Qualification Title: New Zealand Diploma in Networking (Level 6)

Qualification number: 2600

Date of review: 17 June 2019

This report refers to graduates awarded this qualification prior to: 31 December 2018

Final decision on consistency of the qualification: National consistency is confirmed

Threshold:

The threshold to determine sufficiency with the graduate profile was determined as evidence of:

Prepare people to enter employment in IT roles such as a network professional in a service environment, or to proceed to further study.

Graduates of this qualification will be able to:

- Apply advanced wireless and switching configuration and troubleshooting techniques to resolve switching and routing issues for organisational networks.
- Apply routing configurations and troubleshooting techniques to implement and maintain networks.
- Analyse the impact of convergence on network infrastructure and implement unified communications to maintain acceptable organisation service levels.
- Apply specialised knowledge of networking protocols and technologies to configure, maintain and monitor networks.
- Analyse and implement advanced network security to protect and secure assets and to meet best practice and organisational requirements.
- Analyse networking performance scenarios and recommend remedial actions to maintain acceptable organisation service levels.
- Analyse and document requirements for routing, switching, and server infrastructure to support IT infrastructure planning.
- Apply IT service management and change management processes and procedures to comply with organisational requirements.
- Behave with integrity as a responsible Information Technology professional, to contribute positively to society.
- Apply communication, information design, personal, and interpersonal skills, clearly and professionally to enhance working effectiveness, efficiency, and quality outcomes in an organisational environment.
- Apply project management tools and techniques to an IT related project, to analyse and solve problems.
Final consistency review report

Education Organisations with sufficient evidence

The following education organisations have been found to have sufficient evidence.

<table>
<thead>
<tr>
<th>Education Organisation</th>
<th>Final rating</th>
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</thead>
<tbody>
<tr>
<td>Ara Institute of Canterbury</td>
<td>Sufficient</td>
</tr>
<tr>
<td>Abacus Institute of Studies</td>
<td>Sufficient</td>
</tr>
<tr>
<td>New Zealand School of Education</td>
<td>Sufficient</td>
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<tr>
<td>Toi Ohomai Institute of Technology</td>
<td>Sufficient</td>
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</table>

Introduction

This is a 120-credit qualification developed by an expert working group convened by NZQA, the qualification developer. The purpose of this qualification is to provide Aotearoa New Zealand with people who have specialist knowledge and professional and technical skills in networking.

Graduates will have internationally relevant skills and are prepared to enter employment as entry level networking professionals in a service environment (as administrators, engineers or network support workers) or to proceed to further specialist study especially at degree level.

Entry requirements for the qualification are generalist computing skills at level 5 (such as the New Zealand Diploma of Information Technology Technical Support (Level 5) or equivalent knowledge, skills and experience.

The qualification has no optional strands.

The majority of students will undertake this programme full-time, but part-time study options are also available. There are both domestic and international graduates.

Providers report a total of 47 graduates (28 in 2017 and 19 in 2018).

The qualification is due for review in the next few months.

Evidence

The education organisations provided a range of evidence to demonstrate that their graduates met the graduate profile outcomes.

The criteria used to judge the evaluation question were:

- The nature, quality and integrity of the evidence presented by the education organisation
- How well the organisation has analysed, interpreted and validated the evidence, and used the understanding gained to achieve actual or improved consistency
- The extent to which the education organisation can reasonably justify and validate claims and statements relating to the consistency of graduate outcomes, including in relation to other providers of programmes leading to the qualification.

Examples of evidence presented included:

- Mapping of course content to graduate profile outcome.
- Moderation plans and reports.
- Graduate destination data with only 17 of 47 graduates employed in the IT industry. A further twelve graduates are reported as undertaking further study. However very few graduates had progressed yet to professional certification.
Final consistency review report

- Graduate and (less frequently) employer surveys and feedback. For two providers with very few graduates, this was complicated by the fact that information about the employment of graduates was limited by New Zealand Defence Force confidentiality constraints.
- General evidence of employer interaction and feedback from tutors involved in the next level of study.

How well does the self-assessment and supporting evidence provided by the education organisation demonstrate that its graduates match the graduate outcomes at the appropriate threshold?

There was good evidence of effective course planning and commitment to quality delivery from all providers.

However, as the focus of evidence moved from input through output to outcome, the quality of evidence became more variable. In many cases, this was due to low numbers of graduates, or graduates being too recent to provide meaningful feedback on how their skills and capabilities are being used effectively in the workplace.

Only a limited number of graduates were reported as being employed in the IT industry and in some cases, there is uncertainty about how many are employed in roles relevant to this qualification. It is also accepted that graduates at entry level within organisations may not be immediately placed in roles that fully utilise their skill set.

The qualification is also a pathway to higher level study.

In most cases, evidence from employers supporting consistency of outcomes was weak.

It was noticeable that some providers are relying on industry feedback at a generic level, often across a range of IT programmes, rather than having a specific focus on the graduate profile of this programme.

Overall, the self-assessment and supporting evidence supplied by organisations found sufficient demonstrates that their graduates meet the graduate outcomes at the determined threshold.

Special Focus (includes special focus on a strand or outcome)

There was no special focus in this review. All graduate outcomes are deemed to be important (although it is recognised that these are likely to be collapsed into fewer outcomes during the upcoming qualification review).

Examples of good practice

One provider had facilitated a project for their students with industry. However, numbers were small, and it is presently unclear how this might scale-up in future (this provider did not have an intake in 2018).

Most programme teams were tracking graduates effectively, however some felt that their organisations could do more to provide effective systems to help them do this.
Final consistency review report

Issues and concerns

There was some uncertainty in the review meeting whether one organisation had any graduates in this qualification prior to their take-over by another during 2018. Clarity regarding this should have been gained prior to the review meeting.

Recommendations to Qualification Developer

There was an opportunity for some detailed discussion with the Qualification Developer. Consideration needs to be given to whether this qualification should continue to exist, given the relatively low recruitment numbers. After discussion, the general consensus around the table was that this is a valuable qualification and perhaps needs more time to gain recognition within New Zealand. Internationally, graduates at this level are employable. Providers also felt it was a good pathway qualification into higher level study.

There have been significant changes to Cisco Certification requirements in this area and it is important that the review fully considers these.

Some providers were concerned that there may be too much content within the current qualification – certainly the number of GPOs needs careful review. Possibly, though, some providers are not using the flexibility that is already built into the qualification to accommodate emerging technologies. Clearly this will be an area of discussion in the review.

There was a general consensus that employers are looking for graduates with a good balance of soft skills and technical skills.