

## TAKING THE COLLEGE TO THE COMPANY

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Micro-credentials have been a hot topic in education over the last decade, with many interpretations of their relevance, application and definition (Elliott, Clayton, & Iwata, 2014; Fishman, Teasley, & Cederquist, 2018; Greene, 2019). The proliferation of online learning, (massive open online courses, referred to as MOOCs), and digital badges has created a somewhat cluttered space (Gallagher, 2019). The broad range of options and applications has become problematic as institutions, learners, and employers grapple with what micro-credentials are, and what value they provide. In this thought piece, we consider 'micro-credentialing' and how its strategic application can benefit learners, employers, and training institutions.

So, what is a micro-credential? "Micro-credentials are credentialing systems that follow competency-based professional learning, and... make use of digital badges to recognise a learner's skills, achievements and accomplishments" (Ghasia, Machumu, & Smet, 2019, p. 220). A single, typically shareable endorsement or validation of a learner's achievement, a micro-credential is essentially a qualification, albeit a small one. As such, it attests to a set of skills and/or knowledge that is worthwhile in its own right. It may also certify a set of competencies for a specific job. Micro-credentials, then, are not qualitatively different from traditional qualifications; they are different only in size and scope.

It is also important to differentiate between micro-credentialing and micro-learning. Micro-learning is an experience designed to impart a small or defined set of skills and/or knowledge. Micro-credentialing is the process of certifying that the stated set of skills and/or knowledge have been applied and evidenced.

New Zealand's Otago Polytechnic approach to micro-credentials, has been the creation of the *EduBits* brand and platform. We perceived a sea change in education, with learners and employers needing new ways to access education. Micro-credentialing is one of these ways. As the New Zealand Qualifications Authority (NZQA) highlights, micro-credentials "focus on skill development opportunities not currently catered for in the tertiary education system, and for which there is strong evidence of need by industry, employers, iwi<sup>1</sup> and community" (New Zealand Qualifications Authority, 2018, para. 2). Traditional qualifications can create barriers for learners, with sought-after skills buried within them, hidden from the view of employers. A flexible approach to learning and credentialing is required, taking into account the rapidly changing nature of the workplace, the busy lives of learners, and the need to align learning and credentialing with real world scenarios. The development and evidencing of up-to-date knowledge and capabilities is key to "improv[ing] and future-proof[ing] the employability of individuals and support[ing] the productivity of the workforce" (ibid., para. 3), as well as to address critical shortages in industry skills (New Zealand Government: Careers NZ, 2018). Otago Polytechnic's response is that we need to take the college to the company.

The EduBits initiative is both a micro-credentialing system, and a platform for the development of micro-credentials. Under the EduBits brand, we market micro-credentials to a variety of users, including business and industry, educational institutions, and individuals. Central to the EduBits brand is a quality-assured process for the development of micro-credentials, and a platform designed for scalability.

With EduBits, we wanted to differentiate ourselves from other providers and initiatives. It was essential that we designed the EduBits service to offer quality-assured micro-credentials. As a category one NZQA provider, Otago Polytechnic has the highest possible quality rating. Our quality assurance means that Otago Polytechnic has

deployed criteria to ensure that EduBits are designed, delivered, and assessed to best practice standards. At the heart of an EduBit micro-credential is an assessment methodology based on recognition-of-prior-learning principles, giving it broad application in a variety of learning contexts. It is not important how the learner has acquired the skill and/or knowledge for any given EduBit; it is only important that they can demonstrate it with a range of evidence.

Another key development for us has been the creation of an EduBit build process, and a platform for delivery. This is significant, as, in order to achieve scale, we need to be able to replicate EduBits development as efficiently as possible. EduBits can be developed and amended quickly, within weeks, keeping pace with rapid change in workplace skill and knowledge requirements. Since its launch, over 100 micro-credentials have been developed in a broad range of endeavours, including Electric Vehicle Maintenance, Cheese Affinage, and Te Reo Māori in the Workplace.

So, how is an EduBit earned? Learners subscribe to their chosen EduBit via the EduBit website<sup>2</sup>, which guides them through the process they should follow. They then upload evidence of how they have applied the skills and/or knowledge listed as criteria. Evidence can take many forms, but generally falls into four broad categories: artefact, reflection, attestation, and observation. It can result from a defined learning experience, and/or from actual practice, so is often naturally occurring, in that the skill or knowledge has been used appropriately in a practice situation, such as a workplace, giving EduBits flexibility in application. EduBits have been created by Otago Polytechnic that are imbedded into third party training systems and business processes – actual evidence is submitted for assessment from actual business.

Once the learner has gathered and uploaded their evidence to the EduBits website, which may be completed at the learner's own pace, they choose to submit. An approved assessor verifies the learner's evidence against pre-determined academic criteria, ensuring that it is valid, reliable, and sufficient. Evidence comes from the person, a task process, and/or a task outcome. Evidence from the person and the task process may be reflected in the artefact being assessed; the task outcome may be reflected in the artefact or in an attestation. Confirmation of outcome is achievable within ten working days. Upon successful evaluation, candidates are emailed with a link to the EduBits Credly Vault, where they can claim their digital certificate.

Micro-credentials can be used in other ways. An appropriate set of EduBits, for instance, may be aggregated and acknowledged as meeting the specifications for a 'traditional', larger qualification, or part thereof. Traditional qualifications may also be designed to be achievable through a cumulative acquisition of EduBits; similarly, EduBits can potentially be stacked into a qualification, using recognition-of-prior-learning processes. Qualifications can be broken down to micro-credentials, where for each course successfully completed, the learners receive an EduBit.

EduBits are shareable and transferable. When an EduBit is awarded, the learner receives a digital certificate, with embedded meta-data outlining the attained skill and knowledge, and the evidence required to support that skill/knowledge acquisition. The learner can share the EduBit easily online, on their social and professional networking sites, or even as part of their email signature, making the skill and/or knowledge transparent to a third party.

Employers can also benefit by credentialing their training. As EduBits focus on the evidence of a demonstrated skill or knowledge, they can allow for accurate assessment of the effectiveness of training and workplace skill-mapping. If completed prior to training being offered, EduBits can reduce unnecessary training for employees, meaning reduced costs in terms of both time and money. The EduBit assessment looks at evidence that is naturally occurring, not overlaying a learning process with an extraneous test or lengthy reflection to verify knowledge or skill transfer. Therefore the EduBit assessment fits closely into real work contexts, making it relevant and easy to integrate for industry.

In addition to the benefits for learners and employers, EduBits can ensure institutions remain relevant and are at the heart of provision for learners and industry. Breaking down the traditional barriers of larger qualifications allows learners greater access and flexibility. The college can truly be taken to the company through EduBits.

In summary, "the future of alternative certification and credentials appears bright" (Fong, Janzow, & Peck, 2016, p. 14). Credentialed learning can improve learner equity by breaking down traditional barriers to education. Learners can validate current knowledge and skills, including transferable skills, potentially without the need for further training. EduBits can be completed alongside existing workplace activities and validate a wide range of learning sources. By taking a strategic approach to their learning, and completing EduBits that meet their specific skill and knowledge requirements, learners can then look to aggregate them into a wider credential, if appropriate. In a time when innovative and flexible approaches are desperately needed in education, micro-credentials may be one of the solutions.

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- 1 Māori tribes
- 2 <https://edubits.nz/>

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