

# **Assessment and Moderation at Curtin**

## **PILOT PROJECT: FINAL REPORT, April 2009**

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<b>Contents</b>	
<b>Executive Summary</b>	2
<b>1.0 Background</b>	6
<b>2.0 Assessment and moderation working party</b>	6
2.1 Issues discussed by the working party	6
2.1.1 Examinations	6
2.1.2 Timetabling	7
2.1.3 Administration and workload	7
2.1.4 Consistency of terminology	7
2.1.5 Marking and experience	8
2.1.6 Deadlines	8
2.1.7 Derivation of final marks.	8
<b>3.0 The moderation pilot project</b>	8
3.1 Phase One	9
3.2 Phase One results	9
3.3 Phase Two	11
3.4 Phase Two results	12
3.4.1 Where funding helped	12
3.4.2 Where funding did not help	12
3.4.3 Participants' reflections on moderation	13
<b>4.0 Interviews with selected working party members</b>	14
4.1 Interview 1 (Engineering)	14
4.2 Interview 2 (Physiotherapy)	15
<b>5.0 Concluding remarks</b>	15
<b>References and Acknowledgements</b>	16
<b>Appendices</b>	17
Appendix A: Moderation, Scaling and Curtin's Quality Assessment Cycle	17
Appendix B: Draft Moderation of Assessment Policy	21
Appendix C: Pilot Project Participants and Funding	23
Appendix D: Pilot Project Unit Coordinator Report Template	24

## Executive Summary

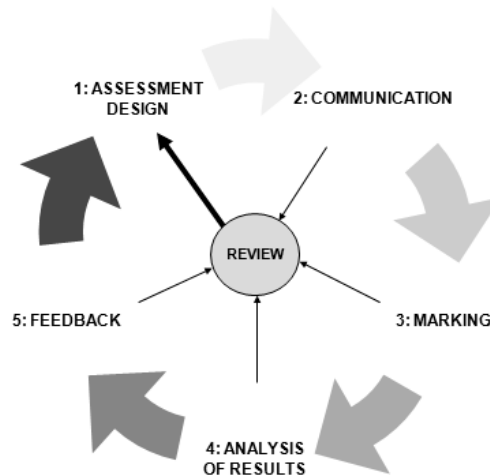
Curtin recognises the importance of moderation for the quality assurance and enhancement of assessment. During 2008, the University Teaching & Learning Committee (UTLC) established an Assessment and Moderation working party with a remit to investigate and report on issues relating to moderation and fair assessment, and to test whether financial supplementation of unit coordinators is an effective way to ensure sufficient support for implementation of moderation procedures. The terms of reference of this working party were to:

1. define moderation at Curtin;
2. develop a quality assessment process for moderation;
3. oversee a moderation pilot project which included financial supplementation to participating unit coordinators.

The working party developed a holistic definition of moderation, spanning assessment design to feedback and review:

*At Curtin, moderation is a quality assurance process directed at ensuring that assessments are marked with accuracy, consistency and fairness. Moderation is required for every assessment which involves a degree of subjectivity. Moderation can be effected through several methods and is part of the Quality Assessment Cycle. This spans the entire assessment event, including the design and post-event analysis of the fitness of the assessment of student learning.*

This was amplified in a quality assessment cycle, detailed in Appendices A and B, and summarised below:



A series of draft policy statements associated with each stage of the assessment cycle were developed by the working party and put forward for inclusion in the 2009 Assessment Manual.

The moderation pilot project (item 3 above) consisted of two phases. Phase 1 involved the collection of material through a survey of all unit coordinators on Bentley campus. This revealed a number of issues relating to the moderation of

assessment. In particular, the survey analysis suggested that there was high compliance in areas relating to the alignment of assessment to desired learning outcomes and the communication of marking criteria and standards to assessors. Less compliance was observed in areas relating to the number of assessment tasks, the clarity of marking criteria, timeliness of feedback, and the transparency of the assessment process to students.

To address these identified issues, Phase 2 aimed to identify ways of improving the moderation process through a model of financial supplementation for larger units (defined here as those with more than 100 enrolled students). Twenty participating unit coordinators contributed to this second phase, each writing a short summary report to show how the additional funding had been used to improve moderation processes.

The results of the pilot project suggested that there were some issues that were readily addressed through additional funding, and some issues that were not as easily resolved. Attendance of sessional staff at moderation meetings was seen as a positive influence; as was additional support for unit coordinators to free up more time to engage in moderation. More difficult issues related to administrative processes for collecting and collating assessments (including timetabling), and the likely impact on staff workload were also raised and discussed. During the pilot, extended interviews were also conducted with members of the working party and sub groups were tasked to investigate and report on specific issues.

In the light of progress to date in the 2008 pilot, a bid was made for funding in the 2009 budget: with \$325,000 secured for this purpose. The monies reside in the Office of Teaching and Learning, with the understanding that they are to be used to provide the most effective and efficient support for assessment and moderation with the Faculties during 2009. A final report on the use of the funds to effect improvements in this area is to be made by January 2010, with an interim report for budgetary planning purposes made in October 2009.

## **Recommendations and actions**

This section includes recommendations for actions, within the budget allocation for 2009. Funding models and allocations will be negotiated with Deans (Teaching & Learning).

