

Beyond teaching quality: Towards a framework for course unit quality

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Global debates on teaching quality have prompted a focus on how university courses and subject units are designed, delivered and measured. However there is no unitary model that consolidates findings and offers a workable guide that can be used by universities and academics to improve learning and teaching. In this paper, a framework for developing and enhancing course units is presented, which highlights the concept of quality units that contributes to teaching quality. The concept of quality units goes beyond teaching practices and outcomes and includes additional factors. In constructing the Unit Quality Framework insights are drawn from research undertaken as part of an Australian Government Office for Learning and Teaching (OLT) sponsored National Senior Teaching Fellowship on the Peer Assisted Teaching Scheme (PATS). The Unit Quality Framework outlines the facets, underlying foundations, aspirational standards, barriers and evaluation lenses that guide unit development, assessments, teaching and evaluation. The paper provides insights into how the framework can be strategically adopted for institutional-wide reform of course units and the reinvention of teaching practices.

Keywords: Teaching quality, course unit design, assessment and evaluation

I. Introduction

Teaching quality has become an important measure in higher education. There are significant changes occurring in Australian higher education, specifically the shifting student profile (in regards to diversity and expectations on satisfaction and employability), advances in technology for educational purposes, and the commercialisation of institutional practices

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that aim to meet the demands of internationalisation and a highly competitive mass-market of tertiary offerings.

Increasing costs of teaching and decreased funding require teaching indicators that show that students are still receiving high quality teaching. Yet, determining teaching quality is a complex activity. In Australia, there are many differing views of teaching and the ways in which quality can be understood, such as effectiveness (Devlin et al., 2012), excellence (Office for Learning and Teaching, 2013), quality (Hughes-Warrington, Bearman, Carbone, Baik, & Krause, 2010; Richardson, 2005; Ramsden, 1991) and more recently teaching scholarship, which is distinct from scholarly teaching (Probert, 2014).

Teaching quality often refers to characteristics of the teacher. These dimensions include personal characteristics, like being well prepared; how they create interactions in the classroom; how they structure knowledge; and how they make learning relevant (Apodaca & Grad, 2005; Burdsal & Harrison, 2009; Mortelmans & Spooren, 2009; Onwuegbuzie, Daniel, & Collins, 2009). This suggests that the teacher shapes the course unit and the unit is enhanced by the teacher. From this perspective 'quality' seems to imply that teaching quality is wholly shaped by a personable teacher that can facilitate interactive, student-centred learning supported by highly organised, relevant curriculum, without considering other subject-related dimensions that contribute to teaching quality.

An alternate definition of teaching quality is the degree to which student achievement of educational goals has been facilitated (Stehle, Spinath, & Kadmon, 2012). In response to this definition, some Australian universities are making moves to improve course unit design and delivery, measure student outcomes and implement cycles of continual improvement independent of conceptualising what teaching quality is, or needs to be (for example, Deakin University, 2015; University of New South Wales, 2014; Griffith University, 2013).

This shift that focuses on student learning has prompted the notion of unit quality—with its focus on how courses and individual units of study are being designed, delivered and measured—as a partner to teaching quality. This paper aims to capture what a quality unit in higher education entails and presents a framework to outline standards in curriculum and pedagogy that allows for consistency in assessing quality assurance. The paper commences with commentary on teacher quality and connects that debate to the importance of how course units are designed and measured. Under the premise that teaching is creating the environment of learning (Ramsden, 2003), this review draws on the research undertaken as part of an Office for

Learning and Teaching (OLT) National Senior Teaching Fellowship that implemented a Peer Assisted Teaching Scheme (PATS) to improve student satisfaction of units and teaching quality. A key outcome of that National Senior Teaching Fellowship was a Framework for Unit Quality that will be presented in some detail. The paper concludes with suggestions of how the framework can be strategically adopted to align quality units with teaching quality.

