

## Aide-Memoire: Proposed approach to implementing a micro-credentials system in New Zealand

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<b>To:</b>	Hon Chris Hipkins, Minister of Education
<b>From:</b>	Dr Karen Poutasi, Chief Executive
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### Purpose

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1. This paper sets out the proposed parameters and outline of approach for the New Zealand Qualification Authority's (NZQA's) introduction of a micro-credential system from July 2018 and seeks your feedback on the proposals.

### Situation

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***Micro-credentials are a new education product designed to respond to fast paced social, economic and technological change***

2. These include changes to the nature of work, the impact of increasing digitalisation and automation, and the expectation of life-long learning for the workforce. Micro-credentials are intended to enable learners and other end-users to access specific knowledge and skills in a cost-effective and time-efficient way. For example, micro-credentials will provide industry with an opportunity to work with providers to bring emergent skills related to new technology to market quickly, so employers can access the skills they need. This direction of travel is well aligned to the Productivity Commission's 2017 recommendations.

***Qualifications will continue to be the primary means by which people gain skills and knowledge and access education and employment***

3. NZQA anticipates that micro-credentials will augment, rather than replace, the formal qualification system. However, NZQA anticipates that over time employers and learners will be increasingly comfortable valuing shorter modules of learning. Accordingly, while full qualifications will continue to be critical in most fields, the overall balance of total learning across full qualifications and micro-credentials may shift. The extent of this shift will be influenced by the speed of technological and other change. As people work for longer and change roles more frequently, and as professional standards continue to evolve (with the need

for recredentialed knowledge and skills), it is likely there will be an enhanced role for micro-credentials.

4. Learner achievement of approved micro-credentials is planned to be recorded on the New Zealand Record of Achievement subject to development of the appropriate mechanisms. This will ensure that the benefits of micro-credentials can be captured by learners and clearly seen by employers.

***Micro-credentials certify achievement of a coherent set of skills and knowledge developed and delivered in response to strong clear end-user need***

5. The table below provides an overview of the proposed micro-credentials system and its characteristics:

Micro-credentials	Characteristics
Educational elements	<p>Certifies achievement of a set of skills and knowledge</p> <p>Coherence of the skills and knowledge required</p> <p>Purpose statement required</p> <p>Learning outcomes required</p> <p>Assessment of learning required</p> <p>Strong evidence of need by industry, employer and/or community</p>
Credit values	5 to 40 credits
Actors who may deliver	<p>Tertiary education organisations (TEOs) with the remit to deliver programmes (quality assured micro-credentials)</p> <p>Non-TEO entities (equivalency service only, see paras 37 to 39)</p>
Administration	<p>Yearly review of quality assured micro-credentials</p> <p>Quality assured micro-credentials published on a public register</p> <p>Micro-credentials with an equivalence statement (delivered by non-TEOs) will be published on a separate register</p>

***Micro-credentials are an education product that sits between assessment standards and qualifications***

6. The table below outlines how these products may be distinguished:

Type of credential	Purpose
<p>Assessment standard (typically a small credit value)</p> <p>There are 2 types: unit standards and achievement standards</p>	<p>Specify an outcome or outcomes and the performance criteria required for achievement.</p> <p>Inform the design of assessment practice in education and training but not programme content, modes of delivery and assessment activity.</p>
Micro-credential (5 to 40 credits)	Coherent set of skills and knowledge with strong evidence of need by industry, employer and/or community

	Smaller than a qualification, allocated a level and credit value against the New Zealand Qualifications Framework (NZQF) by NZQA
Qualification (40 credits plus)	A substantive and comprehensive set of knowledge, skills and attributes to achieve a particular purpose.  Defined by credit value qualification type, and NZQF level, purpose and outcomes statements.

