**From competency to graduate profiles: New Zealand’s shift to a relational approach**

**Abstract**

In 2008, the New Zealand (NZ) Qualifications Authority (NZQA), responsible for ensuring NZ qualifications are credible and robust both nationally and internationally, signaled the need for a review of all qualifications between levels 1-6 on the 10 level national qualifications framework (NQF). The review process mandated qualifications to be registered on the new NZ qualifications framework (NZQF) to be re-structured to meet outcome statements of graduate profiles and education and employment pathways, replacing NQF qualifications based on lists of mandatory and elective competency-based standards. This paper provides background to the move from the realist to a relational perspective towards framing qualifications, with the relational perspective affording opportunities for NZ qualifications to better recognise the complex nature of graduate or occupational identities.

Therefore, this paper traces the development of the stakeholder / market-led NZQF and discusses the advantages and challenges posed by the shift to graduate profile qualification outcomes. Relational perspectives to improve ways of understanding graduate profile approaches exampled by graduate identity and occupational capacity / identities are discussed. The current recommendations from the NZQA for the assurance of national consistency of graduate outcomes across qualifications are deliberated and recommendations made to support understanding and implementing the new graduate profile based qualifications.

**Introduction**

Aotearoa New Zealand (NZ) is one of a handful of countries with a unified or comprehensive qualifications system (Allias, 2007). The government organization responsible for the implementation of the National Qualifications Framework (NQF) is the NZ Qualifications Authority (NZQA). The NQF is also unique in that its original premise was to encompass all levels of qualifications from secondary schooling through to post-graduate degrees (Strathdee, 2011). Engaging the University sector providing qualifications from levels 7 upwards on the 10 level NQF proved a political challenge (Strathdee, 2011). Therefore, to the present, the majority of the qualifications registered on the NQF are from levels 1-6.

In 2008, the NZQA launched a review of the NZ qualifications system and found, as it stood at the time, the system to be difficult for learners, employers and industry to understand and navigate (NZQA, 2009). Part of the issue was the large number of qualifications (i.e. over 6000 with many being similar) registered on the NQF. As a result of the review, seven changes were recommended for implementation. These were, the establishment of a unified NZ Qualifications Framework (NZQF); the NZQF would consist of quality assured qualifications allowing for inclusion of ‘local components’; to ensure currency, mandatory periodic review of all qualifications are to be undertaken; qualification outcome statements had to be strengthened and standardized; qualification developers are required to undergo a mandatory pre-development of qualification stage to rationalize the need for the qualification; industry involvement would be strengthened; and clear information on status of qualification (i.e. active, inactive or closed) was required. It was proposed all the seven recommendations would be completed by 2010, apart from recommendation 3 for the mandatory review, which is still in progress.

In December 2010, with updated version in 2014, guidelines for the approval of qualifications at levels 1-6 for listing on the NZQF were released (NZQA, 2011; 2014a). Principles for the development of qualifications were issued. These principles are for qualifications to be needs based, focused on outcomes, flexible (i.e. achievable across different ‘setting’s including workplace and provider-based) and to be trustworthy and accountable to a range of stakeholders. These documents also described the two stage process for qualifications development, post-Targeted or Mandatory Review of Qualifications (TRoQ/MRoQ). Firstly, an ‘application to develop’ was required to establish if new qualifications were relevant and did not duplicate other qualifications already registered (i.e. to meet recommendation 5 above). Forms and information at this first stage included a template to describe the qualification, an application for approval to develop and evidence of pre-development stage stakeholder attestation. Other evidence required include needs analysis and a narrative of how decisions were made with regards to the proposed qualification. The second stage was the application for approval. Again, an application for approval of a qualification was to be submitted along with attestations from various qualification development stakeholders supporting the qualification (NZQA, 2011). Amendments were made to the Education Act in 2011 to require all quality assured qualifications, including both university and non-university, to be registered on the NZQF by the end of 2015 (Spronken-Smith et al., 2013).

Within the post TROQ/MROQ environment, qualifications registered on the NZQF require the specification of outcome statements composed of three components. These are graduate profiles, education pathways and employment pathways. Graduate profiles identify the learning outcomes required and describe what the learner will know, understand and be able to do, on achievement of the qualification. The educational pathway lists other qualification possibilities the graduate may enroll in after completion of the qualification. The employment pathway provides a guide to the occupational roles the graduate is qualified to work in (NZQA, 2011).

