

Building team capacity: sustaining quality in assessment and moderation practices in a fully online unit

Sonja Kuzich

School of Education, Curtin University, s.kuzich@curtin.edu.au

Robin Groves

School of Education, Curtin University, r.groves@curtin.edu.au

Sheena O'Hare

School of Education, Curtin University, s.ohare@curtin.edu.au

Lina Pelliccione

School of Education, Curtin University, l.pelliccione@curtin.edu.au

A lack of shared understanding and clear expectations regarding student work can compromise the maintenance of standards in higher education. Curtin University became involved in the delivery of fully online units in the Bachelor of Education (Primary) course for the first time in 2009 and subsequently offered the same units in three modes: internal, regional and fully online. With the resulting greater student enrolments, the challenge arose of developing a sustainable model of moderation to support tutors in the moderation process, particularly those who were new to university teaching and an online environment. This paper reports on a project to develop moderation expertise among tutors in a fully online unit with 577 student enrolments regarding the specific content of the unit and university assessment standards. In contrast to common university practice where the process of moderation occurs after marking, this project introduced the issue of moderation prior to the commencement of the unit and built tutors' expertise from this early stage. Detailed feedback was collected from the participants at all stages of the project, which showed that the process had increased participants' readiness for moderation, increased the rigour of the assessments and the moderation processes and improved relationships among the tutors. The process of moderation developed within this project has been adopted in other units, and for other modes of delivery in the school and has served as a mechanism to maintain consistent tutor expectations and marking comparability.

Keywords: moderation; online assessment; tutor training.

Background

In the 2009 budget the Australian Government announced that it would be establishing an independent national quality and regulatory body, the Tertiary Education Quality and Standards Agency (TEQSA). This was in response to a recommendation by the Review of Higher Education (Australian Government, 2008) led by Emeritus Professor Denise Bradley AC, to create a single national regulatory body. The government will provide more than \$206 million over two years to introduce performance funding "across teaching quality, participation, student engagement and completion rates with reward funding attached to targets" (Australian Government, 2009, p. 5). One role of TEQSA will be to provide an independent assessment that will determine whether each Australian higher education institution has met the targets. Ultimately, TEQSA will be responsible not only for accreditation and standards, but also for the identification of which institution qualifies for performance funding.

The increased accountability demands on higher education institutions to provide high quality programs that satisfy the needs of all stakeholders as well as being able to respond favourably to TEQSA, are causing higher institutions to scrutinise their current processes, policies and practices. Students view assessment and feedback as key components of their higher education experience (Williams & Kane, 2009), and consequently, assessment and moderation of student performance are key aspects for universities to review and improve.

The project

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The School of Education at Curtin University has been preparing professionals for practice in a wide range of education-related fields since 1974. The school offers pre-service courses in early childhood, primary and secondary teaching, a Graduate Diploma in Secondary Education and a number of higher education postgraduate degrees. The school has a long history of delivering courses using different modes: face-to-face, external paper-based, external online, and more recently, blended learning environments in the majority of our face-to-face courses. In 2009 a new delivery mode for the Bachelor of Education (BEd), Primary Degree emerged whereby the course was delivered totally online with the exception of the professional practice components.

The School of Education has nine 'graduate outcomes' for the BEd (Primary) and these reflect the University's graduate attributes, as well as address the state teacher registration board's performance standards. The learning outcomes within each core unit have been designed to address the graduate outcomes, while the individual assessments align with the learning outcomes of the unit. In general, the assessments focus on students' analysis, synthesis, application and evaluation of new information and concepts rather than on low-level knowledge such as recall. Formative and summative assessments are used and students complete group and individual assessments as well as peer and self-assessments. There is a progression in the complexity and demands of assessments throughout courses. Moderation processes to increase the fairness, reliability and validity of students' marks need to be implemented with these complexities in mind.