***The current qualifications and funding system provides considerable flexibility, but it is not meeting all training and skill needs***

7. Programmes leading to qualifications typically consist of components of learning, such as courses or modules, that can be, and sometimes are, taken separately by learners. redacted s 9(2)(f)(iv).
8. By contrast, micro-credentials in New Zealand are intended to be a quality assured means by which people can quickly gain particular skills and knowledge that enable them to respond speedily to particular industry, employer, community needs. They are intended to have integrity and coherence as stand-alone education products, valuable in and of themselves. Micro-credentials allow the education and training system to be more responsive and innovative.
9. Micro-credentials can contribute over time toward a qualification where this is appropriate. This would be achieved through TEOs using recognition of prior learning and credit recognition transfer processes when a learner presents with multiple micro-credentials, or potentially through TEOs incorporating micro-credentials into the design of new programmes. NZQA recently published new guidelines for TEOs on developing policies and processes to enable the recognition of learning for credit, although there are weak incentives for TEOs to follow good practice in this area.
10. NZQA considers that micro-credentials should in the first instance focus on skills development opportunities that are not currently catered for in the tertiary education system. There may be cases where an existing module of a programme could be offered as a separate micro-credential, but most modules are built as component parts of whole programmes and may not be suited for emergent skill needs as they stand.
11. In order to avoid duplication, fragmentation and employer confusion, it is important to avoid a situation where every programme currently delivered is disaggregated into its component parts and offered as a micro-credential. This possibility might drive undesirable TEO behaviours. Micro-credentials, in the first instance, should respond to end-user skill and training requirements not currently being met through qualifications and assessment standards.
12. All agencies agree that it is important to support greater flexibility in the system. There are labour market efficiency benefits from all publicly assured qualifications, but funding smaller units of learning (which may deliver greater private benefit than public good) needs to be carefully managed.
13. Our goal is to increase system responsiveness to unmet education and skill needs, while anticipating and mitigating unintended consequences.

***NZQA expects considerable interest in micro-credentials***

14. In engaging with TEOs, employers and other stakeholders it is clear there is significant interest in the opportunities afforded by micro-credentials. Some employers are expressing a preference for micro-credentials over qualifications. It will be important to ensure that the

medium and long term needs of industries are protected through continuing to value full qualifications, where this is appropriate.

15. Agencies expect there to be a considerable demand for micro-credentials and are looking at ways to proceed with caution yet encourage their development in what is expected to be a rapidly evolving environment. Key mechanisms for managing demand will come through setting a high bar for both quality assurance and funding decisions.

***For the purpose of NZQA approval micro-credentials will be treated as a type of training scheme with some distinctive characteristics***

16. A training scheme is defined as study or training that ‘... leads to an award but does not, of itself lead to an award of a qualification listed on the New Zealand Qualifications Framework’. Training schemes are governed by the Training Scheme Rules 2012 that apply to New Zealand TEOs.
17. Some distinctive characteristics of micro-credentials have been identified to assist in maintaining the integrity, managing the volume, distinguishing micro-credentials from both assessment standards and qualifications, and avoiding duplication.
18. The following definition is proposed for micro-credentials:  
*a micro-credential certifies achievement of a coherent set of skills and knowledge; and is specified by a statement of purpose, learning outcomes, and strong evidence of need by industry, employer and/or community*
19. Important characteristics for approved micro-credentials include:
  - they are 5 to 40 credits in size. This is because micro-credentials smaller than five credits are unlikely to have the substantive content that NZQA expects to see in these products, while those with credit values greater than 40 are likely to be too similar to qualifications.
  - there is strong evidence of need from industry and/or community,  
Both TEC and NZQA would expect end-users to demonstrate they have “skin in the game”, for example through investment and resources and active involvement in development and delivery.

***The Training Scheme Rules are an existing mechanism that can be used to quality assure micro-credentials***

20. NZQA will consider applications from New Zealand TEOs for the approval of micro-credentials and their delivery as a type of training scheme and subject, at a minimum, to the same requirements as training schemes. The Education Act limits TEOs delivery of training schemes, these are discussed in paras 32 to 35.

*Schools offering micro-credentials*

21. The Training Scheme Rules allow secondary schools to apply to NZQA for approval to provide a training scheme and therefore potentially micro-credentials.
22. NZQA would consider applications from schools on a case by case basis. However, at this stage it is considered schools are unlikely to apply given to date they have no history of seeking approval for training schemes.
23. This may reflect that the priority for young people without career experience is on obtaining initial qualifications. In future, schools may consider micro-credentials valuable in supporting the transition between secondary and tertiary study. This would be subject to further discussion with the Ministry of Education.