### **1) Undertake a range of staff development activities to ensure that moderation is understood by all teaching staff**

#### **Recommended actions:**

- 1a) Enhance Curtin assessment policy with a greater focus and detail on moderation expectations, ensuring appropriate sections of Curtin's Academic Standards (2008) are assured through that policy (underway)
- 1b) Provide more comprehensive information on moderation through *Teaching and Learning at Curtin 2009* (completed)

- 1c) Include more comprehensive information about moderation in the Foundations of Learning and Teaching programme (underway);
- 1d) As a priority, invite members of the working party to work with the Office of Teaching and Learning to produce comprehensive resources relating to the entire quality assessment cycle specifically for unit and course coordinators (especially those new to these roles). These resources should be designed to be easily accessible by busy staff, and include “just in time” resources such as brief streaming online videos, checklists, samples of marking guides etc. These resources should identify effective ways of assessing students (including the provision of formative feedback) within the moderation framework. [Budget implication: time release for working party members]
- 1e) Invite experienced unit coordinators and teaching staff with expertise in assessment and moderation to mentor colleagues, and reward the mentors through the Teaching Performance Index in 2009. (Noting that this will need to be structured within the TPI);

**2) Ensure moderation can take place in a comprehensive and timely manner:**

- 2a) The amount of time required for the moderation of assessment by unit coordinators (generally fulltime or part-time employees) appears, in general, to be poorly integrated into the workload model at Curtin. As a priority, further action is needed to ensure that the time taken to moderate assessment is recognised in University workload allocation processes for staff. Sessional staff may be placed at a particular disadvantage by remuneration models that align payment to teaching activity.

**Recommended action:** That the working party on the University workload allocation model urgently consider time requirements for assessment and moderation in their forthcoming recommendations, particularly for full time and part time staff who are unit coordinators or tutors in units with more than one hundred students.

- 2b) Unit coordinators can benefit from specific administrative support for assessment and moderation such as assistance from professional staff in the management and handling of assessed work, entry of grades and marks into databases, and electronic submission of assessed work.

**Recommended action:** That the transfer of appropriate administrative tasks from teaching to professional staff be investigated as a priority by the Office of Teaching and Learning drawing on examples already used within some Faculties, and that specific recommendations for implementation be made through the Deans Teaching and Learning to their Pro-Vice Chancellors as soon as possible.

2c) The need to ensure that all assessors (including sessional staff) have clarity around grading procedures and standards cannot be underestimated (dealt with in Recommendations 1a-1e above). The translation of higher level principles and frameworks to the operational level is normally achieved through attendance by all those teaching a unit at moderation meetings (or where there is more than one campus involved, through teleconferencing or videoconferencing). The Pilot Project demonstrated a positive effect when attendance at moderation meetings is funded although it is not clear that \$3 per student will be sufficient in all cases. It may be more worthwhile to align the funding allocation to the numbers of staff involved in the moderation process, and the demonstrated need. However, it was also noted that some areas were already funded in the area of moderation, whilst others were not. This suggests that a differentiated response is required with respect to the allocation of further funding in 2009. (Recommendations 2a and 2b will address what can be done when funding attendance is not the primary issue).

**Recommended action:** A significant proportion of the 2009 budget resources should be allocated to faculties to pay sessional staff to attend moderation meetings (either face to face or remotely) in viable units identified and prioritised by the faculty. In conjunction with this, competitive bidding for funding for projects demonstrated to be aligned with Faculty/School priorities should also be considered.

2d) There is potential for the development of skilled teaching associate positions (for PhD students, for example) to provide extra support for the moderation of assessment at points of need. This could also provide developmental/induction opportunities for those considering an academic career.

**Recommended action:** That the working party further investigate this area and make recommendations to the University Teaching and Learning Committee.

**3) Ensure moderation of all assessments, including examination papers and those which are electronically deployed through the CAA laboratory.**

Investigation to date suggests that moderation of examinations (including peer review of examination papers and those assessments marked online or by optical mark recognition) warrants future attention.

**Recommended action:** That the working party further investigate this area and the implications for change, and make recommendations in due course to the University Teaching and Learning Committee.

## **1.0 Background**

Assessment is a key factor in quality learning and student satisfaction (see, for example Gibbs & Simpson, 2004). Student feedback via Curtin's eVALUate suggests that there is gradual improvement in the area of assessment and feedback but this aspect still remains as the area where students are least positive (Tucker & Pegden, 2008). The trigger for the formation of the working party and the activities described here can be summed up as being primarily in response to the following question:

*Are fair assessment practices in place in all units, in all modes across all locations (including on-shore and off-shore partnerships)?*

The working party was established in 2008 to investigate the issues associated with this question, and plenary discussions were complemented with extended interviews on specific topics conducted separately with members. A pilot project was established, involving a range of participants from the University.

## **2.0 Assessment and moderation working party**

Members across faculties were invited to participate in the working party, with a remit to:

- define moderation
- define and describe a quality assessment cycle
- develop a moderation policy for assessment
- oversee the assessment and moderation pilot project
- investigate other issues relating to moderation

A working paper defining moderation in detail was developed (included as Appendix A). This, together with the results of the pilot project and further working party discussions, ultimately led to the development of the draft moderation policy (Appendix B). In January 2009 this draft policy was put forward for inclusion in the revised Assessment Manual to be released in March 2009.

The working party raised and discussed a number of related issues, and these are summarised in section 2.1.