This project aimed to address these moderation issues and provide support to tutors in a unit, Introduction to Curriculum, which is part of the BEd (Primary) course offered in a 100 per cent online mode. The unit was offered from mid-August 2009 and there were a total of 577 students in eight groups, with one unit coordinator and five tutors, some of whom taught more than one group. As a fully online unit, open entry was offered through an alternative university entrance pathway. This led to large enrolment in the course and greater variety in the expertise and experience of the students than in most university units.

Background literature

Assessment and evaluation are essential components in the quality assurance cycle in higher education. An increasing focus on standards within university teaching and learning has placed a greater emphasis on the reliability and validity of marks, not only within a unit but also across a course and between courses. An Australian Government paper resulting from a review into teaching and learning within Australian higher education, *Striving for Quality* (Department of Education, Science and Training, 2002), identified the importance of moderation.

If articulated academic standards are to be maintained, academics need to share a common understanding of the standards, and fairly and consistently assess student achievement in terms of the standards. To ensure such a common understanding, some form of moderation of assessment is necessary ... There is not a strong tradition of systematic moderation of assessment and evaluation of performance within Australian universities at undergraduate or postgraduate level either between different markers in the same subject, across subjects, across courses or across institutions. (p. 28).

As student numbers increase within higher education institutions, teams of lecturers, rather than individuals, now have to interpret and apply agreed standards when marking students' work (Price, 2005). Although reliability is well represented in the literature relating to assessment, there has been little research regarding moderation in higher education settings (Bloxham, 2009). The scope of the literature reviewed relates to moderation of marking written assessments and feedback to students within a teaching team and does not include moderation of online discussions.

There are two primary reasons for engaging in moderation of assessments and both are related to issues of quality (Hughes, 2008). The first, moderation for accountability, enables an official confirmation of assessment quality. The second, moderation for improvement, seeks to ensure the quality of assessment through developing the preparedness and capability of the markers to "make consistent and comparable judgements" (Hughes, 2008). Boud and Associates (2010), put forward seven propositions on assessment reform in higher education, one of which confirms that "discussion of processes and reference points for determining standards is relatively rare. Assessment

judgements are more consistent when those making them are able to reach consensus as to ways of establishing performance” (p. 2).

Moderation has been relatively well addressed within literature relating to high school assessment (Wyatt-Smith, Klenowski & Gunn, 2010; Maxwell, 2002). In the high school context, Maxwell emphasises the value of moderation in ensuring “consistency and comparability of the assessment judgments across different assessors, programs and schools” (p. 1). One definition of what moderation means within the higher education context is provided by Bloxham (2009): “moderation is a process for assuring that an assessment outcome is valid, fair and reliable and that marking criteria have been applied consistently” (p. 212). At this university, moderation is defined as “a quality assurance process directed at ensuring that assessments are marked with accuracy, consistency and fairness” (Curtin University, 2010, p. 23). Whilst the compulsory schooling sector has sought to de-privatise teacher evaluation through recognition of the value of collaborative standard setting, in higher education institutions the culture of individual professional autonomy in setting standards and making judgements about students’ work against them is still deeply ingrained. This, in part, has contributed to the criticisms of assessment in the higher education sector, where it has been identified as one of the weakest features of the teaching and learning process – “the Achilles’ heel of quality” (Knight, 2002, p. 107).

Bloxham (2009, p. 212) identifies a number of benefits resulting from effective moderation, including:

- improved reliability through discussion of how different markers interpret marking criteria
- avoidance of individual marker bias
- amelioration of the effects of ‘hard’ or ‘soft’ markers
- increase in students’ confidence in marking
- development of staff confidence in responding to students’ assignment queries
- building of staff knowledge and capacity and development of an assessment community through seeing others’ marking and discussing marking decisions
- staff viewing moderation in terms of fairness to the student as well as a means of ensuring quality.

However, an important consideration, given that feedback is often cited as an area of student concern, is that a protracted moderation process may have the undesirable effect of slowing down the return of student work (Bloxham, 2009). It may also consume more resources relative to teaching and have little impact or demonstrable connection to student learning. Rust (2007, p. 230) reminds us that good assessment practices should work to support and positively influence student learning.