2. Teaching quality that focuses on the teacher

Student evaluations are a common instrument used in higher education to evaluate teaching quality. It is accepted that student evaluations do provide a legitimate view of their learning and teaching experience, although since the 1970s their validity has been continually debated. Studies suggest that student evaluations are bias based on a number of factors, such as grading leniency (Greenwald & Gilmore, 1997), unit workload (Griffin, 2004) and pre-course expectations made by students (Remedios, Lieberman, & Benton, 2000). Others like Marsh and Roach (2000) outline that these factors do provide a valuable index of teaching quality. However, student evaluation instruments have been created independently of any theoretical basis or definition of teaching quality (Ory & Ryan, 2001; Penny, 2003; Spooren, Brockx, & Mortelmans, 2013). Without an accepted definition for teaching quality, evaluation methods may not be measuring what matters. While individual student evaluation instruments, peer observation and reflective practices (as described by Brookfield, 1995) are useful in offering insights into improvement of teaching quality, there appears to be a lack of consideration given to measures of teaching quality that do not focus on the teacher.

While students are not necessarily the most competent stakeholder to assess teaching and unit quality (Pears, 2010), their experiences are important as they are rich in ideas on what teaching quality and a quality unit could entail within the context of a particular educational setting. Part of the problem of using student evaluations as the primary measure of quality is that student perceptions are misconceived as the enacted curriculum (Bath, Smith, Stein & Swan, 2004). As Goodyear (2015) argues, teaching is much more than exposition and includes pre-active forms such as planning and design, and post-active forms like reflection and evaluation.

Carbone and Ceddia (2013) undertook a comprehensive study of qualitative data obtained from student evaluations from the physical sciences, namely Information, Communication and Technology (ICT), Engineering and Science units. These course units were selected due to

concerns about high failure and high attrition rates. Student feedback was sought by way of the standard, anonymous unit evaluation survey provided to all enrolled students at semester's end. An open-ended question was asked "What aspects of this unit are most in need of improvement?" and 756 responses were analysed to determine common recurring themes in need of critical attention. The analysis identified ten main attributes of a quality unit; lecturer, lecture, tutorial, tutor, lab, assessment, off campus issues, the learning management system (LMS) and resources provided (Carbone and Ceddia, 2013).

Student evaluations have become instruments of quality assurance rather than quality enhancement. As Biggs (2014) argues quality assurance involves managerial assessments that "play the man not the ball" (p. 16) meaning that often the teacher is targeted for criticism, rather than considering aspects that might influence the quality of the unit which might be outside of the teacher's control. Quality enhancement uses feedback obtained from students, colleagues and from personal observation for formative evaluation that determine where there may be problems in teaching, learning and assessment. Earlier Biggs' (2001) suggested there are three aspects to quality assurance in higher education—establishing a learning and teaching model, mechanisms for enhancement and procedures for removing impediments to teaching quality. Multiple universities have created rubrics in an attempt to create a quality unit model, with common elements found to be the organisation of learning (learning objectives, activities and assessments), student interaction and collaboration, the use of student feedback and course evaluation, learner support and resources, application of technology and compliance to institutional policy and professional standards (Illinois Online Network, 2010; Quality Matters, 2014, California State University Chico, 2014; Krause, Dias, & Schedler, 2015). Such rubrics form a model of learning and teaching within the context of quality demonstrating that they are valued in some way.

The focus on teaching quality that is centred on the teacher is a concern because of the barriers it creates to unit enhancement. Carbone (2015) obtained academic's views on barriers to teaching quality and unit enhancement from five Australian institutions and identified four categories of barriers and challenges to delivering teaching quality (Carbone et al., 2016). These are divided into internal and external barriers, that is, ones that the academic has control over and others outside of their control. Firstly, the internal personal/individual barrier relates the academic's pedagogic skills, content knowledge and expertise, their priorities and commitment to teaching quality and professional development. External student-related barriers relate to the changing student profile (such as age,



diversity, socio-economic background, language ability and comprehension), student commitment to study and their current skills, knowledge and expectations. Department or faculty barriers encapsulate the workplace culture and environment and refers to the willingness and ability of leaders, workload allocations, time and support and prioritising research over teaching. The final barrier relates to the decisions made by the institution, such as strategy, funding, centralised standards, policies and practices and a commitment to resources.