**Graduate profile or graduate outcomes**

Hence, the re-configured NZQF, forces a shift from qualifications listing the completion of mandatory and elective competency-based unit standards to qualifications describing the graduate profiles, and employment or educational pathways of graduates completing programmes of study. Programmes of study are the ways deployed by organisations (i.e. workplaces, training providers) to structure and organize ‘training’ or learning to achieve graduate outcomes (NZQA, 2011). However, the term graduate profile may be understood in several ways. For instance, a recent NZ study on ‘graduate outcomes (GO) defined GO as an umbrella term used to cover a range of results related to the knowledge, skills and values acquired through higher education. In the study, GOs were envisaged to encompass both graduate attributes (GA) and graduate profiles (GP) (Spronken-Smith et al., 2013 p. 1). However, the NZQA chose to use the term graduate profile to mean graduate outcomes, possibility to try to ameliorate confusion with ‘learning outcomes’ (LO). Hence, as envisaged by the NZQA (2009), graduate profile statements are at the ‘heart’ of NZ qualifications reform and define the measurement of the effectiveness of qualifications. Therefore, this article uses the NZQA term, graduate profile to encompass graduate outcomes and attributes.

As defined by NZQA, the ‘outcomes’ within *graduate profile* statements in NZ qualifications must describe the performance of the graduate in relation to the designated level of the qualification awarded; specify the key capabilities the graduate will attain as a result undertaking and completing a programme of study; specify requirements for eligibility for licensing or professional registration and any critical practice or employment elements; use descriptors that reflect the level of the qualification; be allocated an indicative credit value, the total of which must equal the qualification credit value where one credit is equivalent to 10 hours of notional hours of learning; appropriately reflect the range of skills, knowledge and attributes applicable to the particular programme of study or training (NZQA, 2011). Additionally, a ‘good’ graduate profile should provide clear descriptors to employers and learners as to the high level skills, knowledge and attributes role of graduates. The *education pathway* outlines the further education pathways a graduate of the qualification can undertake. For example, a certificate can be the first step that leads through diploma to a bachelor’s degree. The *employment pathway* identifies the occupational roles (i.e. role descriptors) in which a graduate may be qualified to work, or the contribution they may make to their community (NZQA, 2014a). Shifting the framework of qualifications from prescribed competency unit standards to the more holistic graduate profile means NZ qualifications are afforded the opportunity to better acknowledge the complex nature of graduate or occupational identities.

**Realistic vs relational approaches to understanding graduate outcomes**

An approach to framing graduate identity and employability is offered by Holmes (2013). Graduate identity and employability may be understood through using realist or relational theoretical perspectives. A realist perspective makes the assumption “that there are discrete, existent, objectively real and (in principle) identifiable characteristics of graduates that constitute their identity and employability” (Holmes, 2013 p 1045). In contrast, the relational perspective posits “meaningful, significant human behavior cannot be merely, and objectively observed” (Holmes, 2013 p 1049). Hence, as defined by the NZQA, the shift from an atomistic listing of ‘unit standards’ to the development of graduate profile statements in NZ qualifications may be classified as a shift from realistic to relational approaches. Due to the retention of descriptive graduate profiles in the form of graduate outcomes, there is but a small shift along the continuum between the realistic and the relational. However, the movement of the construct of the NZQF qualifications signals a crucial swing in the intended curriculum. Billett (2011) proposes, through a study of vocational education curriculum, there are perceived differences in the *intended curriculum* as constructed by statuary bodies (e.g. NZQA, registration boards, professional councils); in how teachers and institutions (i.e. tertiary organisations) interpret the intended curriculum to deliver the *enacted curriculum*; and then in the learning students engage with as the *experienced curriculum*. Therefore, although the NZQF changeover to graduate profile statements may be slight with regards to moving along the relational continuum, qualifications couched as graduate profiles represent significant influences on the enacted curriculum. In particular, on assessment practices moving towards holistic / inferential (Beckett, 2000) emphases as compared to assessment of atomized competency ‘units’.

**Implications of shifting from realist to relational perspective**

Discussion on the implications to the enacted curriculum follows. In particular this section, discusses the implications wrought by the NZQF shift to graduate profiles on the enacted curriculum, how qualifications and their ‘outputs’ are viewed by NZ vocational educators and the effects of the NZQA’s process for assuring national consistency of graduate outcomes.

