Micro-credentials roundtable

About the roundtable

As part of its inquiry into [technological change and the future of work](), the New Zealand Productivity Commission hosted a roundtable on micro-credentials, 2-4pm, 18ᵗʰ September 2019 at the Productivity Commission's office in Wellington. The roundtable was designed to investigate a variety of views on the current landscape, and future for, micro-credentials in New Zealand, as a new model of tertiary education.

Two Commissioners, Sally Davenport (Professor of Management, Victoria University of Wellington) and Gail Pacheco (Professor Economics and Director, New Zealand Work Research Institute), attended to listen to the discussion and engage with participants.

The Commission provided three broad questions to participants in advance to stimulate the discussion:

1. What are the main gaps in the current education system that micro-credentials can meet?
   a. How much value do you think micro-credentials have in terms of recognising prior learning, as opposed to teaching new skills?

2. What are the main challenges facing, and opportunities for, the uptake of micro-credentials in the New Zealand education system?
   a. What are your thoughts on the current approach to micro-credentials in New Zealand (ie, after the [NZQA trial](), with current [TEC funding rules]())?

3. What future do you envisage for micro-credentials in the New Zealand education system? In thinking about this, we would be interested in your view on the likely future, as well as your ideal future.

Definitions and purposes differ

There is no common definition of a micro-credential…

There is no common definition of what a 'micro-credential' is – the term is used in different ways across the globe and means different things to different people. As one participant noted, "the horse has bolted on the name micro-credential". In New Zealand there is also no common definition, and what [NZQA has defined as micro-credentials]() are sometimes referred to as 'nano-degrees' in other countries. There is however something about quality assurance and the formality of the framework, eg, shouldn't call a MOOC a micro-credential.

…and different approaches have different purposes

There is also no single purpose for micro-credentials in New Zealand – it's not just a difference of terminology. For example, different courses or qualifications available:

- aim to solve different problems, eg providing an entry point to an industry to attract more people; allowing existing practitioners to upskill or specialize; permit recognition of existing skills and competencies; or for firms or individuals to meet regulatory requirements (eg, to show have taken "reasonably practicable" steps to meet health and safety responsibilities)

- take different forms – some are competency-based (and can be completed or achieved in a relatively short period of time); others require learning new knowledge and take longer to attain (more akin to the NZQA model of 5-40 credits in size); and yet others aim to combine both competency-based credentialing and new learning to fill gaps

- don't all fit the NZQA definitions and criteria.

Uniformity isn't desirable

A clear message was received that a standardised model isn't needed or desirable, since different industries have divergent needs and goals. An example of fire engineering was raised, where the micro-credential model is needed for both recognition of prior learning (RPL) and additional training to fill knowledge gaps. However, the NZQA model isn't suitable for capturing both those two elements.

Industry is keen on ensuring the availability of competency-based micro-credentials. These credential what an individual is competent to do, ie, "applied knowledge in context".

Nor is there a 'typical' micro-credential student. Evidence of learning using credentials appear to play a more important role for people at the boundaries, eg, changing employers or careers. For those changing careers, externally-validated (ie, NZQA) credentials are more valuable as there may be less cross-industry appreciation of the value of different types of training.

For some industries, the NZQA route is too slow, time-consuming and expensive. Such industries consider that they are the best source of validation. In other words, certain brands are strong enough so there's no additional need for external NZQA accreditation. Conversely, for others, NZQA accreditation could provide reassurance to learners or confidence in the rigour, design and delivery of the underlying programme.

Wherever you draw the line on what is or isn't a micro-credential will probably end up looking arbitrary.

Pass rates aren't always the right measure of success

An example was raised of a biosecurity micro-credential in the context of different measures of success. The assessment is to create a biosecurity plan for their business and over 200 people have participated. But only 2 people have graduated, because most participants weren't there to gain a qualification, they just wanted to know what to do (ie, how to create a biosecurity plan). So, despite poor completion rates, the learning from the assessment has been very successful. This hasn't been a problem because this micro-credential is industry-led and so does not need to meet any external regulations eg, funding related to pass rates.

Fitting micro-credentials into the qualifications landscape

Is 'cannibalisation' of existing programmes a major risk?

Not really. Some industries would be happy to break up existing qualifications into 5 or 6 linked and smaller qualifications, but that's mainly because they believe it would better serve the interests of employers and employees. However, other industries prefer to stick with existing and established qualifications.

Some considered that the NZQA block on setting up micro-credentials where there are existing programmes is unnecessarily rigid. But there is no appetite to displace formal credentials.

The ability to 'stack' micro-credentials

Most considered that there should be the ability to choose whether micro-credentials stack or not; however, there was a robust discussion on whether several micro-credentials stacked together provides the same overall skill-set as embarking on a larger, more cohesive qualification.

To the extent there are concerns about combinations of smaller packages not being equivalent to the learning encapsulated in the larger, traditional qualifications, these can be managed through design choices – eg, requiring a capstone assessment at the end of the 5-6 linked micro-credentials, which would demonstrate integrated knowledge or competence.