***The Tertiary Education Commission is looking at how and when it should fund micro-credentials***

24. The Tertiary Education Commission (TEC) advise that they currently have some ability to fund training schemes. They will take a fresh look at these funding settings in light of the growth of micro-credentials and their potential to change the role that small packages of learning play in the system.
25. redacted s9(2)(f)(iv). They are looking at their operational settings and processes to identify and address any internal barriers to funding micro-credentials. TEC will soon begin discussions with the Ministry of Education with a view to providing you advice about whether policy changes are needed.
26. The TEC notes the potential of micro-credentials to make the system more flexible and responsive to the needs of learners, employers, and other end-users.
27. The TEC and Ministry of Education also note the need to manage the risk of proliferation of low-value micro-credentials, and of industry shifting costs of funding them from the private sector to the tax payer.
28. TEC proposes, in the first instance, to target investment to a small number of high-quality micro-credentials in key priority areas developed and delivered by high-quality TEOs in whom both NZQA and TEC have confidence.

***There are some interdependencies that will need to be managed as a new micro-credentials system beds in***

29. Concurrent with the initial implementation of micro-credentials are two key Government reviews already under way. The first is the review of vocational education and training (VET) and the second the development of the Institutes of Technology and Polytechnic (ITP) Roadmap. Both of these reviews are likely to lead to changes in the structure, roles and functions of different education organisations as well as potentially changes to policy, regulatory and funding settings.
30. NZQA is also currently reviewing the NZQF. This work will be completed in 2019 if no legislative change is required, or later if legislative change is required. The review aims to update the learning outcomes across each level of the framework, explicitly show the transversal skills employers value within the level descriptors and ensure that the framework allows for the recognition of regional qualifications, international qualifications and New Zealand micro-credentials.
31. The introduction of a micro-credentials system, using the current Training Scheme Rules, does not require an immediate update of the NZQF, but incorporating micro-credentials in the NZQF review ensures that the new framework will better reflect the evolving New Zealand education and training system.

***Industry training organisations and micro-credentials***

32. Currently, Industry Training Organisations (ITOs) are required under s251(3) of the Education Act to partner with an education provider to offer training schemes and thereby micro-credentials. This is because their primary roles are to set standards and arrange training and they are not able to obtain accreditation to deliver programmes or approval to deliver training schemes (or micro-credentials) in their own right. s9(2)(f)(iv) submission to you on micro-credentials for industry training identifies this as a limitation and recommends the recognition of unit standards as micro-credentials.
33. While programmes leading to qualifications and approved micro-credentials include details of the learning activities required, unit standards serve a different function which is to inform the design of assessment practice in education and training but not programme content, modes of delivery and assessment activity.

34. NZQA considers it necessary, in the early phases of implementation, to quality assure the learning included in each micro-credential. Our recent experience in monitoring programme delivery and assessment practices indicates it is prudent to incorporate micro-credentials into the overall quality assurance framework.
35. The VET review is expected to clarify the roles of different types of education organisations including ITOs and NZQA will ensure that the micro-credential system is adjusted, as may be necessary, to any changes resulting from the VET review.

***NZQA, with other agencies, will evaluate and review the effectiveness of the micro-credentials system***

36. A review will be commenced in Q4 2018/19, approximately nine months after implementation of a micro-credentials system, to confirm if approved micro-credentials are meeting the policy intent, identify any challenges, and make recommendations for enhancements. It also provides a timely opportunity to ensure the alignment of micro-credentials with changes arising from particularly the VET review.