*From competency to occupational capacity as described by graduate profiles*

Four challenges for using standards are identified by Sadler (2005). These are conceptualising standards; setting standards; communicating standards to students and academic staff; and becoming proficient in the use of standards. This section discusses the aspect of how a shift in the intended curriculum impacts on how enacted curriculum standards are conceptualized. As prefaced above, the expression of NZ qualifications in terms of graduate profiles, indicates a small shift towards acknowledging the ‘relational’ nature of human endeavor. The qualification systems of some countries, notably European qualification systems (Allias, 2010) allow for ‘occupational capacity’ (Clarke, Winch and Brockman, 2013) as life-long learning trajectories. Clarke, Winch & Brockmann (2013) compare the German ‘beruf / occupational capacities’ approach with the English vocational education and training competencies for brick layers. Of note is the German system’s holistic approach of building occupational capacity across German brick layers’ occupational lifespan rather than the English system of pre-trade skills preparation and the assessment of itemized / atomized competency standards.

When perceived as a whole, NZ qualification objectives through the definition of graduate profiles and educational and employment pathways, show an intention to recognize career and life-long learning implications of completing qualifications. The NZQF, in line with the NZ Government’s strategy to align qualifications with NZ’s economic progress (see Statement of Intent for NZ tertiary education (Tertiary Education Commission, 2014)) is envisaged as a vocational pathway, encouraging and supporting the development of careers across a lifetime. The TROQ/MROQ process has been undertaken with industry sectors and discipline ‘fields’ to ensure qualifications at various levels of study are developed comprehensively through connections between progressive graduate profiles, and accompanying employment and educational pathways. Therefore, an additional shift in understanding the function of qualifications is now required with stakeholders (students, employers, vocational educators etc.). In particular, to understand the consequences on career planning through how qualifications, at different levels in discreet discipline areas, may be scaffolded or pathwayed from one level to the next.

*Impact on educator identities*

The change of emphasis produced through the enacted curriculum, leads to changes in the roles of NZ vocational educators. Educators’ roles are altered from being ‘facilitators’ of the completion of competency assessments to becoming ‘industry models’ and mentors of learners’ attainment of graduate profile outcomes. A change in how standards are perceived (Sadler, 2005) leads to ways NZ vocational educators make sense of graduate profiles and modifications to the structure of programmes of study. In particular, aspects of teaching ‘delivery’, the types of learning activities used to assist students to ‘become’ practitioners, and processes of assessment, all require re-think, re-development and communicating to both vocational educators and vocational learners.

*Assessment and assessor challenges*

Changes in the focus of intended curricula influence the enacted curriculum. In this section, the aspect of assessments and assessors’ proficiencies to use graduate profiles are discussed. In particular, “assessment drives what students learn and standards drive industry” (Woods, Thomas & Rigby, 2011, p1). Jones (1999) and more recently, Richards (2014) propose the importance of assessors understanding the implications of assessment judgement. Educational judgement requires considerable expertise. Recent Australian research (Hodges, 2014; Richards, 2014) indicates the ability to interpret competencies as requiring sophisticated understanding of the nuances and implications of assessment processes. Hodges suggest “interpreting competencies is a sophisticated ability and that its development may require different initial and continuing education and training [for vocational educators] from that currently provided” (2014, p.27). Richards (2014) writes of the challenges in grading competency based assessments in the Australian context. It follows, the changeover from competency to graduate outcomes requires capability development with educators and assessors.

In NZ, aspects of holistic competence through inferential assessments (Beckett, 2010) have been encouraged through the implementation of the gathering of ‘naturally occurring evidence’ of competency (exampled through recent work by Vaughan, Kear & MacKenzie, 2014) and the use of eportfolios (example of work using mobile phones to gather evidence of skill attainment and occupational identity by Chan, 2011). However, there remains much work to be completed for entire sectors of the NZ vocational education system, to understand and work towards assisting learners to attain graduate profiles. Specifically, to assure ‘consistency’ of graduate profile outcomes across the NZ tertiary context (see below for further discussion on ensuring consistency across qualifications). Su (2008) provides an overview of how to implement holistic assessments of graduate attributes. Inferential assessments (Beckett, 2010) are improved if significant ‘hot actions’ (Hager, 2001), often instances when work tasks require judgment, problem solving or negotiation, are identified as assessment way markers. In particular, a requirement to understand and deploy effectively, various strategies for ‘informal assessments’’ contribution to assists students’ learning. Where students may not have access to authentic practice contexts, role-plays, simulations and project work provide opportunities for the collection of graduate profile achievement.

