



Education Report: Update on micro-credentials and actions to promote their development and use

To:	Hon Chris Hipkins, Minister of Education
From:	Grant Klinkum, Chief Executive, New Zealand Qualifications Authority Tim Fowler, Chief Executive, Tertiary Education Commission Andy Jackson, Deputy Chief Executive, Graduate Achievement, Vocations and Careers, Ministry of Education
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Purpose

1. This paper provides you an update on the development of micro-credentials in the New Zealand education and training system and outlines current and proposed actions to promote their further development and use.
2. It also provides early advice on actions to assist Building and Construction Industry Training Organisation's training needs to support the industry's skill needs through micro-credentials.
3. NZQA proposes to proactively release this briefing with some redactions as part of the next publication of documents.

Recommendations

4. It is recommended you:
 - i. **Note** the contents of this paper
 - ii. **Provide** feedback on the current and proposed actions to promote micro-credentials
 - iii. **Forward** this paper to Employment, Education and Training Ministers for their information and noting.

Background

5. Micro-credentials are an education product designed to respond to the changing nature of work, the increasing impact of digitalisation and automation, and the growing expectation for flexible life-long learning by the workforce. They are intended to enable learners and other end-users to access specific knowledge and skills in a cost-effective and time-efficient way.

6. Learners can use micro-credentials for a range of purposes and particularly those related to education and employment. For example, as:
 - a pathway to employment through quickly gaining in-demand knowledge and skills
 - an 'on-ramp' to education and training by undertaking a 'starter' micro-credential that helps to meet the entry requirements of a qualification
 - a means of accessing specialist knowledge and skills that could be within a qualification without needing to undertake the whole qualification
 - a pathway to maintain currency in employment through gaining additional post-qualification and employment knowledge and skills.
7. Micro-credentials, in the first instance, respond to demand for skill and training requirements not currently met through qualifications. This is to ensure that micro-credentials augment the formal qualification system and complements traditional 'long-form' qualifications by incentivising the development and delivery of short, focused packages of learning.
8. Micro-credentials can also enable a more flexible acquisition of skills and training through contributing or 'stacking' toward qualifications. Programmes leading to qualifications may include micro-credentials as components of learning, provided the design of the programme is coherent and maps to the qualification outcomes and strategic purpose.
9. The market for micro-credentials is relatively new. NZQA began approving micro-credentials in August 2018, and funding approval followed with Tertiary Education Commission (TEC) setting requirements at the beginning of 2019. Moreover, while micro-credentials are a kind of training scheme and training schemes have been a feature of the system since 2011, these have been developed and comparatively less used than standards, programmes, and qualifications.

Approval requirements

10. NZQA approves micro-credentials from tertiary education organisations (TEOs) that:
 - certify the achievement of a specific set of knowledge and skills
 - have a statement of purpose and clear learning outcomes
 - have demonstrable support from the relevant industries, employers, or communities
 - have a credit value that is from 5 to 40 credits (inclusive)
 - do not typically duplicate current quality assured learning approved by NZQA.
11. The TEC funds micro-credentials that meet the standard SAC/ITF funding conditions, and:
 - complies with NZQA's above criteria for approval
 - shows end-user buy-in
 - contributes to government and TEC priorities
 - complements, and does not displace, private investment.
12. Along with approving micro-credentials from TEOs that meet the requirements outlined in paragraph 10, NZQA also assesses the content of micro-credentials from non-TEOs resulting in a statement of equivalence against the levels and credits of the New Zealand Qualifications Framework (NZQF). NZQA is clear in its equivalence statement that this does not mean NZQA has quality assured delivery of the micro-credential.
13. The intent of the equivalency service is to raise the profile and increase the uptake of lifelong learning opportunities delivered by non-TEOs, by giving these short-focused packages of learning a value in terms of the common vocabulary of levels and credits on the NZQF.