Moderation is interpreted in a variety of ways, ranging from a simple, narrow view such as double marking or post-marking analysis of results, through to a more comprehensive view where markers are involved in every aspect from assessment design to marking post mortems (Lawson & Yorke, 2009). Moderation is most commonly undertaken after at least some, if not all, marking has been completed (Hughes, 2008). A typical moderation process involves steps such as: the unit creator designing the assessment; development of marking criteria and distribution to students and teaching staff (who are also usually the markers); students submitting completed assignments; markers grading some or all of the assignments based on the marking criteria; markers meeting to discuss marks and to validate interpretations of standards; then finally returning assignments to students.

The range of marks given for student responses to an assessment item and the pattern of the mark distribution may vary significantly among markers (Bloxham, 2009). In addition, the consistency or reliability between markers is made more difficult with assessments such as essays, which are designed to capture complex learning and where markers are required to take a more subjective approach. One way to assist markers with such judgements is through the use of a criterion-referenced approach to assessment involving a marking rubric. Without such a rubric, markers with different amounts of knowledge, experience and values, may place undue emphasis on some aspects of the criteria and less on others (Bloxham, 2009). Hunter and Docherty (2009) argue that while the assumption is

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made that markers understand the implicit expectations of the author of the criteria, there still exists a wide variation in marker interpretations of these marking criteria and therefore variation in the resulting marks. These problems are exacerbated with large student groups requiring a large number of markers. Even when supposedly explicit marking rubrics are provided, the reliability and validity of marking is compromised because markers do not necessarily have a clear and comprehensive understanding of their meaning and common standards are not maintained (Bloxham, 2009; Rust, Donovan & Price, 2005; Adie, 2008). The reliability of markers, that is their capacity to make consistent and comparable judgements, is dependent upon making the implicit knowledge embedded within marking criteria explicit or creating “a shared understanding of how another assessor assesses” (Lawson & Yorke, 2009, p. 237). Grainger, Purnell and Zipf (2007) propose that for markers to assess accurately the quality of students’ work they must have a strong understanding of what constitutes quality and be able to make judgements in relation to this. This becomes more complex when these judgements need to be made by multiple markers.

Bloxham (2009) argues that understanding how a marking rubric is to be interpreted in relation to a particular assignment is a process that is socially constructed. This process enables a translation of the criteria into “concrete and situation specific terms” (Knight & Yorke, 2003, cited in Bloxham, 2009, p. 212). Hunter and Docherty (2009, p. 3) claim that socialisation involving “active engagement, discussion and negotiation” between markers, which addresses the tacit beliefs about academic standards, is the strongest way to ensure greater marker reliability and validity. Adie (2008) suggests social moderation has merit in marrying the rich professional judgements that markers make with the need for valid and reliable representations of standards of quality. Through a collaborative process of discussion and reflection the tacit knowledge of each marker is made explicit and shared understandings of assignment intent and expectations of quality are reached (Bloxham, 2009; Rust et al., 2005; Maxwell, 2002; Sadler, 2005).

There have been few studies that have specifically addressed such socialisation processes and their impacts on grades. Saunders and Davis (1998) and Ecclestone (2001) (both cited in Hunter & Docherty, 2010) demonstrate a reduction in marking inconsistency, where tutors marked sample papers collaboratively and debated the grades. Saunders and Davis demonstrate that a three-stage moderation process involving discussion with peers resulted in a common understanding and less marker variation over time. The three stages they suggest are: initial discussion about the meaning of the criteria; further discussion to refine understandings after some marking has been undertaken; and, moderation discussions after all the marking has been completed.

Rust et al. (2005) outline a socio-constructivist model of assessment recognising that assessment needs to be approached in the same way as learning. They argue that it is not realistic to expect that markers will develop knowledge and understanding of assessment practices, interpretation of criteria and explicit and implicit standards without active engagement and participation. At Curtin University this approach to moderation has been modified into a five stage process to actively engage markers in each of the stages of assessment design, communication, marking, analysis of results, and feedback to learners. James (2003) identifies that this kind of process supports current pedagogical thinking about assessment; ensuring assessment is firmly embedded within teaching and learning rather than just a summative exercise. Price (2005) states that even ‘expert’ markers need to engage in a rigorous moderation process along with ‘novices’, suggesting that each marking instance constitutes its own assessment community into which all members, regardless of prior experience, are socialised. Wenger (2000) characterises this as a community of practice.