### **2.1 Issues raised by the working party**

#### **2.1.1 Examinations**

Working party members discussed issues dealing specifically with the need for co-examiners to be involved with the writing and 'testing' of examination papers to help ensure that the papers were unambiguous, fair and clearly written. It was suggested that marking guides (also known as rubrics) could easily be constructed at this point with input from the people responsible for marking. The working party felt that it is clear that there is a need for more attention to be given to the design of the examination in the early stages, observing that this may alleviate some post examination moderation issues. This concept of a peer review of assessment was incorporated in the draft moderation policy (Appendix B). Flexibility around delivery of all assessments must be allowed from an educational perspective, and the working party concluded that it may be beneficial to initiate systems of exam paper

encryption to allow secure storage and transfer of examination papers between locations

### **2.1.2 Timetabling**

The issue of moderating oral presentations and practical examinations was raised. It was observed that in many cases these activities are graded by only one examiner and it is difficult for all examiners to moderate assessment where artefacts (i.e. pieces of evidence) are not available or are of a second order (such as assessors' notes).

Some lecture theatres and teaching spaces are set up to record i-lectures and it was suggested that teaching staff could also use these spaces to record the students' presentations. This would enable more than one marker to see/hear the work for assessment purposes. It would provide evidence for a review of the assessment in the case of an appeal. There were potential risks in terms of the recording process adversely affecting student performance, and this would need to be addressed: practice assessments may help in this respect (thereby providing added benefit of improved formative feedback to students).

### **2.1.3 Administration and workload**

Discussion revealed that moderation is presently not taken into consideration in most workload calculations, though there are some local practices that are recognising this issue. Members of the party observed that unit coordinators spend time towards the end of semester involved in tasks that are not of an academic nature. These include collecting examination papers from examination venues, distributing examination papers to markers, setting up markers' meetings and entering and checking students' names and grades onto spreadsheets. The working party discussed suggestions that (in some cases) administrative support could be used more effectively to relieve teaching staff of such tasks and freeing them up to focus on the moderation process. The administrative staff involved and work assigned would be dependent on the size of the unit and its location. Arguments were advanced for a funding model for assessment to ensure that marking was adequately supported in two areas. Firstly the time taken for marking and moderation needed to be adequately recognised, and secondly, staff development support and associated resources were seen as essential.

### **2.1.4 Consistency of terminology**

The working party also observed that there is some confusion over terms used in the moderation process (and in assessment more generally). It was felt that more consistency would be helpful in this respect. To illustrate, the terms 'marking criteria', 'assessment standard', 'marking guide', 'assessment sheet', 'rubric' are often used interchangeably yet some of these refer to different things. Curtin is presently addressing this in a number of areas to do with assessment and moderation. For example:

- The Assessment Manual 2009 edition provides updated guidance;
- *Teaching and Learning at Curtin 2009* uses consistent terminology;
- Foundations of Learning and Teaching modules have been revised to include more guidance on moderation;

- Workshops on assessment are being conducted by the Office of Teaching and Learning in Faculties, and are available on request (contact Jon Yorke, x1735).

### **2.1.5 Marking and experience**

The working party discussed the differences in time required by someone who is new to the unit compared with those who have had more experience. Currently, there is no University-wide method for recognising the time needed to participate in moderation meetings and/or workshops, and it is incumbent on the markers to deal as best they can with the task of marking – sometimes with good support from their colleagues, and sometimes not. The working party suggested that there is a risk when descriptive forms of assessment (essays, reports and so on) are replaced too frequently by methods such as multiple choice tests: the latter are quicker and easier to mark but do not require students to develop skills in writing and critical argument. Construction of good multiple choice tests requires high level expertise and trialling/review to ensure validity and reliability.

### **2.1.6 Deadlines**

The working party believes that deadlines at the end of a study period for the input of final grades are generally problematic particularly in the case of large units that were also taught offshore. Unit coordinators have to work quickly within tight deadlines to make sure final grades are submitted on time. The working party noted the risk that moderation processes may become a casualty of the time frames and deadlines. Shifting these deadlines (where possible) may allow examination markers more time to moderate during the examination period. Current timeframes (eg the Wednesday immediately after exam week) create significant pressure on marking and moderating, yet a quick turnaround of results is desirable for learners. The working party concluded that electronic submission, delivery and collation of assessment would be beneficial (particularly for offshore delivery) to provide maximal time for moderation.

### **2.1.7 Derivation of final marks**

The working party discussed the processes by which final assessment marks are derived, and raised some concerns over the transparency of this process. There was some anecdotal evidence that this final mark was being arrived at in a number of different ways and was subject to varying individual methods. This issue has not yet been adequately addressed and warrants further attention.

## **3.0 The moderation pilot project**

The assessment moderation pilot project was set up to **examine** (Phase 1) and then **support** (Phase 2) moderation processes across schools and faculties, and to test whether financial supplementation is effective in ensuring moderation occurs. Phase 1 explored the issues unit coordinators face in regard to differing assessment types and modes of delivery. Phase 2 of the project provided participating unit coordinators with access to funds to ensure moderation. Phase 2 aimed to test whether making funds available assists effective moderation, and if so, whether the level of funding used in the pilot is adequate.

### 3.1 Phase One

During the first semester of 2008, unit coordinators were contacted by email and asked to indicate whether ten key fairness factors were embedded within the units for which they were responsible. A range of units were included, from small to large, delivered both off and on-campus using a range of teaching approaches. The 'fairness' factors surveyed represented the key stages in the moderation cycle outlined earlier, and colleagues were asked to self rate their 'compliance' with the ten statements shown (in abbreviated form) in Table 1.