3. Focussing on unit quality as the method of overcoming the barriers to teaching quality

The alternative to teacher-focussed approaches to teaching quality that relies on student perceptions of teaching is the concept of 'quality units'. This places unit design within the ideas of teaching quality, where institutions take a broader view in assuring and enhancing learning and teaching quality in regards to value for money, being fit-for-purpose and how it transforms student learning (Harvey & Green, 1993). There is little in the literature to suggest a definition of a quality unit. Offered in this paper is an idea of a quality unit—that it aims to enhance quality assurance with better practice features of unit design and on-going evaluation and contribute to teaching quality and teacher development.

To establish what a quality unit should entail, identifying broad facets or components would prove a strong starting point of exploration. The framework presented in this paper draws on work undertaken by Carbone and Ceddia (2013). Their study was subsequently repeated through a multi-institutional analysis of 347 student evaluations from introductory programming units in ICT programs (Carbone et al., 2013), which resulted in similar findings. Further examination of the ten attributes identified by Carbone and Ceddia (2013) and their commonalities presented an opportunity to merge them into five facets of a quality unit. The five facets being educator, learning outcomes, learning activities, assessment and feedback and resources (refer to Figure 1). This consolidation provided a clear and concise shared language that could be easily understood by a range of different educational contexts.

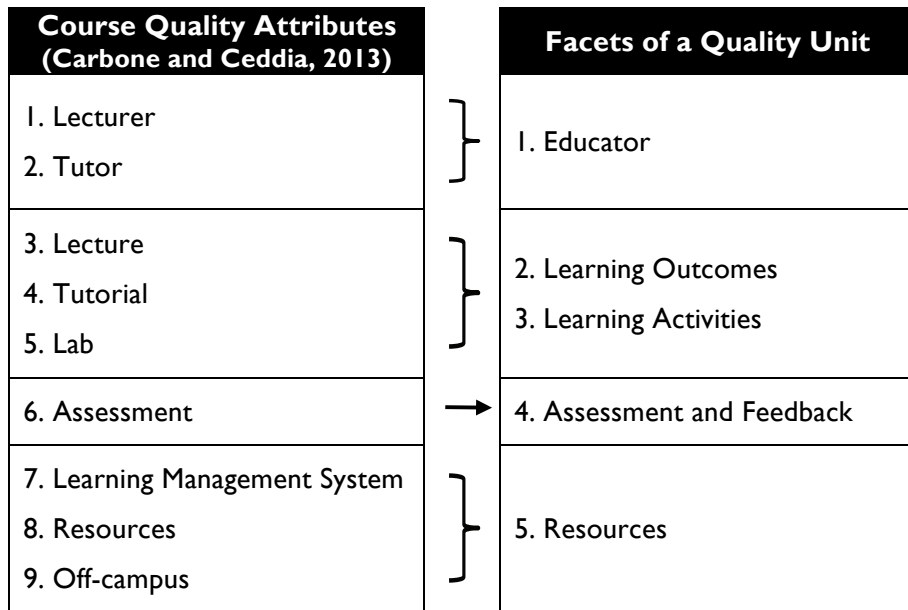


Figure 1: Facets of a quality unit

The educator facet recognises that learning and teaching is a deeply embodied and meaningful social event in which students and teachers are active agents in consuming and producing knowledge. Inclusive of this is the educator’s presentation style, knowledge of the subject and responsiveness to students. Learning outcomes connect the unit to the course and guide the selection of purposeful content that will help students develop the knowledge, skills and attributes needed. Learning activities encapsulate pedagogical methods for shaping and delivering stimulating learning that integrates the unit’s learning outcomes, assessment and resources. The assessment and feedback facet encourage alignment with the learning outcomes, learning activities and resources and provide guidelines for providing valued conceptual and empirical feedback. The resources facet merges the Carbone and Ceddia’ (2013) attributes of Learning Management System (LMS), resources and off-campus support. Combined, these facilitate greater student learning through the provision of relevant and accurate literature and resources, a supportive and interactive technological platform and access to on- and off-campus experiences.

