learners need contact details for technical support, otherwise they may bombard the institution's phone system and social media accounts with queries.

One option is to give microcredential learners a range of contacts, depending on the type of support they need. Another is to make use of centralised **student support** that learners can contact about a range of issues. This approach would cover financial support, payment issues, requests for refunds or deferrals, accessibility requests, and queries about the microcredential programme. Some learners will be in search of pastoral support, for example when mental or physical health issues impact on their studies (see Chapter 6). A clear decision is required as to whether that support will be provided.

A form of help that most university students take for granted is **library support** – helping them to find and make sense of resources, supporting the use of referencing software, and teaching information and study skills. More broadly, library support for students gives them access to a huge range of physical and online resources to which non-students have limited access because they are locked behind publisher paywalls.

Microcredential learners may not need access to library services – their course may be entirely stand-alone, with access negotiated in advance to any texts that they must access. In these cases, it is the educators who will need support from the library in suggesting relevant resources, dealing with rights access, and suggesting open educational resources (OER) that learners will be able to access. On the other hand, lack of library access can be a problem when designing postgraduate microcredentials, as postgraduate study requires learners to develop skills in finding and accessing information, as well as in carrying out their own research.

More broadly, these issues around support are linked with a decision the institution must make. Are these regular students who happen to be studying relatively short courses, or are they an entirely different group of microcredential learners? If they are students, then national quality assurance standards in some countries require them to be treated in the same way as other students, with access to all the associated wraparound services, including library access. These services come with a price attached, which increases the cost of the microcredential. On the other hand, if they are not regarded as students, quality assurance bodies will inquire how these learners can receive academic credit from a university, and learners who enrol on these credentials to test out whether university study is for them may gain an inaccurate understanding of the support that is available.

While the student/learner tension is a thread that runs through the whole microcredential initiative, the matter of library access is one of the places where it is most likely to surface. In some disciplines, a course that runs without library access is straightforward to run; in others, the prospect of running a course for academic credit on which learners have no access to journal papers, textbooks or book chapters is a challenging concept. The

student/learner decision may therefore have an impact on which faculties are able to run microcredentials. On the other hand, it may prompt the institution to decide against offering academic credit and instead find a way of recognising microcredentials as evidence of prior achievement.

Decisions as to how microcredentials are recognised and accredited have career implications. As microcredentials are oriented towards starting a new job, gaining new skills or making a career change, careers advice is directly relevant to these learners. With international cohorts of learners, specific advice is difficult to provide. Nevertheless, links to job boards, recruitment sites or advice from those already working in the field can be incorporated. The institution's **careers advice** service will be well placed to help build this form of support into the microcredential offering.

Healy identifies four challenges for microcredentials learners that can be addressed by providing careers advisers to help those learners to build a cohesive career strategy that integrates microcredentials and expresses their value to potential employers:

Firstly, microcredentials may not actually be necessary for the learner's particular goals. Secondly, learners may miscalculate the labour market demand for certain skills, or select microcredentials that do not meet explicit or implicit requirements for entry into their desired profession. Thirdly, reactive or anxious learners may accumulate microcredentials haphazardly, with little coherent purpose or strategic intent. Finally, learners may lack the job application skills needed to express the value of their microcredentials to employers or integrate them into a coherent employability narrative. (Healy 2021: 21–22)

The European Commission underlines the importance of careers guidance in this context: 'strategic career guidance could support the aims of inclusiveness in lifelong learning; individuals with

lower levels of qualifications are more likely to need career guidance and are more at risk of losing their jobs due to automation' (European Commission 2020: 24). Some of this guidance can be provided by employers or by local and national employment offices, but there are also opportunities to build it into the overall microcredential offering.

Of course, the career and development opportunities offered by microcredentials are not confined to their learners. A new level of microcredential and a new set of learners open up employment opportunities within the educational institution itself. As this chapter makes clear, there are multiple internal roles that develop or emerge as the microcredentials initiative progresses. These will be supported by **human resources** work on setting up and amending contracts, recruiting and supporting staff, and providing appropriate training and development opportunities. The training needs are perhaps most acute for educators, who will be taking on a substantial amount of new work that is likely to differ significantly from their existing teaching commitments.

Educator roles

The importance of **educators** to microcredentials means their work is considered in several chapters of this book. Learning designers and the production team are covered in Chapter 5, the work of **data services** to support educators forms part of Chapter 9, and different aspects of educators' work form the basis of every chapter. Here, the focus is on the ways in which the roles of the educator change in the context of microcredentials.

This change is particularly evident for educators who normally teach in a face-to-face environment and have little experience of online education except for the emergency pivot to online

teaching that was thrust upon them by the Covid-19 pandemic. Working on microcredentials is not the same as working with a group of students who would normally expect to be in physical proximity (for example, on campus or in a training room). It is a form of distance education, which functions in a different way.