**Table 1: Statements**

1	Assessments, including exams, measure achievement of the unit learning outcomes—nothing more, nothing less.
2	There are four assessment tasks, preferably three, in a 25 credit unit. One of these may be an exam.
3	All assessments have clear marking criteria, communicated to all students. Students are told (in writing) how a task will be graded.
4	These marking criteria are communicated to all teaching staff (in all modes and in all locations) before students commence the task.
5	These marking criteria are communicated to all markers (in all modes and in all locations) before marking commences.
6	Marking standards (expectations for performance at each grade level) are agreed and adhered to by all markers. Anomalies in marking are resolved.
7	Processes are in place to ensure that scaling of marks after student work has been returned to them does not occur.
8	Students are informed about the processes in place in this unit to ensure fairness through moderation.
9	Student work is returned with a clear mark and/or grade and clear indications as to where they can improve.
10	Student work is returned in time for them to improve on the next assessment task.

In addition to these statements, two open ended questions aimed to elicit further information:

- What are the issues we need to address to fix identified gaps?
- Do you have examples of good practice you would be willing to share?

### 3.2 Phase One results

A total of 364 responses were received during the six week survey period, with the vast majority of returns being from units offered face to face on the Bentley campus. Sixty-two units were offered at other on-shore campuses (such as Curtin International College and Curtin Sydney) and 82 units were offered offshore (Miri and beyond). The breakdown of responses by Faculty were:

- Curtin Business School: 109 responses
- Centre for Aboriginal Studies: 9 responses
- Humanities: 47 responses

- Science and Engineering: 50 responses
- Health Sciences: 148 responses.

The sample included many of the University's high-enrolling units.

During the collation of results, all responses which seemed ambivalent or uncertain were coded as 'non-compliant'. As a result, this may possibly understate the level of compliance with these statements. However, there is also the possibility that unit coordinators under-reported or declined to respond if their responses presented them in a less than favourable light. Both of these factors should be acknowledged as a risk to this study.

Notwithstanding these cautionary notes, statements 1, 4, 5, 6 and 9 received the highest level of 'compliance' with at least 90% of the respondents agreeing that these processes were in place in their units. Although all of the statements have a basis in University policy and/or 'good practice' guidance, statements 2, 3, 7, 8 and 10 received rather more modest levels of compliance (between 70 and 89% in agreement).

Somewhat unsurprisingly, it became clear that there were some differences in consensus as to the definitions of moderation and scaling. This was illustrated (for example) by a small number of participants who equated moderation with double marking. It should be recognised however that moderation processes do not need to include moderation of every paper/activity and sampling can provide adequate reassurance of consistency when carried out appropriately. This suggests that the terms used should be standardised, with scope for staff development in this area.

The open-ended questions produced a number of interesting comments and suggestions. Issues raised clustered around three broad themes: workload, communication and staff development:

- Respondent comments suggested reappraisal of *workload* was appropriate in view of the significant challenges of moderating between campuses. The time taken to conduct the post-hoc analysis of results was seen as a barrier to the goal of rapid feedback, and a number of respondents suggested that a realistic allocation of resources for the administration of units would free academic staff time.
- *Communication* was a significant factor, especially where assessments were undertaken by local teaching staff in an offshore location. The need for clear communication between staff and with students in terms of the marking procedure was also prominent (particularly in respect of statement 8 above).
- In terms of *professional development*, some respondents felt that new tutors in particular would benefit from more direction and advice in terms of improving the quality of feedback to learners – a somewhat surprising assertion given the generally high level of reported compliance with statement 9. There was a clear sense that there was considerable scope for professional development in assessment more generally, and

specifically in the understanding and interpretation of marking criteria.

- Beyond these broad themes, there were also concerns about the *potential lack of quality assurance where units were taught by one member of staff.*

### **3.3 Phase Two**

The second phase of this project (conducted in Semester 2, 2008) sought to explore financial supplementation to ensure effectiveness in different approaches to moderation across the University. In view of the significant issues raised when dealing with larger cohorts, participation was sought from unit coordinators with more than 100 enrolled students.

Nineteen unit coordinators agreed to participate in this second phase, with student numbers in each unit ranging from 105 (Humanities) to 1,383 (Curtin Business School). A funding pool of \$23,559 was made available, and allocated to units using a funding model which allocated \$3 per student enrolled in the unit. In total, participating units represented 7,853 students. (See Appendix C for funding allocation and uptake.)

Funding was designed to support the maintenance or enhancement of existing moderation processes in each unit. In recognition of the diversity of assessment practices in the University, participants were permitted to draw down funding and use this as they wished, within the moderation framework described in Appendix A. It was expected that unit coordinators might use the funds to engage additional markers, pay sessional staff to attend marking meetings, or to use video/teleconferencing with remote colleagues. This approach allowed participants to interpret the framework flexibly in the context of their practice.

Unit coordinators were asked to follow the assessment moderation framework described earlier and to subsequently complete a one page summary (Appendix D) describing how moderation processes were enabled or enhanced. Participants were also requested to specify how the funding was utilised, and to flag moderation issues that could not be addressed through this approach. Meetings were set up with all participants and all agreed to follow the quality assessment cycle derived from the working party. There was further discussion around other issues associated with moderation (such as disciplinary variations in marking/grading between science based areas and those from the arts and humanities) and although these were noted it was explained that they were outside the scope of the project. Throughout the semester the participants were contacted and given opportunities to ask for clarification or further help. At these points some explained that they would not be using any of the funds, one participant pulled out of the project and a small number continued with the project but felt unsure where to use the funds.