## **Micro-credentials from non-TEOs**

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***Separate from New Zealand quality assured micro-credentials, NZQA also proposes to establish a service that assesses the content of micro-credentials from non-TEOs (domestic and international) in terms of levels and credits on the NZQF***

37. This assessment can be understood as an equivalence service. An example of this equivalence was trialled in NZQA's pilot with a United States based online education company, Udacity, where NZQA assessed the content of Udacity's Self-driving Car Engineer Nanodegree programme to 60 credits of learning and assessment at Level 9 of the NZQF.
38. These micro-credentials would not be quality assured. NZQA would use clear mechanisms to show end-users that a micro-credential assessed in terms of equivalence to the NZQF does not mean quality assurance of the micro-credential. Entities would need to use a NZQA prescribed statement that the micro-credential was levelled to the NZQF and given a specific credit equivalent alongside a clear statement that the micro-credential and the delivery was not quality assured by NZQA.
39. This same equivalence mechanism may later be extended to allow for international qualifications (such as Information Technology drivers' licence) and regional qualifications (such as ASEAN qualifications in tourism) to be referenced against NZQF.

## **Engagement and consultation**

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***The proposals for micro-credentials have been developed in conjunction with a sector working group and alongside a series of focus groups arranged with various end-users of the NZQF***

40. Focus groups were held with employers, learners, Māori, Pasifika, registration bodies and qualification developers seeking feedback on the utility of the NZQF and qualifications system. At each of these sessions, the issue of micro-credentials dominated discussion. These groups noted that the qualifications system has not adapted appropriately to labour market needs. NZQA has also separately engaged with education provider peak bodies over the past year about the opportunities and risks of introducing micro-credentials.
41. The importance of including different kinds of education products, in addition to qualifications, on the framework was raised. Each focus group identified that recognising small dynamic packages of learning, such as micro-credentials, would assist individuals learning undertaken at any stage of their education or employment. The business and employer group wanted more

flexibility and agility in the system, while learners explicitly expressed interest in access to micro-credentials.

42. The feedback has been used to inform both the development of the proposed approach and the review of the NZQF.

***NZQA consulted publicly on draft proposals for the recognition of micro-credentials from 5 March to 13 April 2018***

43. Feedback was received from 50 organisations and 26 individuals. The majority of submissions supported the recognition of micro-credentials in New Zealand and confirmed the demand for a micro-credentials system. Submissions also provided valuable advice on the draft proposals. NZQA has refined its approach following the feedback received.
44. The key themes from feedback, the general views expressed, and NZQA’s response are summarised below:

<b>Theme</b>	<b>General View</b>	<b>NZQA Response</b>
Definition	<ul style="list-style-type: none"> <li>• Definition requires further refinement</li> </ul>	<ul style="list-style-type: none"> <li>• The definition is now more educationally appropriate</li> </ul>
Credit Values	<ul style="list-style-type: none"> <li>• Originally proposed 10 credits minimum for micro-credentials is too high</li> <li>• 60 credits (and more) is too large</li> </ul>	<ul style="list-style-type: none"> <li>• Final credit value proposed to NZQA Board 5 to 40 credits</li> </ul>
Duplication/Proliferation	<ul style="list-style-type: none"> <li>• Duplication and proliferation are concerns</li> </ul>	<ul style="list-style-type: none"> <li>• Quality assurance through Rules</li> <li>• Require evidence of strong need by industry/community</li> <li>• Central published register of approved micro-credentials</li> </ul>
Training Scheme Rules	<ul style="list-style-type: none"> <li>• Qualified support for using training scheme mechanism</li> </ul>	<ul style="list-style-type: none"> <li>• Training Scheme Rules confirmed as vehicle for micro-credentials</li> </ul>
Equivalence to NZQF	<ul style="list-style-type: none"> <li>• Mixed support for equivalence</li> <li>• Ensure no confusion between equivalence and quality assured micro-credentials</li> </ul>	<ul style="list-style-type: none"> <li>• Set up a new assessment service to undertake equivalence</li> <li>• Use clear mechanisms to show that equivalence does not mean quality assurance of micro-credential</li> </ul>

## Next steps

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***NZQA is working with other agencies to agree to the proposed approach and the operationalisation of the micro-credential system***

45. We will keep you informed on our progress and update you fully before we go live from early July 2018.
46. NZQA would appreciate any feedback from you before finalising the proposed approach.



Karen Poutasi (Dr)  
Chief Executive, NZQA  
25 May 2018

**Chris Hipkins**  
Minister of Education

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