*Ensuring consistency across qualifications*

The challenge now, as New Zealand qualifications become registered as an outcome of the TRoQ/MRoQ process, is to ensure graduate profiles are met consistently across the various public and private training organisations offering programmes of study and attainment of qualifications through workplace learning and training. Graduate profiles provide indicators (i.e. traces the intended curriculum) for programme developers to design programmes of study (i.e. the enacted curriculum). Hence, with graduate profile outcomes situated towards the relational approach, there is a need to understand how graduate profiles will be envisaged by students, educators and industry. Oliver cautions that “measuring graduate outcomes, particularly generic outcomes, is contentious and difficult” (2011 p. 3).

In 2011, a discussion paper (Competency International Limited, 2011) contracted by NZQA, reviewed strategies for maintaining consistency of NZ qualifications’ graduate outcomes. The discussion paper recommended four methods to assure national consistency of graduate outcomes of qualifications. The methods were: light sampling, provision of provider portfolios, common critical outcome assessment and ‘next user’ method. A focus of the paper was on the consistency of assessments. In particular, to ensure comparable outcomes were achieved across providers and assessors. Following in 2014, the guidelines for assuring national consistency of outcomes for qualifications were published (NZQA, 2014b). This document details the quality assurance framework for ensuring consistency of graduate outcomes. The responsibilities of qualification developers and ‘consistency reviewers’ are detailed. NZQA ‘consistency reviewers’ are required to facilitate the consistency review process by identifying and agreeing to the form of evidence required and reaching agreement on the rating of quality evidence for each tertiary education organization. Ratings are for consistency to be sufficient or not sufficient. The process had been envisaged as part of the formative quality assurance framework for all NZ tertiary organisations offering NZQF qualifications. The national consistency (at levels 1-6) form part of the triangulation with a ‘self-assessment’ process and external evaluation also providing evidence of tertiary organisations’ capability and integrity. The first programmes post TROQ/MROQ are only now (beginning of 2015) undergoing the process to establish consistency. The process for ensuring consistency across NZQF qualifications is thus, emergent.

*Specific challenges within the NZ context*

At the moment, there is some disconnect between the philosophies laid out by NZQA (2011) and tertiary funding mechanisms for training providers and students. Both NZQA (2011) and the Tertiary Education Commission (2014) broadcast similar objectives of ‘flexibility’ in provision. However, funding of training providers is based on qualification completion. Therefore, there is tension between meeting the needs of learners’ / employers’ / industries’ flexibility and funding structures which are outcomes based. Learners are expected to complete qualifications within set time-frames. Implications to funding for students (through ‘student loans’) and training providers occur when learners dis-engage part-way through programmes, sometimes with employment or educational pathway outcomes, but without completing qualifications.

**Conclusion**

This paper has presented the evolution of the NZQF from a competency / realistic approach towards graduate profile / relational outcomes perspectives. There is still some way for the NZQF to move towards a truly relational perspective but the journey has begun. Post TROQ/MROQ challenges are posed through the development of programmes of study and related assessment processes. The NZ continuation of the movement from realistic to relational hinges on ensuring the consistency of qualifications process is transparent and formative. Hence, the intended curriculum’s shift towards relational approaches has prompted re-developments in the enacted curriculum, with the effects on students’ experience curriculum more evident over the next few years.

**References**

Allias, S. (2010). The Implementation and Impact of National Qualifications Frameworks: Report of a Study of in 16 countries. Geneva, Switzerland: International Labour Office, Skills and Employability Department.[http://www.oit.org/wcmsp5/groups/public/---ed\_emp/ ifp\_skills/documents/meetingdocument/wcms\_126589.pdf](http://www.oit.org/wcmsp5/groups/public/---ed_emp/%20ifp_skills/documents/meetingdocument/wcms_126589.pdf)

Beckett, D. (2001). Hot action at work: A different understanding of ‘understanding’. In T.Fenwick (Ed.). *Sociocultural Perspectives on Learning Through Work*. New Directions for Adult and Continuing Education Series. San Francisco, CA: Jossey Bass.

Beckett, D. (2008). Holistic competence: Putting judgement first. *Asia Pacific Education Review*, 9(1), 21-30.

Billett, S. (2011) *Vocational education: Purposes, traditions and prospects*. Dordrecht, Netherlands: Springer.

Chan S. (2011). Becoming a baker: Using mobile phones to compile eportfolios. In N. Pachler, C. Pimmer, & J. Seipold (Eds.). Work-based mobile learning: concepts and cases; A handbook for academics and practitioners (pp. 91- 115). Oxford, UK: Peter Lang.

Clarke, L., Winch, C., & Brockmann, M. (2013). Trade-based vs occupational capacity: The example of bricklaying in Europe. Work, Employment and Society, 27(6), 932.