Identifying the facets of a unit allows for a more holistic evaluation that reflects expectations from the university and student perspective. For instance, aspirational standards would require educators to add animation and a conversational dimension to their delivery, so to spark interest and



curiosity in students. Learning outcomes can signal progress and nurture future learning, where students feel they can fulfil the requirements of the unit and desire more. Learning activities might stimulate student learning or are organised in their purpose and process so to lead to independent inquiry and increased confidence. Assessment and feedback could celebrate learning that has taken place, enriched with feedback about ongoing potential. Resources might add colour to information and have an enticing quality which draws the student in and help shape a view of the field. It is these aspirational standards that provide a working definition of teaching quality that can inform a unit quality framework.

4. The Unit Quality Framework

Most Australian higher education institutions have created cycles of course unit evaluations that aim to drive teaching quality. Examples of dimensions of a course unit that are evaluated include student engagement, unit effectiveness and efficiency (Deakin University, 2015), unit content, coherence, relevance and currency (Griffith University, 2013). It is not clear whether these institutions have an espoused model of teaching and learning or avenues for supporting teachers to overcome challenges and improve their practice. Our study identified three underpinning core foundations for what is required and what can, and what can't be done within unit design. These foundations were found to be the use of *technology*, *space* and *governance*. The use of *technology* for educational purposes relies on access and resources, involves instructional elements and interactivity and supports collaboration amongst students (Oliver and Herrington, 2001). *Space* refers to where teaching and learning takes place. Halilovich, Carbone and Ross' (2013) highlight the importance of the spatial, social, experiential and emotional dimensions of learning and teaching and the spaces in which it occurs, such as in campus classrooms or online. *Governance* provides the industrial and institutional policies and standards that need to be delivered and maintained. While they may be perceived to be restrictions, they actually provide a quality assurance baseline that highlight opportunities for improvement. These three foundations provide a set of requirements and expectations that directly impact the design, delivery and measurement of course units.

Selecting appropriate multiple lenses to evaluate a unit provides a holistic view of the unit when compared to just adopting one or two measures. One way in which a course unit could be viewed and measured is by extending Brookfield's (1995) work on critical reflection. Brookfield (1995) contributes a model where academics undertake systematic self-reflection on their own

performance, gives consideration to student feedback, draws on peer observation, and learns from scholarly literature. The peer lens calls on academics to liaise with colleagues through peer observation and review to generate innovative solutions to teaching problems. The student lens gives students a voice through evaluation and encourages academics to engage and respond to feedback. The self lens invites academics to critically reflect on their experiences to reveal aspects of their practice that may benefit from adjustment or strengthening. The scholarly literature lens exposes academics to other ideas about teaching practice through research, offering different ways to view and understand their teaching.

In advancing Brookfield's (1995) work, four additional lenses are considered for unit quality:

- ▶ *The Governance Lens* to ensure that adherence to institutional policy and standards are met in regards to national qualifications frameworks and professional bodies.
- ▶ *The Technology-Driven Analytical Lens* that uses data and learning analytics to provide valuable information on the extent to which technology is accessed and embraced by students, and to what affect.
- ▶ *The External Moderator Lens* to provide a view from assessment moderation, ensuring assessments are strongly aligned with learning outcomes, activities and resources and academics are consistent in the approach to evaluating assessments.
- ▶ *The Tutor Lens* to incorporate the view of tutors and teaching assistants involved in the delivery of the course unit, to actively engage with them for feedback and how to become more responsive educators.