### 3.4 Phase Two results

Participants were asked to complete a report (Appendix D) outlining how the funds were used. Some of the participants noted that they did not use the funds as they felt the moderation meetings they routinely set up were already within the work load of the tutors or they felt the process had been running smoothly 'as was' and in consequence, this did not need changing.

#### 3.4.1 Where funding helped

- **Paying sessional staff to attend moderation meetings** (8 participants): Some faculties had never previously paid for sessional staff attendance as it was not within their budget. The staff had usually tried to attend from 'the goodness of their heart'. The funding meant that more staff attended and the meetings were more thorough.
- **Providing time to work on marking guides** (3 participants): As part of the moderation meeting extra funding (that usually bought time) meant there was a more thorough review of marking guides and in some cases these were altered within the meeting. All staff therefore had input and a clear understanding of the marking of the assignment. This was especially important for new staff.
- **Paying an external examiner to review papers** (1 participant): Funds were used to engage an external reviewer to moderate papers. Previously there was only time for the unit coordinator to moderate a small sample of assessments, but in this case more papers were moderated. Was this an improvement? If so, how was it obvious?
- **Paying sessional staff to do more marking** (4 participants): This was particularly the case for large first year units. The unit coordinators assigned their marking load to a tutor to free themselves up to moderate the unit.
- **Paying sessional staff to attend a second class** (2 participants): In these cases staff received payment to attend a class in order to double mark oral presentations.

#### 3.4.2 Where funding did not help

There were areas in the moderation process that participants indicated would not benefit from additional funds as the problems were due to time constraints. In large first year units in Engineering, Commerce and Psychology, unit coordinators cited difficulties in marking papers, moderating and meeting final end of year deadlines. It was felt that even when their own marking was assigned to others the role of moderating the entire unit was difficult to achieve in the time frame. Although funding does go some way to alleviating the problems encountered in these large units there is an additional need to re-negotiate deadlines, and take into account the size of the unit when assigning administrative staff and timetabling of examinations.

It was generally felt that marking practices were more consistent where marking teams were established over a number of semesters. It was suggested that this was also the case for offshore units. Established teams may require less support for the development of moderation processes and efforts in this area may be most usefully directed towards teams that are comparatively new. Whether an assessor

group is newly established or not, regular reviews of assessment processes (as outlined in the moderation framework) are required to ensure that moderation practices do not become tacit and/or moribund.

Timetabling constraints also limited the number of additional classes that sessional staff could attend to be second marker of oral presentations. In two cases, it meant the unit coordinator attended extra sessions. This issue was not only a question of the cost of sessional staff but their availability.

The funding did not help in finding appropriately qualified staff to examine in some schools. Further investigation would be necessary to ascertain other ways to attract such examiners and whether national or international partnerships involving peer-review and benchmarking might remedy this.

Participants noted that in some cases the funding was not sufficient to organize workshops for markers in regional and offshore locations. Presently, offshore markers are usually provided with marking guides and advice from unit coordinators.

Participants observed that there is no University level approach whereby offshore markers and Bentley markers have the opportunity to meet as a group and work through the guides (either face to face or through tele/video conferencing). Including more offshore input through this type of meeting could refine the moderation process and be a staff development opportunity for offshore participants to increase confidence in marking assessments.

The funding was insufficient in some cases to pay for moderation meetings for all assessments. One participant asserted that there were not enough funds to double mark all papers. However, double marking for all papers is not a requirement: it usually suffices to double mark a sample of papers

### **3.4.3 Participants' reflections on moderation**

Further comments were received from some participants, who felt that moderation could be improved if:

- **there was technical support for video taping oral presentations** (One participant attempted to have students' oral presentations recorded so more than one person could see presentations and grade them; this proved too difficult and time consuming.)
- **a video was put together to help instruct the markers** (This arose as an alternative suggestion to having two people attend oral presentations for marking. 'Training' videos would allow markers to watch / discuss how to assess the activity.)
- **there was more inclusion of regional and offshore teams** (Some participants suggested that they did not adequately moderate in these areas as the funding was insufficient for face to face workshops, although they were given clear marking guidelines and support.)

## **4.0 Interviews with selected working party members**

Interviews were conducted with volunteers from the School of Engineering and Physiotherapy. This need was identified following discussions in the working party which established that further investigation was needed in certain areas where the cohort of students in units was large and assessment was not paper based. Information gained from these interviews supported some of the findings from the pilot project, in particular issues relating to the moderation of practical tasks, and the division of responsibility between unit coordinators and administrative staff.

### **4.1 Interview 1 (Engineering)**

This interview raised issues relating to the workload faced by unit coordinators, the moderation of examination papers, and the collection/handling of assignments.

**Unit co-ordinator workload** The interviewee provided further support for the observation that there are certain aspects of the moderation process that can only be done by the unit coordinator (as they have access to all markers involved etc). The issue of unit coordinator workload was raised particularly for the end of semester period. At this point unit coordinators are responsible for:

1. marking final assignments;
2. moderating across the unit;
3. meeting university deadlines in terms of submissions of grades.