Overview of micro-credentials

14. As of 15 March 2021, NZQA has approved and listed 140 micro-credentials on the register of approved micro-credentials. The micro-credentials cover a broad range of subjects as defined by the New Zealand Standard Classification of Education (NZSCED) with no one subject being prevalent. Some examples of subjects are Forestry Studies, Automotive Vehicle Operations, Seafood Processing, Mechanical Engineering, and Security Services.
15. A breakdown of approved micro-credentials by TEO type, credits, and NZQF level is below:

TEO Type	Number of micro-credentials	General credit range	Main NZQF Levels
Te Pūkenga subsidiaries	49	5 - 20	4 - 7
Transitional Industry Training Organisations (TITOs)	54	5 - 30	2 - 4
Private training establishments	33	5 - 40	2 - 6
Wānanga	3	20 - 36	2 and 5
Course owner (not a TEO)	1	24	3

16. TITOs account for well over a third of approved micro-credentials. Primary ITO and MITO have been the most active with 24 and 13 micro-credentials respectively. Examples of micro-credentials from these TITOs include *Biosecurity Advice to Action* (Level 5, 10 credits) and *Working Safely with Electric Vehicles* (Level 4, 8 credits).

Building and Construction micro-credentials

17. Building and Construction Industry Training Organisation (BCITO) has developed two approved micro-credentials so far. These are *Kitchen Installation micro-credential* (Level 3, 35 credits) and *Computer Numerical Controlled Machinery for Construction Related Trades* (Level 3, 25 credits).
18. TEC has allocated BCITO \$1.4 million from the WDC/TITO COVID-19 Response Projects Fund (focused on supporting industry recover from Covid-19 impacts). One of BCITO's funded projects will develop a suite of 10 micro-credentials, including supporting materials, to address skills shortages and retraining requirements.
19. BCITO is currently in the scoping and engagement phase of micro-credential development. Delivery would be through a range of providers including Te Pūkenga. NZQA will support BCITO through the development process and in how these micro-credentials may be best delivered. BCITO's micro-credential project is expected to be completed in January 2022.
20. Te Pūkenga subsidiaries and Private Training Establishments (PTEs) make up almost all the remaining approved micro-credentials. Of the subsidiaries, Otago Polytechnic has the most approved micro-credentials (25) followed by Eastern Institute of Technology (8). PTE micro-credentials are spread across 15 providers. These include The Mind Lab, Yoobee Colleges, Media Design School and Future Skills Academy.
21. Recently, Te Wānanga o Aotearoa has been approved to deliver *Hei Tikitiki* and *Hei Toki* (both Level 2, 36 credits). These micro-credentials, among the first from wānanga, aim to provide learning that would allow rangatahi to explore a range of life pathways and gain the confidence and interpersonal skills required to engage in employment.

22. University micro-credentials are approved by their respective Academic Boards and must meet NZQA’s criteria. These micro-credentials are not listed on NZQA’s register. To date, universities have approved and been funded for eight micro-credentials.

Equivalency Service update

23. In addition to 140 approved micro-credentials, NZQA has assessed 30 micro-credentials from 14 non-TEOs for equivalence in terms of levels and credits on the NZQF. These organisations include the Electricity Engineers’ Association (EEA), Mediaworks, Statistics NZ, and Capital and Coast DHB. Examples include EEA’s *Overhead Line Design* (Level 4, 25 credits), and CCDHB’s *Neonatal Intensive Care Unit Certificate* (Level 8, 28 credits).

Brief micro-credential case study

24. Training Systems and Solutions (trading as Stratcom Security) is a PTE specialising in security training. They have partnered with an Auckland based security company to train their mainly Māori and Pacific staff in pre-flight security, and deliver two micro-credentials: *Pre-flight Security Basic Training* (Level 3, 30 credits) approved by NZQA in May 2020, and the new *Pre-flight Screening and Physical Inspection of Cargo and Mail* (Level 4, 18 credits).

25. Training Systems’ application to NZQA for the *Pre-flight Screening and Physical Inspection of Cargo and Mail* micro-credential stated that it would help to provide training and job opportunities for Māori and Pacific people in South Auckland. Training Systems said:

“Providing training for the security company’s staff is already helping to address the social and economic inequity in that area. By providing recognition of their new work skills through a micro-credential we are helping to give them a greater opportunity to stay in work, develop their capabilities and thereby improve their social and economic situation.”

26. As of 15 March 2021, 117 completions have been reported to NZQA for the *Pre-flight Security* micro-credential and learners’ achievement recognised on their New Zealand Record of Achievement. So far, one completion has been reported for the new *Pre-flight Screening* micro-credential only recently approved by NZQA in December 2020.

Enrolment in micro-credentials

27. TEC enrolment data shows a significant increase in delivery in 2020 compared to 2019. Most of these micro-credentials were funded by TEC. Universities have been slower to respond to this opportunity, but officials expect they will grow their offerings in future.

