Qualification Title: New Zealand Diploma in Construction (Level 6) with strands in Construction Management and Quantity Surveying

Qualification number: 2420

Date of review: 9 July 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:

Graduates having the essential theoretical knowledge, skills and aptitude to work under supervision, as either construction managers or quantity surveyors, depending on their qualification strand. The required knowledge, skills and aptitudes are fully articulated in the core and strand graduate outcomes as shown below.

Graduates will be able to:

- Understand and apply knowledge of the roles, standard documentation and administrative requirements of the construction industry, and communicate in a construction related context.
- Operate within the statutory and regulatory environment as it applies to the construction and design of buildings.
- Manage construction and resource allocation, programming and construction activities, for a medium building and for medium and large buildings, understand the principles related to the provision of services.
- Evaluate and select materials and finishes for building projects, taking into account environmental aspects of the design and construction techniques to be used.
- Apply a broad knowledge of the structure and structural principles for building work including foundations, substructure, the envelope and the interior, and passive fire protection systems for medium and large buildings.
- Analyse, select and administer construction contracts including the preparation of a tender submission from trade sections and other financial components and value building works up to and including final account statements.
- Work in a team and identify organisational principles in a construction and consulting environment.

Graduates of the Construction management strand will also be able to:

- Develop construction plans and methodologies, for medium buildings.
- Create technical sketches to communicate information relevant to the construction project.
- Assist with general construction management tasks.

Graduates of the quantity surveying strand will also be able to:

- Analyse and present feasibility information and preliminary estimates to clients.
- Assemble quantity surveying documentation relevant to specialist and specific trade sections and measure a schedule of quantities for a small building of an individual trade section including services.
- Collate all priced components into a tender submission for medium and large buildings using tender process knowledge.
Introduction

The purpose of this 240-credit qualification is to provide the construction industry with individuals who have the essential theoretical knowledge, skills and aptitude required to enter employment in construction management or quantity surveying on residential and commercial building projects, under the supervision of a more experienced practitioner. The qualification has core graduate outcomes and two strands; Construction Management or Quantity Surveying. Each strand has three additional graduate outcomes.

Nine tertiary education organisations with approved programme had students graduate during the review period. Many but not all education organisations had graduates from both strands. BCITO is the qualification developer and a representative participated in the consistency review meeting.

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

Programme related evidence

- All submissions provided some evidence of the context in which the programme was delivered and assessed.
- Nearly all education organisations provided a matrix showing how the learning outcomes mapped against the ten graduate outcomes (seven core outcomes and the three that were

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>Otago Polytechnic</td>
<td>Sufficient</td>
</tr>
<tr>
<td>Open Polytechnic</td>
<td>Sufficient</td>
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<tr>
<td>Waikato Institute of Technology</td>
<td>Sufficient</td>
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<tr>
<td>Universal College of Learning</td>
<td>Sufficient</td>
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<tr>
<td>Toi Ohomai Institute of Technology</td>
<td>Sufficient</td>
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<tr>
<td>Wellington Institute of Technology</td>
<td>Sufficient</td>
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<tr>
<td>Unitec New Zealand</td>
<td>Sufficient</td>
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<tr>
<td>Northland Polytechnic</td>
<td>Sufficient</td>
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</table>
specific to the chosen strand). Few organisations showed how many assessors had had their judgements moderated.

- The degree of internal and external moderation activity varied. A few organisations undertook limited internal and/or external moderation and had variable results; this was a significant or even serious gap. Some clearly reported the results and outlined the actions they took/will take to improve assessment and moderation practice. A few organisations clearly articulated how well the moderation activity had covered the ten graduate profile outcomes, providing useful validation of the graduates demonstrating the graduate profile outcomes.

Graduate feedback

All education organisations had gathered graduate feedback via phone and/or electronic surveys. The quality of the questions and the results varied. Most, but not all, had sought the graduates’ views on how well they had demonstrated the graduate profile outcomes. The strongest surveys used a well-designed rating scale. Structured phone interviews provided better response rates than electronic surveys. The analysis of the results was often limited. Stronger submissions identified the key patterns and the follow-up action if the graduates’ level of confidence was lower for particular graduate profile outcomes. A few submissions clearly evaluated overall, how well the findings supported that the graduate cohort had demonstrated the graduate profile outcomes.

Destination related evidence

- Many graduates progressed into construction management and quantity surveying roles. Some education organisations provided details of the organisation and workplace roles in which the graduates were working; this was good supporting evidence. Often the education organisations collected this evidence when surveying the graduates; the clearest submission analysed the survey response rate and therefore the proportion of total graduates who were known to be in related employment.

- Some organisations asked the employers to rate how well the graduates were demonstrating the graduate profile outcomes using a rating scale. Stronger submissions identified those outcomes which could not be rated as the workplace role of the graduate did not provide an opportunity to demonstrate that capability. There was a wide variation in the quality of the analysis of these findings.

- A minority of graduates enrolled onto a higher-level and related training programme. Most education organisations provided the title of the programme and the name of the education organisation; this was good supporting evidence.

Conclusion

- Few organisations strongly triangulated the different evidence sources. For example, few compared how well the external moderation results had confirmed the internal moderation results. Some used the same questions and rating scale when asking the employers and graduates respondents to rate the graduate’s graduate profile outcome capability and triangulated these findings to reach some overall conclusions.

- Few provided well justified conclusions. This involved evaluating how well the results showed that the graduates had demonstrated the graduate profile outcomes at the
threshold. The stronger submissions also rated the quality of the evidence they had collected and analysed. This was clearly the most challenging task for the organisations.

- Most organisations identified some gaps and the actions to address these gaps. There was variation in how well they identified the significance of the gaps and the level of detail and how they were addressing the gaps.

**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?**

Many education organisations provided sound programme related evidence. The internal and external moderation activity covered the graduate profile outcomes well and the results generally confirmed the assessor judgements. The analysis and understanding of this data, for a consistency review purpose, was more limited.

Well-designed graduate surveys clearly rating the graduate’s capability against the graduate profile outcomes, along with a high proportion of graduates participating in the survey was good quality evidence. The analysis and understanding of the survey data was at times of a lower quality.

Some organisations provided detailed destinational evidence showing graduates pathway onto expected work and further study. Employer feedback on the graduate’s capability, with reasonable response rates, strengthen the case for sufficiency.

The stronger submissions clearly identify the significance of the gaps and provided credible actions to address them. Triangulating the programme-related, graduate feedback and destinational evidence to reach a robust conclusion proved challenging, but this was not a serious weakness. Overall, the self-assessment and supporting evidence supplied, by those 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)

None

**Examples of good practice**

One TEO when designing its graduate and employer feedback survey added the phrase ‘under supervision’. This phrase was explicitly stated in the strategic purpose statement of the qualification. The meeting agreed this was important guidance to give the survey respondents. For example, respondents were asked how strongly they agreed that graduate had demonstrated the following graduate profile outcome: “Under supervision, operates within the statutory and registry environment as it applies to the construction and design of buildings”.

**Issues and concerns**

There were no specific issues and concerns raised during this consistency review.

**Recommendations to Qualification Developer**

There were no specific recommendations.