Of these tasks, administration processes accounted for a large proportion of time. It had been calculated that a unit of approximately 150 students required about 5-6 hours of administrative effort by the unit coordinator for tasks such as the input of student grades and the double checking of grades against names. Scaling this up, it was observed that the administrative load for 20 units each with 150 students would require approximately 100-120 hours, equating to 2 weeks' work for 2 administrators.

**Examination paper moderation** In light of working party members' observations about examination paper design, the interviewee agreed that there was little time for thorough moderation of the examination paper before it was submitted. At present, examination papers are submitted by week 5. If there was flexibility around this deadline there could perhaps be the possibility for more general input in the design of the paper. A suggestion was made of having a small group of academics work through the papers and check marking guides and sample answers, if necessary liaising with unit coordinators to improve these and ensure consistency across the discipline.

**Assignment collection and return** For some two years, the School of Engineering has employed a system that entails students submitting all of their assessed work (except invigilated tests and examinations) through a School Assessment Office with advertised counter hours. Students must use a school-constructed personalised cover sheet downloaded from the intranet. The cover sheet features a unique (specific to both the student and assessment) barcode that is scanned upon submission. This electronically logs receipt of the piece of work and automatically sends an email of receipt to the student. To direct administrative tasks away from the unit coordinator it may be feasible to

investigate the possibility of setting up such systems in other schools - particularly those with larger units where the 'payoff' is greater.

#### **4.2 Interview 2 (Physiotherapy)**

This interview focused on issues associated with the assessment of practical tasks. In this interview, the participant echoed concerns raised by the moderation working party as to the fairness of the grading of this assessment type. It was noted that previous examiners for practical tasks were drawn from staff in the School of Physiotherapy. Since then, it has become necessary to include practicing physiotherapists and/or supervising clinical practitioners from outside the University. In the past, marking explanations and support were given to all examiners as part of a meeting prior to the examination day. Due to time and availability constraints, this support is now given on the day of the examination. This puts pressure on the marking team in terms of time and resources. The lack of time available to 'train' appropriate staff who are not locally based suggests some potential for a model of guidance and support through video recordings accessed by examiners prior to the examination.

#### **5.0 Concluding remarks**

The working party has revised the definition of moderation, developed and refined the quality assessment cycle and developed draft moderation policy statements (see Appendices A and B). A range of issues and potential solutions have been identified and discussed through the moderation pilot project and discussions with key stakeholders. Broad issues identified centre around academic staff workload, payment of sessional staff, and the design, collection and moderation of assessments (particularly examinations). Good assessment design (recognised as a key factor in a holistic definition of moderation) can eliminate or at least reduce moderation issues and problems that occur after the event. For moderation processes to improve, it is essential that colleagues are engaged and supported in this critical dimension of assessment design. This working party has also established and highlighted the need for high quality and efficient administrative processes: these are key variables and should not be neglected.

Finally, it should be noted that improved moderation processes will enhance the quality of assessment at Curtin, but they must not be allowed to drive the assessment towards types that are easy to mark.

A summary of recommendations and actions appears on Pages 3-5.

**- End -**

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<http://evaluate.curtin.edu.au/local/docs/UARSem2-2008.pdf> (accessed January 19 2009)

## Acknowledgements:

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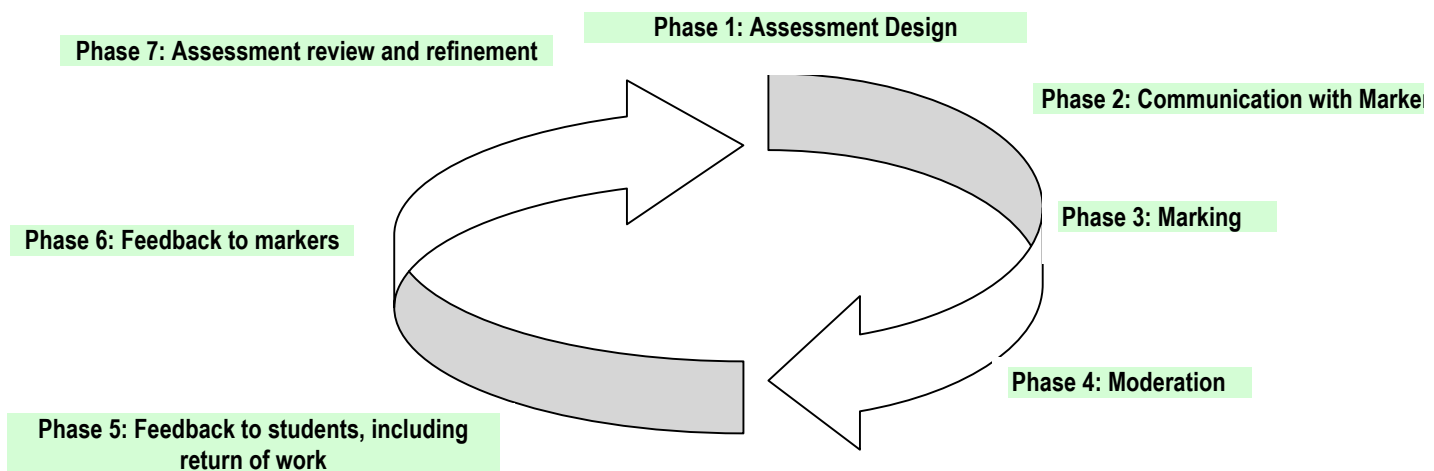
## Appendix A: Moderation, Scaling and Curtin's Quality Assessment Cycle

**At Curtin, moderation** is a quality assurance process directed at ensuring that assessments are marked with accuracy, consistency and fairness. Moderation is required for every assessment which involves a degree of subjectivity. It can be effected through several methods (detailed below) and is part of the Quality Assessment Cycle (that is, includes the entire assessment event, including the design and post-event analysis of the fitness of the assessment of student learning). The process of moderation can include the adjustment of student marks, but always based on the re-assessment of student work. As part of the moderation, adjustments to student marks must occur before the script or the marks have been communicated to the student.