Methodology

There is a high, hard ground where practitioners can make effective use of research-based theory and technique, and there is a swampy lowland where situations are confusing ‘messes’ incapable of technical solution ... There are those who choose the swampy lowlands. They deliberately involve themselves in messy but crucially important problems and, when asked to describe their methods of inquiry, they speak of experience, trial and error, intuition and muddling through ... (Schon, 1983, pp. 42-43)

This project was conducted in the spirit of Adie's (2008) comment that social moderation can integrate the rich professional judgements that markers make with the need for valid and reliable representations of standards of quality. The adopted approach attempted to balance one foot on the hard ground, whereby the assessment moderation practices are based on theory and research, and one foot in the messy, swampy lowlands where assessment practices are guided by experienced intuition and trial and error. The research used a qualitative, interpretive approach.

The study was supported by a university project grant. Its aims were to:

- improve moderation processes with tutors in a fully online unit with a large student enrolment, offered for the first time
- build the expertise of tutors and others from the earliest point in the unit
- develop a model or process that could be transferred to other equivalent units.

The BEd (Primary) course was delivered totally online for the first time in 2009 and there were large enrolment numbers in most units. These factors led to particular challenges in ensuring valid, fair and reliable assessments. Working in the online environment, the content of the unit, and the assessment of students at a tertiary level were all new to many of the tutors. The tutors were mainly primary schoolteachers and ex-teachers with expertise in primary schools but no previous experience of this kind of tertiary unit.

All tutors of online groups were invited to participate in the study. From the tutor cohort, four tutors participated in the moderation process with a range of age, experience in teaching and experience in higher education. Table 1 provides a profile of the four tutors involved in this study.

Table 1: Participant profiles

Tutor	School teaching experience	University teaching experience	Highest qualification	Online teaching experience
A	34 years teaching, 20 as principal	4 years	Master's degree	Second unit
B	Classroom teacher	0.5 years	Master's degree	Fourth unit
C	15 years teaching, 2 as deputy principal	4 years	Master's degree	First unit
D	30 years teaching, 20 as administrator	20 years	Master's degree	Second unit

Five meetings of three hours each were held with the four tutors who were based in the city where the University is. Two meetings were held relating to each of the two assessment items in the unit. In each case the first meeting was held at an early stage in the unit, well before the assessment item responses were due from students, introducing the assessment item and the marking rubric and discussing what work of various standards would look like. The second meeting was held when the responses had been submitted to enable discussion of students' submissions, individual assessment of common assessment responses, comparison of results, and discussion regarding reconciliation of marks where divergence in assessments had occurred. In both cases the assessment items were extended responses in essay format. A fifth meeting of tutors was held at the conclusion of the unit to debrief regarding the marks and grades awarded, the moderation procedures and suggestions for further improvements.

Data was collected through written surveys before the first meeting and after each of the first four meetings. Participants were interviewed individually at the conclusion of the fifth meeting, with questions generated from the survey responses and discussions that took place during the moderation process. Some tutors in the equivalent face-

to-face unit also attended meetings to enhance the moderation between the online and face-to-face groups of students, as well as among the online population. This report is based on data from those tutors who were involved in teaching the fully online groups of students.

The participants' responses to the surveys and transcripts of the interviews were analysed using a content analysis approach whereby the common issues and themes were identified. The predominant themes referred to by participants were increased readiness for moderation, rigour in the assessments and improved relationships among the tutors.

Findings and discussion

Let's face it, every unit within the University should run one of these just in terms of getting people together, you know, collaborating, maybe increasing people's level of comfort too (Tutor B).