A combination of lenses working in concert would provide highly valued insight on a unit's contribution and its impact on teaching quality (and vice versa).

5. Implications of the framework

The Unit Quality Framework (as presented in Table 1) provides a working model for how teaching quality and quality units are defined “for the time being” as the university undertakes a long-term strategy to reform underperforming units and provide opportunities to all academics to reinvigorate aspects of their units or teaching. The framework articulates an



Table 1: The Unit Quality Framework

Facet	Foundations	Minimum Standards	Aspirational Standards	Barriers			Evaluation Portfolio
				Internal	External	Institutional	
Educator	Technology	<ul style="list-style-type: none"> Demonstrate a solid theoretical knowledge of content. Create engaging and intellectually stimulating presentations. Respond to students' queries in a timely manner. Cater for different individual and group needs. Offer support to students in flexible modes. Organised and have good class management. 	<ul style="list-style-type: none"> Show a passion for the subject matter, making content relevant and meaningful. Inspire and support their students to know more in the field. Create an encouraging conversational environment. Encourage students to form diverse views, question frameworks and to seek a critical scholarly perspective of their own. 	Individual	Student-related	Faculty	Self, Peer, Student, Technology-Driven Analytical and Scholarly Literature.
	Space	<ul style="list-style-type: none"> Aligned to the unit and course, regulatory, institutional and professional body requirements. Show a clear relationship to the learning activities and assessment tasks. Clearly framed to ensure students develop knowledge, skills and attributes that the unit intends to develop. 	<ul style="list-style-type: none"> Have an aspirational dimension which is unlikely to have achieved before beginning the unit. Framed to remain aspirational and might contain expressions of future learning—the desire to learn more—which are not exhausted by the successful completion of the unit. 				
	Governance	<ul style="list-style-type: none"> Aligned with assessment and learning outcomes Scaffolded to develop knowledge and skills towards achieving learning outcomes. Supplemented with up-to-date, fit-for-purpose resources in multiple modes of access. Strongly supported by discussions, stimulating peer interaction and extended expertise in a timely manner. Maintains a breadth and depth with clarity and authenticity across learning outcomes, activities and assessment. Provide timely and constructive feedback on a balanced workload of meaningful tasks, clearly structured and scaffolded. Incorporate multiple feedback sources in exemplars and the specificity of assessment tasks. Allow student self-assessment prior to submission. 	<ul style="list-style-type: none"> Designed to stimulate, extend, and service a range of learning preferences inciting high levels of inquiry and conceptual frameworks. Scaffolded to move the students towards goal setting, self-directed learning and self-assessment against social, cultural and personally derived norms. 				
Learning Outcome	Technology	<ul style="list-style-type: none"> Organised to support learning and are easily accessible. Fit-for-purpose Relate to the unit and are appropriate for the student level. 	<ul style="list-style-type: none"> Use of multiple constructively framed feedback loops which lead students to self-efficacy and responsible self-management, leading to growth in the students' behaviours and knowledge. 	Individual	Student-related	Faculty	Governance, Tutor, Student and Scholarly Literature.
		<ul style="list-style-type: none"> Dynamically added during the semester and directly incorporated into learning activities. Foster learning autonomy. Can be contributed to or evaluated 	Student, Tutor, Self and Scholarly Literature.				
Learning Activities	Technology	<ul style="list-style-type: none"> Organised to support learning and are easily accessible. Fit-for-purpose Relate to the unit and are appropriate for the student level. 	<ul style="list-style-type: none"> Use of multiple constructively framed feedback loops which lead students to self-efficacy and responsible self-management, leading to growth in the students' behaviours and knowledge. 	Individual	Student-related	Faculty	Governance, Tutor, Student and Scholarly Literature.
		<ul style="list-style-type: none"> Dynamically added during the semester and directly incorporated into learning activities. Foster learning autonomy. Can be contributed to or evaluated 	Student, Tutor, Self and Scholarly Literature.				
Assessment and Feedback	Technology	<ul style="list-style-type: none"> Organised to support learning and are easily accessible. Fit-for-purpose Relate to the unit and are appropriate for the student level. 	<ul style="list-style-type: none"> Use of multiple constructively framed feedback loops which lead students to self-efficacy and responsible self-management, leading to growth in the students' behaviours and knowledge. 	Individual	Student-related	Faculty	Governance, Tutor, Student and Scholarly Literature.
		<ul style="list-style-type: none"> Dynamically added during the semester and directly incorporated into learning activities. Foster learning autonomy. Can be contributed to or evaluated 	Student, Tutor, Self and Scholarly Literature.				
Resources	Technology	<ul style="list-style-type: none"> Organised to support learning and are easily accessible. Fit-for-purpose Relate to the unit and are appropriate for the student level. 	<ul style="list-style-type: none"> Use of multiple constructively framed feedback loops which lead students to self-efficacy and responsible self-management, leading to growth in the students' behaviours and knowledge. 	Individual	Student-related	Faculty	Governance, Tutor, Student and Scholarly Literature.
		<ul style="list-style-type: none"> Dynamically added during the semester and directly incorporated into learning activities. Foster learning autonomy. Can be contributed to or evaluated 	Student, Tutor, Self and Scholarly Literature.				