TEO type	2019	2020
Te Pūkenga subsidiaries	20	265
Transitional Industry Training Organisations (TITOs)	192	886
Private training establishments	23	655
Total	235	1806

Feedback from employers, learners, and providers

28. NZQA requires TEOs to annually review approved micro-credentials to confirm their continued need. In August 2020, we analysed these reviews. TEOs reported that learners and employers who engaged with micro-credentials were positive about their experience. Learners appreciated the opportunity to pivot to a new industry without significant time commitment. Employers found that micro-credentials were useful in training workers quickly, which was particularly valuable for industries with high demand for skilled workers.

29. TEOs were positive about the reception for micro-credentials. While some noted that the number of learners undertaking and completing micro-credentials in the previous 12 months were relatively low, several said that this was their initial cohort and considered that awareness and uptake from employers and learners would increase as micro-credentials gained presence in the system. The increase in delivery above supports this observation.
30. The impact of Covid-19 and the resulting labour market/employment shock is presently unclear in terms of the development and uptake of micro-credentials. On one-hand workers seeking to pivot to new career paths may be expected to seek micro-credentials to retrain and upskill. On the other hand, uncertainty can lead to reduced investment in training – especially in job-specific skills. Displaced workers may seek generic qualifications to upskill.

Perceived and actual obstacles to development of micro-credentials

31. The 140 micro-credentials from TEOs that NZQA has approved since August 2018 has been lower than anticipated, based on the feedback at the time that micro-credentials could help to address a 'gap' in the system. Throughout this same period, NZQA has listed or approved more qualifications, programmes, training schemes, and assessment standards.
32. While the increase in delivery and uptake of micro-credentials is promising, actions can and are being taken by agencies to identify and address obstacles to the further development and use of micro-credentials.
33. The main obstacles are the:
 - cost of development and delivery compared to revenue generated from micro-credentials
 - current legislative settings that make it difficult for TEOs to seek NZQA approval to deliver micro-credentials developed by other TEOs
 - perception of difficult and complex regulatory environment that restricts duplication of micro-credentials, prevents 'stacking' toward qualifications, and inhibits funding
 - tendency of TEOs to default to the development and delivery of full qualifications.
34. Micro-credentials vary in size from 5 – 40 credits and are usually designed to meet a specific need. This could mean a short shelf life for the micro-credential and could discourage their development, particularly for smaller micro-credentials and where there may be a niche cohort of learners. In cases such as these, the cost of development could outweigh the revenue from delivery.
35. The legislative settings require a TEO to both develop and deliver a micro-credential so that it can be approved by NZQA. This means that TEOs need to reinvent or duplicate the wheel if they seek to deliver other TEOs' approved micro-credentials. The settings also mean that Workforce Development Councils (WDCs) would not be able to seek NZQA approval of micro-credentials as they are not delivery organisations.
36. TEOs perceive regulatory barriers in the areas of duplication of learning, 'stacking' of micro-credentials, and funding. This appears to stem largely from a lack of clarity about the policy and regulatory settings and the flexibility that is possible.
37. For example, NZQA requires that micro-credentials do not *typically* duplicate other NZQA quality assured learning. This is intended to mitigate against the disaggregation of qualifications and to incentivise the development of micro-credentials that focus on new or unmet skill needs. It is not intended to mean that NZQA would not approve *any* micro-credential that duplicates existing approved learning.
38. TEOs have signalled that in some cases it can take too long to gain approval and funding particularly when they seek to quickly deliver a micro-credential. This appears to relate to the

understanding that NZQA and TEC's respective processes are sequential, and because there are additional requirements that TEOs must meet for funding purposes.

39. TEOs continue to prioritise the development of 'long-form' learning leading to qualifications. Our aim is to encourage a broadening of perspective that includes micro-credentials through better promotion and adjusting our regulatory and legislative settings to enable greater flexibility and scope for micro-credentials.