Prior to any discussions, participants were asked their understanding regarding 'moderation' and significant issues associated with it. All four responded similarly, commenting that moderation is:

to ensure comparability of evaluation/marks across various tutors within the unit (Tutor A)

to ensure that students' assignments have been marked accurately and fairly in agreement with two or more people (Tutor B)

a process to try and ensure that a student's work will be awarded the same mark/grade regardless of the assessor – i.e. the development of common understandings of what particular standards of work 'look like' (Tutor C).

Their comments largely reflected a concern with issues of reliability between tutors. Participants considered that issues such as consensus, flexibility, willingness to compromise and learn, and having and using clear, well understood standards or criteria for assessments were important.

The surveys indicated a high level of satisfaction among the participants after each meeting. All commented that their expectations had been met. "I feel very supported" (Tutor C), "the confidence and trust we developed as a group" (Tutor A) and "Today's meeting was great!" (Tutor B) were typical comments. While increasing the reliability of marking remained the major priority, issues relating to validity, such as differentiating between the quality of students' writing and their demonstrated understanding of unit content, were often mentioned. Often comments related to 'encouragement' for students, recognising that while this might not be a moderation issue the tutors were all teachers who wanted their students to do as well as possible. Assisting students with electronic, online learning was a high priority. In some cases the tutors were also becoming familiar with this mode of learning and teaching themselves.

The data analysis of participants' responses to the interview questions identified common themes. These focused on increases in the participants' readiness to be involved in moderation, improvements in the rigour of assessments and the moderation process, and improvements in the relationships among the tutors.

Readiness

Each of the participants agreed that commencing the moderation well before student assessment responses were submitted was beneficial. Tutors were able to go into the marking process having done much of the groundwork. The youngest and least experienced tutor highlighted the comments of her colleagues: "I felt much better prepared. I was much clearer of expected standards through the discussion with other people" (Tutor B).

In addition to feelings of being better prepared, this group of tutors also indicated that the project had helped them to gain confidence concerning the whole process. They were asked to rate on a scale of one to five (with five being the most confident) how they felt at the beginning of the project and how they felt upon its completion. Each tutor reported that they felt more confident at the end than they had at the beginning, with Tutor B going from rating of 1 to 4, commenting that this was due to "all the discussion and support". This same tutor identified that she had felt extremely unsure when she had previously tutored a unit, and would have loved the opportunity to be more supported at that time. Overall, the tutors expressed that the support generated by this type of moderation with their colleagues added to their confidence levels. When asked to elaborate, Tutor A shared that she "loved being able to talk to other people about the assignments" and that the most beneficial area was "being able to sound out ideas with others". Tutor B had her beliefs confirmed by "being able to say, yes, I agree with you" or conversely having "someone telling me something and I can say, oh dear, I totally missed that point". Tutor A summarised the benefits of increased confidence and readiness by identifying that "it allows other people to challenge your thoughts to make you think things through in another way".

Rigour

For Tutor D, rigour was an important element that had caused him some concern before joining the online teaching team as he was unsure how the moderation would operate. He commented that he was grateful that he had come on board and that it had been "a fabulous learning experience". Although admitting that he had known "nothing about online learning" in spite of being a very experienced educator, he recognised that as a tutor, he "had to make this

the best learning experience for the students". He stated that the process had allowed him to "feel much more confident" that he was being "valid and fair" in his assessments. He indicated that this occurred as a direct result of "being able to talk it through with others".

Tutor C agreed and thought that "hearing what other people consider good work" was part of the valuable learning. But she commented that a more important aspect was "having to justify why or why not I think something is good work". Tutor A commented that she liked to "get things right" and that the moderation had been "so satisfying and valuable" in that regard. She also identified that the moderation process had supported her in targeting what needed to be taught as well as identifying where students were "likely to make mistakes".

It was agreed that working with others who demanded rigour in their teaching created opportunities for tutors to re-evaluate their own practices.

It was useful to connect with others who demand rigour ... so my conversations with someone like Tutor A sometimes made me think 'well, OK, I need to go back and think about this'. So it was very useful from that point of view (Tutor D).