overarching standard that all units should meet with respect to five facets of unit delivery: educator, learning outcomes, learning activities, assessment and resources. Aspirational, best practice statements are also stated for each facet for academics to strive towards. The framework also recognises the barriers to teaching quality that may exist and the enablers like technology, space and governance that are leveraged to enhance a unit. It outlines an evaluation portfolio that could be used to measure the quality of the five facets.

The Unit Quality Framework has been designed to cater for the many different contexts that academics and institutions operate in, including: face-to-face; online; blended; small class; and large classes. It can be used by academics—as individuals, working in pairs or as a cohort—as a tool for systemic unit improvement across a department or faculty, as well as a framework for developing new course units. The starting point for using the framework commences with analysing data from a combination of evaluation lenses (for example, peer review of the unit, student evaluation data, and learning analytics), which would support critical self-assessment against the elements of the framework. As an individual user, the framework can highlight which facet of the unit needs enhancement and will draw an academic's attention to their own practice that requires development. In a partnership, the framework can be used in a more conversational style, where academics act as mentors in peer assisted learning to establish teaching quality goals and strategies. As an instrument for systematic unit improvement across a department or faculty, centralised learning and teaching units can embed the framework into cycles of course evaluation and design professional development initiatives that focus on one or all the elements of the framework. In essence, the framework conveys a clear message that supports a consistent narrative across terms and concepts of a quality unit and teaching quality. It provides a guide to key areas to focus on—and measure—allowing for a more efficient analysis and diagnosis of teaching quality, unit enhancement and course improvements.

Strategic agenda at institutional level

The framework is currently being trialled at one of Australia's leading universities. The framework has been accepted as an integral feature of the institution's learning and teaching agenda—the strategic approach for broad systemic adoption to reinvigorating teaching practices and reforming units with the aim to respond and remain competitive in the wake of massive changes occurring in higher education. The framework established a pedagogical model which has influenced change to evaluation and continual



improvement cycles and has provoked a commitment to resources to support the reform.

In applying the framework, a centralised approach was taken to nominate and evaluate underperforming units across all faculties and campuses as priorities. Course units in need of critical attention were identified based on low student evaluation scores. In its trial phase, some units required total reform across all facets of the framework based on continual poor student feedback, others were in need of reinvigoration, only requiring enhancements to one or two facets of the unit. Once identified, academics responsible for teaching the nominated units were provided with support from a faculty-based educational designer and the option to participate in peer mentoring in applying the framework. While priority units have been identified, the trial has not limited the involvement of proactive academics wanting to make improvements of well performing units.