**At Curtin, scaling** refers to the adjustment of student scores based on statistical analysis alone, or without reference to the quality of student scripts, or after work has already been returned to students. **The Assessment and Moderation Working Party recommends that scaling in this sense should be unacceptable at Curtin.**

Moderation may be effected in several ways, and is likely to work best if based on the following principles:

1. The front-end of the assessment process is key: that is, the design of assessments and their direct links to learning outcomes, as well as clear defensible marking criteria (also known as rubrics)
2. Review of assessments—their frequency and style and the relative success rate of students—must be a regular part of the unit improvement cycle
3. Clear communication with assessors helps ensure clear understanding of the assessment task, the marking criteria, and expectations of students.
4. Pre-marking meetings with assessors to clarify marking criteria are essential and decrease post-marking issues
5. Offshore and remote campuses and partnerships have specific needs and require constant and reliable communication between coordinators and markers: when things go wrong they are harder and more costly to fix.



## **Phase 1: Assessment Design**

Before the unit commences, the unit coordinator designs summative and formative<sup>1</sup> assessment tasks which directly assess higher order thinking skills in the learning outcomes and are

1. achievable by students within the allocated time frame;
2. appropriately weighted;
3. appropriately spaced throughout the study period, with a small formative or summative assessment task within the first four weeks of semester is possible;
4. supported by clear marking criteria which are clearly communicated to all students and markers well before assessments are due; and
5. designed to avoid plagiarism.

In the unit outline, students should have the details of all assessments, their marking criteria, and how moderation will be undertaken (give specific methods and timelines) to ensure fairness to students.

## **Phase 2: Communication with Markers**

Before marking commences for any assessment task which involves a degree of subjectivity, the unit coordinator meets with all markers (or communicates with remote colleagues) to ensure clarity of the expectations of assessment, and agreed processes and application of the marking criteria. This phase, while potentially costly, is key to preventing post-marking issues (which can be even more costly to address). In this phase, marking methods can be agreed which will minimise erratic application of standards, using several methods including:

1. Markers meet before marking commences and compare allocation of marks on selected random papers
2. During marking, all assignments (or one particular section) are marked by the same marker according to the approved marking criteria. This marker should review papers marked earlier (e.g. the day before) to ensure that their marking standard has not changed.
3. During marking, all assignments are re-marked by a second person. This could also be double-blind marking where two markers independently assess all assignments. Consistency limits and ways of resolving differences must be prescribed.

It is important to note that these processes must be in place regardless of the campus where the marking is done. There is sometimes a tendency to assume that marking completed by offshore or onshore partner colleagues must be subjected to scrutiny, but not so if the marking is done by a Bentley colleague. All marking practices need to be checked for comparability because all markers are

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<sup>1</sup> Summative tasks are primarily intended for assessment of learning (that is, they measure what a student can do, and are for marks which count towards the final unit mark and grade. Formative assessments are designed to assist students to improve their learning (eg practice tests, tasks and exercises) which are not for marks which count towards the final mark and grade. There is ample evidence to suggest that formative tasks significantly improve students' preparation for and chances of success in summative assessments.

subject to human error, different standards, fatigue, and so on. This also assumes that unit coordinators on the main campus know and are in communication with colleagues coordinating the unit on other campuses: this is essential to ensure moderation is effective and efficient.

### Phase 3: Marking

Marking is completed and lists of assigned marks and grades are returned to the unit coordinator. At this point, general feedback on the assessment may be given to the students as a whole group—what went well, what did not—but not to individuals.

### Phase 4: Moderation

The unit coordinator conducts post-marking analysis using one of several methods including:

1. Spot check a random sample of papers in each grade range for consistent application of standards and criteria
2. Moderate all papers which are borderline (pass/fail or between two grades).
3. Statistical analysis of results between markers—the distribution of grades and marks can be analysed to see if there is any potential harder or softer marking. However, marks can only be adjusted by looking at the papers, not just adjusting marks on a spreadsheet.
4. Work which has been assigned a Fail grade should be marked by another independent assessor to ensure students are not penalised unfairly.

If there are anomalies, then **student work needs to be re-read and re-marked and marks adjusted accordingly before work and marks are released to students**. Contracts already in place with offshore campuses and partners will determine how moderation will be conducted: all contractual obligations must be observed.

### Phase 5: Feedback to students, including return of work

Once any adjustments have been made, students receive all marks and assignments and feedback as soon as possible, and in time to improve performance in the next assignment. Student appeals with regard to marks can be dealt with more efficiently because the moderation process above has been detailed and recorded and communicated to the student group.