The group also identified that moderation is essential in all areas of teaching. Although teachers have the freedom to assess in different ways, there are certain elements that must remain consistent. With an early childhood education background, Tutor B recognised major differences in the marking processes of adults and young children and admitted that she found it difficult to ascertain 'fairness' in her marking. She welcomed the opportunities to 'clarify' by listening to other tutors' points of view and identifying that they were very different from her own, which therefore encouraged and developed expansion of her thinking.

Improved relationships among tutors

The group confirmed that the opportunity to make connections with others was an important aspect of online teaching which could often be overlooked.

The collegiality that this has developed has been fantastic. I now feel that I can email any of the tutors and ask for advice or feedback and ask, "what do you reckon? What are you saying about ... ? How would you answer this question? This is not only about moderation it's also about feedback and consistency. It is important that we are all saying the same thing to students and this has allowed us to work together to do that (Tutor B).

Tutor C commented that there is a risk that tutors feel isolated in their work when they "work independently at home sitting in front of a computer for hours on end". She went on to confirm that this process had helped eliminate feelings of remoteness, summarised by "you don't feel that you are totally alone".

Tutors agreed that a "definite bond of collegiality" (Tutor A) had developed through participation in the moderation project. The team commented that the benefits could have been even greater if all of the tutors had been involved, suggesting "this would have increased the value for everyone" (Tutor B). Although, in the main, tutors choose this type of work because they welcome the opportunity to work from home, they also "found it a really nice experience to be able to come and talk with other people to give affirmation" (Tutor A) to the work that they do. They all "enjoyed" and "looked forward" to coming to meetings and developed a "sense of community with the other tutors" (Tutor C).

Overall, the tutors agreed that moderation had made them feel part of a supportive environment that was not just about moderation: it was also about feedback and consistency across a large group of students and teachers. They commented that it had been a learning experience they had appreciated being involved with.

Tutor A suggested that the process be something that should be included in the workload of all tutors and be done on a monthly basis, and that in this way the process would be valued and tutors would come to an understanding that it is just "part of the job". She commented that this would encourage 'automatic' moderation so that people have opportunities to listen to what others are saying, think about their own practices and consider whether they have fully understood the concepts themselves.

Conclusion

A major initiative in this project was to introduce the issue of moderation from the commencement of the unit and to build tutors' expertise from this point. The contention was that this would lead to improved procedures for moderation, improved validity, fairness and reliability in the students' feedback and marks, as well as improved expertise and levels of satisfaction among the tutors. The participants indicated that the face-to-face meetings had great benefits for them and also that commencing moderation as early as possible during the unit provided major benefits. They commented on their increased level of understanding of the unit, of the assessment items and of typical student responses at different levels. They were certain that the results for students were fairer and more defensible as a result of the process. All participants, irrespective of previous experience, commented on their improved expertise with regard to assessment in the unit and in general. They valued being part of a team, rather than feeling they were 'on their own' and commented on the importance of being able to rely on each other and easily obtain support and assistance if they needed it. All mentioned high levels of confidence and satisfaction with marking and moderation as a result of the process.

Boud (1988) argues that the most important guarantors of quality in higher education are the academic staff. The focus of this study was on building team capacity to ensure strong and effective assessment and moderation processes as a way to sustain academic standards. The outcomes confirm the benefits of an approach emphasising the inputs and contributions of staff throughout the moderation process commencing at the earliest possible stage.

As a result of this project, a similar approach has been built into the tutor training and moderation processes for all units offered by the school. The benefits of investing in face-to-face meetings where possible and commencing early during units have been recognised for all modes of delivery, particularly for tutors in fully online units where isolation can be a significant issue.