Competency International Ltd. (2011). Ensuring the consistency of qualification outcomes – a discussion paper. Wellington, New Zealand. New Zealand Qualifications Authority. <http://www.nzqa.govt.nz/assets/Studying-in-NZ/New-Zealand-Qualification-Framework/consistency-qual-outcomes.pdf>

Hager, P. (2001). Hot action at work: A different understanding of “understanding. *New Directions for Adult and Continuing Education: Sociocultural Perspectives of Learning through Work, 92*. San Francisco, CA: Jossey-Bass.

Hodge, Steve 2014, *Interpreting competencies in Australian vocational education and training: practices and issues,* Research Report, National Centre for Vocational Education and Research (NCVER), Department of Industry, Commonwealth of Australia.

Holmes, L. (2013). Realist and relational perspectives on graduate identity and employability: A response to Hinchliffe and Jolly. *British Educational Research Journal, 39*(6), 1044-1059.

Jones, A. (1999). The place of judgement in competency-based assessment. Journal of Vocational Education and Training, 51 (1), 145-160.

NZQA (2009). Targeted review of qualifications consultation document. <http://www.nzqa.govt.nz/assets/About-us/Consultations-and-reviews/TROQ/troq-consultation.pdf>

NZQA (2011). Guidelines for approval of programmes of study leading to qualifications listed on the New Zealand Qualifications Framework and accreditation of tertiary education providers. Wellington, New Zealand: NZQA. <http://www.nzqa.govt.nz/assets/Providers-and-partners/Registration-and-accreditation/guidelines-approval-programme-accred.pdf>

NZQA (2014a). Guidelines for approval of qualifications at levels 1-6 for listing on the New Zealand Qualifications Framework. Wellington, New Zealand: NZQA <http://www.nzqa.govt.nz/assets/Studying-in-NZ/New-Zealand-Qualification-Framework/Guidelines-for-approval-of-New-Zealand-qualifications-at-levels-1-6.pdf>

NZQA (2014b). Guidelines for assuring national consistency of graduate outcomes for qualifications listed on the New Zealand Qualifications Framework.<http://www.nzqa.govt.nz/assets/Providers-and-partners/Registration-and-accreditation/Consistency-of-graduate-outcomes/guidelines-consistency-of-graduate-outcomes.pdf>

Oliver, B. (2011). Good practice report: Assuring graduate outcomes. Strawberry Hills: Australian Learning and Teaching Council (ALTC).

Richards, J. (2014). An old chestnut revisited: Teachers’ opinions and attitudes towards grading with a competency based training framework. *International Journal of Training Research, 12*(3), 182-191.

Sadler, R. D. (2005). Interpretations of criteria-based assessment and grading in higher education. *Assessment & Evaluation in Higher Education, 30*(2), 175-94.

Spronken-Smith, R., Bond, C., McLean, A. Frielick, S., Smith, N., Jenkins, M., & Marshall, S. (2013). How to Engage with a Graduate Outcomes’ Agenda: A guide for Tertiary Education Institutes. Wellington, New Zealand: Ako Aotearoa. <https://akoaotearoa.ac.nz/graduate-outcomes>

Strathdee, R. (2011). The implementation, evolution and impact of New Zealand’s national qualifications framework. *Journal of Education and Work, 24*(3-4), 202-321. DOI:

10.1080/13639080.2011.584688

Su, Y. (2008). Assessing Graduate Attributes for Employability in the Context of Lifelong Learning: The holistic approach. IAEA Annual Conference. Cambridge, UK. Retrieved from <http://www.iaea2008.cambridgeassessment.org.uk/ca/digitalAssets/164891_Su.pdf>

Tertiary Education Commission (2014). Statement of Intent 2014-2018. Tertiary Education Commission, New Zealand. [http://www.tec.govt.nz/Documents/Publications/TEC-Statement-of-Intent-(SOI)-2014-2018.pdf](http://www.tec.govt.nz/Documents/Publications/TEC-Statement-of-Intent-%28SOI%29-2014-2018.pdf)

Vaughan, K., Kear, A., & MacKenzie, H. (2014). Mate, you should know this! Re-negotiating practice after a critical incident in the assessment of on-job learning. *Vocations and Learning: Studies in vocational and professional education*, 7(3), 331-344.

Woods, L.N., Thomas, T., & Rigby, B. (2011). Assessment and standards for graduate outcomes. *Asian Social Science, 7*(4), 12-17. doi:10.5539/ass.v7n4p12