Agencies' response so far

40. The Ministry of Education (the Ministry) wrote to you in August 2020, "*Encouraging micro-credentials and other short, flexible tertiary education and training options*" [METIS 1227146 refers], about actions to increase the uptake of micro-credentials. These actions are completed or underway. For example, easing funding rules for micro-credentials and clarifying how micro-credentials may be 'stacked' toward qualifications.
41. 
42. NZQA is working with TEC and the Ministry to enable delivery of WDC developed micro-credentials within current legislative constraints, and we anticipate WDCs will be able to undertake this function by the time they 'stand up' in October 2021. However, longer-term, an amendment to the legislation is required to resolve this issue as outlined in the next section.
43. NZQA has recently published specific guidance on how micro-credentials may 'stack' toward qualifications. We have updated our guidance to include information for TEOs on when and how they can 'stack' micro-credentials and continue to meet our approval requirements. There has been an increase in queries from TEOs about micro-credentials and 'stacking' following our recent communications.
44. We have clarified when and where approved micro-credentials may duplicate current NZQA quality assured learning e.g. where a particular component of a programme is needed by end-users and can be shown to be a 'stand-alone' package of learning.
45. NZQA will seek to amend some of our regulatory requirements for micro-credentials as part of forthcoming proposed changes to NZQA Rules (scheduled for consultation in August 2021). These include removing the annual review requirement with other changes under consideration.
46. NZQA and TEC have worked together to streamline our respective approval processes so that turn-around is faster and communicated that our respective approval processes work side by side. NZQA currently approves micro-credentials in less than 20 working days. TEC has additional and necessary requirements to gain funding that can add to the time taken.
47. TEC is developing guidelines for TEOs that want to increase their delivery of short learning packages, including micro-credentials and single course enrolments. The guidelines will advise how TEOs can shift their funding to support more short learning packages, including micro-credentials provision, within their allocation.
48. This work follows TEC's decision to remove the 5 percent cap funding condition on short awards to enable growth in products such as micro-credentials, while managing risks. The guidelines reflect current TEC assessment principles and criteria, for example relating to evidence of industry/employer need and demand.

Further actions to promote micro-credentials

49. NZQA, TEC and the Ministry are considering a range of actions to promote micro-credentials and enable their further development and delivery. These actions are intended to help raise the demand voice for micro-credentials and to better enable TEOs and Workforce Development Councils to value, develop and deliver micro-credentials.
50. One way to stimulate further micro-credential development is to enable the TEC's Qualification Development Fund for this purpose. This would help to address front-end development costs and mitigate the possibility of modest revenue streams. ✓
51. The Qualification Development Fund is currently undersubscribed as most applications have previously come from transitional ITOs, which are now more focused on their transitions. Only a third of the Fund (\$350,000 out of \$1 million) has so far been allocated for 2021/2022 financial year.
52. Officials recommend extending the criteria for the Qualification Development Fund to cover support for developing micro-credentials. This could be done relatively easily and quickly as part of your annual determination of the design of TEC's funding mechanisms.
53. NZQA working with the Ministry has begun consulting on possible amendments to the Education and Training Act 2020 as part of proposals to simplify New Zealand qualifications and other credentials. If approved, the proposals will:
 - raise the status of micro-credentials by recognising them on a New Zealand Qualifications and Credentials Framework ✓
 - remove confusion in the system by replacing training schemes with micro-credentials ✓
 - enable the approval of WDC micro-credentials and allow TEOs to deliver 'common' or 'national micro-credentials' including those developed by WDCs, and other bodies such as the Ministry of Education. ✓
54. NZQA is continuing to work with peak bodies to communicate and clarify our approval requirements including where micro-credentials could be duplicated and 'stacked'. We have begun work with Te Pūkenga to establish how micro-credentials may be efficiently delivered across the subsidiary network under the current regulatory settings.
55. NZQA has begun work to raise the profile of micro-credentials on social media. Recent initiatives on LinkedIn have led to a good response with a 8.21% engagement rate. NZQA has submitted copy to Business New Zealand and NZ Chambers of Commerce on the training and upskilling opportunities enabled by approved micro-credentials and our equivalency service to use in their newsletters and publications. ✓
56. Similarly, NZQA and TEC have begun work to raise the profile of micro-credentials on the careers.govt.nz website.
57. We seek your feedback on the current and proposed actions to promote micro-credentials outlined above.

58. We recommend that this paper is forwarded to Employment, Education and Training (EET) Ministers for their information and noting. ✓



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Hon Chris Hipkins
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The proposed actions look sensible.
WDCs will be able to influence microcredential uptake through the purchase advice they give to TEC.
The strategic component of the UFS provides another avenue to support MC development.