Employing educational designers that are jointly based in faculties and central learning and teaching division

As part of the institution's commitment, educational designers were appointed to each faculty with a small percentage of their time (10%) appointed to the centralised learning and teaching unit. The primary role of the designers is quality enhancement, reporting to the Associate Deans of Education within the faculty and dotted line reporting to the central learning and teaching unit. They support academics through the reform process in applying the framework, ensuring that individual units are aligned with the overall aim of the course and act as a resource to academics proactively reinvigorating their practice. Placing educational designers within the faculty has allowed for more highly contextualised approach to adopting the framework, as they are more responsive to faculty strategy and sensitive to discipline traditions and innovations.

Professional development at individual level

Academics have also been given the option to participate in the Peer Assisted Teaching Scheme (PATS) (Carbone 2011) as an additional mechanism to apply the framework. Through PATS, academics have been given the option to form mentor-mentee or reciprocal peer-to-peer partnerships. The semester-long PATS process includes identifying opportunities for improvement against the facets of the framework. Peer observation and mid-semester student feedback which are valuable in evaluating progress and the impact of changes.

In addition, an online professional development module for academics has been implemented. Titled *Enhancing your unit*, the 6-hour module introduces the framework and requires participants to set goals around each facet of a unit they are currently teaching, develop and implement an improvement strategy and have their progress reviewed. The module consists of video interviews, online materials, reflective questionnaires, discussion forums and learning activities.

In 2015, the module was piloted with 24 academics providing a lived experience of the application of the framework in an online environment. Overall, participant's opinion of the module was positive. The multiple activities and the forum for discussion were considered as an opportunity to work with colleagues across the university to improve each facet of the course unit.

Reviewing the course unit

In the same university, the framework has been applied to review course unit. For example, a request came from an Associated Dean Education, specifically asking to:

provide feedback regarding qualitative performance at lectures and tutorials ... and provide feedback on the quality of the materials for a unit and under the understanding the person will not be a discipline expert and thus, can only evaluate high-level issues ... (personal communication, December 21, 2015)

In undertaking the review the unit quality framework which set out standards against the five facets of a unit around teaching, the learning outcomes, the learning activities, assessment and feedback and unit resourcing was applied by the reviewer. The reviewer's attention was also drawn to the three underpinning foundations of technology, space and policy to provide boundaries around what can, and can't be achieved. Feedback on the evaluation report was described as "excellent, covering all the areas we were looking for..." (personal communication, April 8, 2016)

6. Conclusion

Presented in this paper have been ways in which quality teaching can be understood, recognised and measured. At a national policy level, frameworks and standards for teaching are typically formalised (for example, the 2014 Australian Government Higher Education Standards Framework)



which strongly influences the governance of learning and teaching. At an institutional level, student evaluations obtain feedback on satisfaction, teacher performance, course content and assessments. However, the idea of teaching quality remains contested.

The Unit Quality Framework provides a consolidated model that establishes a common language and a set of standards for quality units. As a result, it establishes a working definition of teaching quality and quality units, yet acknowledging that these concepts will undoubtedly evolve again in the future. The framework can be central to reform course units and reinvigorate teaching practices. Furthermore, the framework integrates with professional development for academics, both formal programs and peer assisted collaboration to help academics advance their teaching practices from foundation requirements to aspirational practice.

The framework is far from complete, but does provide a foundation for articulating an institution's view of quality units and teaching quality, forming an integral part of quality assurance practices. To advance the broad adoption of framework, it will be further discussed with academics and educational designers for feedback on the benefits, use and challenges—including the participants in the online module. This will be supported by comparative data from student evaluations on the impact that reformed and reinvigorated units have had on their learning experience. Opportunities to further refine the framework will be considered, as well as enhancements to the educational designer role and the online module. The Unit Quality framework will be incorporated into the university's cycle of improvement, as it is necessary to ensure that it accurately reflects the debates of teaching quality, as well as the expectations and challenges of learning and teaching in higher education.

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