Michael G. Moore has written extensively about distance education, which he has researched since the 1970s. In doing so, he has identified many roles that the educator takes on. These include: arranging for student creation of knowledge; supporting motivation, stimulating analysis and criticism; giving advice; and arranging practice, application, testing and evaluation (Moore 1993). At different times, he refers to the teacher as a:

listener, contributor, person who deals with financial and administrative constraints, person who decides where teaching takes place, user of interactive video, provider of opportunities for dialogue, provider of appropriately structured learning materials, collaborator with design teams, collaborator with content experts, collaborator with instructional designers and collaborator with media specialists. (Papathoma, Littlejohn & Ferguson 2022)

A more recent set of teaching responsibilities compiled by Salmon and her colleagues (2017), in the context of MOOCs, extends the list. They include access and motivation, development, information exchange, knowledge construction and online socialisation. The list is extended by the responsibilities of learning mentors:

enhancing connections between course participants, providing external links to relevant resources, building and deepening discussions, linking conversations, highlighting relevant conversations, encouraging reflection, encouraging responses, encouraging the development of external networks, and producing weekly reviews. (Papathoma, Littlejohn & Ferguson 2022)

In a face-to-face setting, most or all of these roles would be carried out by the same person. They are multiple different elements of the activity of teaching – elements that are so often combined it can be difficult to see them as separate activities. However, in a distance education setting such as microcredentials, it is helpful to disambiguate these roles, and to assign them to different people. Educators do not have to work individually, distributed one to each room in a training centre or campus. Instead, they can work together as a team. The work of designing a microcredential, presenting the material within it, supporting learners on the course, and providing feedback on assignments can be done by separate individuals.

Because the activities involved in teaching a microcredential are diverse, the teams involved in their production and presentation require diverse forms of expertise. Those involved need to be expert in the microcredential subject area, the related area of employment, microcredential design, presentation and editing of videos, legal requirements for using learning material and, ultimately, the pedagogy. Teaching on microcredentials, as with other courses on online platforms,

involves activities that relate to administrative work (funding, allocating work to and managing different professionals), design and technical skills (video presentation and editing). These types of work and skills need to be combined with pedagogical decisions, and subject matter expertise. However, the subject matter expertise needs to be presented in new forms such as video-script writing and decisions about the use of appropriate resources (whether copyrighted or licensed under Creative Commons) are essential. (Papathoma, Littlejohn & Ferguson 2022)

Ultimately, teaching on a microcredential is about working as part of a team, recognising and drawing on the expertise of others. Narrowly defined, that team includes the **subject-matter experts, learning designers** and **mentors** who have the most traditional teaching roles. More broadly, it includes the **production team** and experts on **accessibility** and **rights** who make the microcredential possible. Overall, as this chapter has shown, it includes the project team, support roles and both outward-facing and internal-alignment work. The final part of the jigsaw is, of course, the focus of all this activity – the learners.

Microcredential learners

The role of the learner, and specifically of the online learner, is often presented simply as a consumer of content. Educators deliver content and learners digest it. This view is associated with an understanding of learning as the acquisition of facts or procedures, or simply as a process of memorisation (Richardson 2005) – an approach that has led to the production of many stultifyingly boring online courses that simply chain together a series of videos and require learners to watch these in sequence. As Chapter 2 on pedagogy and Chapter 5 on learning design show, learners need to play a much more active role in the learning process.

Their role can be extended to supporting the microcredentials initiative in a variety of ways. Learners can play a major part in the evaluation of microcredentials. Their activity and their performance provide some measures of the success of these courses, and this basic quantitative data can be supplemented by surveys, interviews and focus groups. Learners can be recruited as consultants when developing new microcredentials, and can

support the revision of microcredentials that have already run, ensuring they remain up to date and relevant to the world of work.

Although the focus of microcredentials is on the course and learning, there is more to higher education than the classroom experience. Students form communities; they socialise; they join the students' union or students' association. When they leave, they often support the institution as alumni. Apprentices forge links with each other; they go out and they form groups. This social interaction is currently missing from the majority of microcredentials but would support their strategic aims in many cases. If microcredentials are regarded as a gateway to higher education, increasing social interaction would help to provide a more representative introduction. If microcredentials are to be stacked or used to build into a qualification, then social interaction between registration periods keeps learners engaged with the institution and reduces the need for re-recruitment. Learners who know each other outside their course may be more confident about engaging in the collaborative work required on many employment-focused microcredentials.

Some microcredentials learners certainly seek to stay in touch with each other once the course is finished. This work can be left to individuals and to social media but some institutions will see benefits in shaping and developing these interactions.

Conclusion

The roles described in this chapter show that a successful microcredentials initiative requires teamwork from across the institution, or a well-resourced unit that can draw on a range of expertise. Motivation and support of staff to engage in the development and provision of microcredentials is key to the success

of the initiative. It is important to recognise that these courses are not simply another addition to the prospectus. They require change throughout the institution, and a shared sense of purpose relating to the strategy that drives them.

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