The delivery context matters a lot – on-job learning would often provide the "glue that pulls micro-credentials together" in a way that provider-based learning might not.

Micro-credentials in a fast-moving world

In some industries, micro-credentials will only ever have a limited currency as technology and business is moving fast. For example, the [New Zealand Green Building Council](#) has frequently updated its (non-NZQA) credentials to reflect this. In particularly fast-moving areas, the NZQA route is therefore considered largely unsuitable as accreditation would take too long to meet the needs of learners.

In recognition of this, NZQA is trying to do a fast turnaround of approving micro-credentials and is expecting that some may not last long. Experience with the approved micro-credentials has been positive – NZQA listened and got things moving quickly. NZQA also acknowledges that the current roles and processes are a starting point and will evolve.

Use of micro-credentials in tertiary providers

Some polytechnics are looking to use micro-credentials as a way for their students to demonstrate work skills and competencies (eg, working in a team, problem-solving; keeping to task). It allows for the personalisation of a student's learning journey. Others are considering using them as part of internships that complement traditional qualification routes.

Progress on using micro-credentials in universities is less advanced, but some pilots are underway. Micro-credentials are being viewed as an opportunity for the university to differentiate itself and provide more tailored, work-based learning. The focus is on positioning their learners to have an advantage in the marketplace by demonstrating clearly identified, transferrable skills. Would like to identify work pathways earlier on, based on employer-driven competencies.

Seeing a pathway

For young people …

A lot of people don't want or need a diploma, but what they do want is to see a pathway to the future. Especially for young people, it should lead to a clear destination. Programmes like the [Gateway Programme](#) are intended to 'pathway' people sooner.

… And other learners

But micro-credentials are not just for young people – 2nd chance learners are equally important. Productivity is about gaining new skills, and developing knowledge, skills and competencies in defined pathways is also valuable for adult learners. Keep in mind that most learners want something out of study – this could be a ticket to a trade, but also prestige within an industry.

What might the future hold?

Stimulating training

Micro-credentials could stimulate training in sectors that don't currently have strong training cultures. They also provide bridges and opportunities for people to change careers or upskills. The present system is not agile enough and needs to be more responsive. It encourages the design of study to fit funding rules, rather than funding to meet desired outcomes.

Trends

Specialisation is an increasing trend. In the building industry, the increasing specialisation of some activities (eg, kitchen installation) has been a driver of demand for micro-credentials, since installers are no longer joiners in the traditional sense. It also enables the further disaggregation of the value chain.

Micro-credentials will always lag developments in industry, because of the need to hear and understand what's going on, develop the programme and then launch it. But they are faster options than traditional,

larger qualifications. They also allow for updating at the margins of existing qualifications. For example, 80% of what is needed isn't changing, but 20% is and that's where micro-credentials really come to the fore.

Funding

The big question will be "who funds micro-credentials"? In the ITO sector, a key constraint is how many micro-credentials the organisation can afford to maintain and manage. In some industries (eg, welding) there are existing and credible international tickets – why require the development of New Zealand equivalents or NZQA approval? Why couldn't we just fund the international options?

In general, employers state that they want fully rounded employees (and it is generally regarded as positive that individuals have a wider range of skills), but there is a question about who should pay for this type of more rounded learning. For example, it may be quite clear cut that learning that fulfills the needs of the immediate job is paid for by the employer, but for wider or more generic learning it is not so straightforward.

Being strategic

There is an opportunity to be more strategic and outward-looking. For example, one of the goals of micro-credentials could be to promote the integrity of New Zealand to those overseas (ie, the quality of employee skills or businesses). It is also an opportunity to think about which industries are strategically important in New Zealand. While there may never be economies of scale for niche activities like queen bee breeding, or electricity lines work, there are clear public good rationales for supporting these activities. So, moving away from a rules-based approach could be necessary.

The overall aim should be for more people to get more skills, and meeting industry demand. Micro-credentials could be a viable alternative delivery mechanism for formal qualifications – enabling things like RPL, and not replacing, but complementing qualifications.

Attendees

Participants

Andrew Donohue	BCITO
Angela Natali	Victoria University of Wellington
Bill Sole	New Zealand Board for Engineering Diplomas (NZBED)
Brenden Mischewski	Mischewski Consulting
Colin Kennedy	Young Enterprise Scheme
Eve McMahon	New Zealand Qualifications Authority (NZQA)
Gareth Leniston-Lee	Tertiary Education Commission (TEC)
Hana Cadzow	Otago Polytechnic
Hugh Wilson	Unitec
Mike Crossan	Primary ITO
Neel Pandey	Manukau Institute of Technology (MIT)
Peter Higgs	Institute of Public Works Engineering Australasia (IPWEA)
Phil Urlich	MITO

Commission attendees

Amelia Sharman	Principal Advisor
Gail Pacheco	Commissioner
Judy Kavanagh	Inquiry Director
Nicholas Green	Principal Advisor
Sally Davenport	Commissioner