References

- Adie, L. (2008, December). *Changing assessment practices: the case for online moderation*. Paper presented at the Australian Association for Research in Education 2008 International Education Conference, Brisbane. Retrieved October 27, 2010, from http://www.aare.edu.au/live/index.php?option=com_content&view=article&id=146&Itemid=24.
- Australian Government. (2008). *Review of Australian Higher Education*. Retrieved August 15, 2009, from <http://www.deewr.gov.au/highereducation/review/pages/reviewofaustralianhighereducationreport.aspx>.
- Australian Government. (2009). *2009-2010 Commonwealth Budget – Education Overview-World Class Outcomes*, Retrieved 15 August, 2009 from <http://www.ato.gov.au/budget/2009-10/content/overview/html/index.htm>.
- Boud, D. (1988). Professional development and accountability: working with newly appointed staff to foster quality. *Studies in Higher Education*, 13(2), 165-176.
- Boud, D. & associates. (2010). *Assessment 2020: seven propositions for assessment reform in higher education*. Sydney: Australian Learning and Teaching Council.
- Bloxham, S. (2009). Marking and moderation in the UK: false assumptions and wasted resources. *Assessment and Evaluation in Higher Education*, 34(2), 209-220.
- Curtin University (2010). Developing appropriate assessment tasks. In *Teaching and Learning at Curtin 2010* (p. 22-44).
- Department of Education, Science and Training. (2002). *Striving for quality: learning, teaching and scholarship*. Paper prepared as part of the Government Review Higher Education at the Crossroads. Canberra: Department of Education, Science and Training.
- Grainger, P., Purnell, K., & Zipf, R. (2007). Judging quality through substantive conversations between markers. *Assessment & Evaluation in Higher Education*, 33(2), 133-142.
- Hughes, C. (2008, July). *Moderation*. Paper prepared for the assessment subcommittee of the University of Queensland teaching and learning committee. Brisbane. Retrieved July 10, 2010 from www.tedi.uq.edu.au/downloads/assessment/Moderation-discussion-paper.doc.
- Hunter, K., & Docherty, P. (2009). Reducing variation in the assessment of student writing. *Assessment & Evaluation in Higher Education*, 34, 1-16.
- James, R. (2003). Academic standards and the assessment of student learning: some current issues in Australian higher education. *Tertiary Education and Management*, 9(3), 187-198.
- Knight, P. T. (2002). Summative assessment in higher education: practices in disarray. *Studies in Higher Education*, 27(3), 275-286.
- Lawson, K., & Yorke, J. (2009, November). *The development of moderation across the institution: a comparison of two approaches*. Paper presented at the ATN Assessment Conference, Melbourne.
- Maxwell, G. (2002). *Moderation of teacher judgements in student assessment: discussion paper on assessment and reporting*. Brisbane: Queensland School Curriculum Council.
- Price, M. (2005). Assessment standards: the role of communities of practice and the scholarship of assessment. *Assessment & Evaluation in Higher Education*, 30(3), 215-230.
- Rust, C. (2007). Towards a scholarship of assessment. *Assessment & Evaluation in Higher Education*, 32(2), 229-237.
- Rust, C., Donovan, B., & Price, M. (2005). A social constructivist assessment process model: how the research literature shows us this could be best practice. *Assessment and Evaluation in Higher Education*, 30(3), 231-240.
- Sadler, D. R. (2005). Interpretations of criteria-based assessment and grading in higher education. *Assessment & Evaluation in Higher Education*, 30(2), 175-194.
- Saunders, M. N. K., & Davis, S. M. (1998). The use of assessment criteria to ensure consistency of marking: some implications for good practice. *Quality Assurance in Education*, 6(3), 133-144.
- Schon, D. (1983). *The reflective practitioner*. London: Basic Books.
- Walvoord, B., & Anderson, V. (1998). *Effective grading: a tool for learning and assessment*. San Francisco, CA: Jossey-Bass.
- Wenger, E. (2000). Communities of practice and social learning systems. *Organization*, 7(2), 225-246.
- Williams, J., & Kane, D. (2009). Assessment and feedback: institutional experiences of student feedback, 1996 to 2007. *Higher Education Quarterly*, 63(3), 264-286.
- Wyatt-Smith, C., Klenowski, V., & Gunn, S. (2010). The centrality of teachers' judgement practice in assessment: a study of standards in moderation. *Assessment in Education: Principles, Policy & Practice*, 17(1), 59-75.