### Phase 6: Feedback to markers

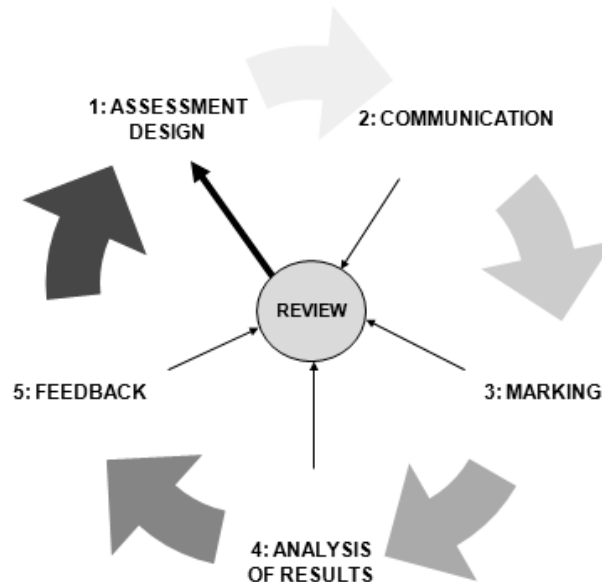
Once student work is returned, it is essential that markers also have feedback on the effectiveness and efficiency of the marking and moderation process. This includes an analysis of the assessment task (was it appropriate? was it too difficult or too easy?), the assessment criteria (were they easy for students and markers to follow? Do they need refining?), the timing of the assessment, the marking and moderation, and the feedback cycle to students (ask students whether they felt they got sufficient feedback).

## **Phase 7: Assessment review and refinement**

All of the above information should be used to review the assessment event, and improve it for the next time the unit is offered, whilst ensuring that assessments are sufficiently different each time the unit is offered.

## Appendix B: Moderation of Assessment – Draft Policy

At Curtin, moderation is a quality assurance process directed at ensuring that assessments are marked with accuracy, consistency and fairness. Moderation is required for every assessment which involves a degree of subjectivity. Moderation can be effected through several methods and is part of the Quality Assessment Cycle. This spans the entire assessment event, including the design and post-event analysis of the fitness of the assessment of student learning.



### 1. Assessment Design

Assessments will be subjected to a review prior to their release to students to ensure that they reflect good practice. This review, convened by the unit coordinator, may invite comment from colleagues within the institution or those external to it. A review would typically cover the following points to ensure that assessments are:

- aligned with the intended learning outcomes;
- consistent with the scope and level of the unit;
- clearly and unambiguously described in terms of the task and assessment criteria;
- equivalent when offered in multiple locations;
- designed to avoid the inadvertent encouragement of plagiarism;
- appropriately weighted and scheduled across the study period.

### 2. Communication

Details of the assessment tasks, weighting, due dates and marking criteria will be specified and made available to students in accordance with the unit outline. In particular, students will be informed as to when their marked work and/or feedback is to be received. Students will be notified in writing of any changes to the assessment, should this be required.

### 3. Marking

Assessors will be provided with sufficient information to ensure comparability of marking. Unit coordinators will ensure that they are available to other assessors

to provide clarification and/or guidance should this be required during the marking process.

#### **4. Analysis of results**

The unit coordinator will conduct a review of the results. This review may comprise one of a number of available methods such as:

- spot checking a random or selected sample of student work to check for consistent application of marking criteria and standards
- second marking a random or selected sample of student work to compare marks awarded;
- second marking student work deemed to be at a borderline (pass/fail or between grade boundaries);
- statistical analysis of results to see if there is any potential variance between markers.

If anomalies are detected, student work will be reassessed and marks adjusted accordingly before work and marks are released to students. Contracts already in place with offshore campuses and partners will determine how moderation will be conducted: all contractual obligations must be observed.

#### **5. Feedback**

Students should receive all marks, assignments and feedback as soon as possible, to maximise their opportunity to improve performance in following assignments. Markers should be provided with feedback on the effectiveness and efficiency of the marking and moderation process. Such feedback may include a review of the:

- assessment task to establish whether it was set at an appropriate level;
- assessment criteria to establish whether they were easy for students and markers to use;
- timing of the assessment, marking and the moderation processes employed;
- feedback provided to students.

## Appendix C: Pilot Project Participants and Funding

Faculty	Level of unit	# students	Unit is offered at	\$ available	\$ spent	Funds spent mainly on
CBS	Year 1 undergraduate	1043	Bentley, offshore	3129	2065	Attending moderation meetings
CBS	Year 1 undergraduate	1241	Internal/ext, Penang, Sing, Sydney, Miri, Indonesia, Mauritius, CIC Canning College	3723	1844	Attending moderation meetings
CBS	Year 1 undergraduate	1383	Vietnam, DCDM, regional campuses, MIS, CIC, Sydney, Canning Coll, Penang, Miri	4149	4500*	Attending moderation meetings
CBS	Year 2 undergraduate	804	Bentley, Distance	2412	0	Did not use funding
CBS	Year 1 undergraduate	341	Bentley, offshore	1023	1026*	Paid additional marking staff
HS	Year 1 undergraduate	396	WA Regional, Bentley	1188	0	Did not use funding
HS	Year 2 undergraduate	120	Bentley	360	0	Did not use funding
HS	Year 3 undergraduate	140	Bentley	420	650*	Attending moderation meetings
HS	Year 2 undergraduate	132	Bentley	396	470*	Paid external examiner/ moderator
HS	Year 1 undergraduate	322	Bentley	966	131	Attend moderation meeting, tutorial presentation class
HS	Year 1 undergraduate	254	Bentley, WA Regional,	762	0	Did not use funding
Hums	Year 1 undergraduate	105	Bentley, WA Regional,	315	0	Did not use funding
Hums	Year 1 undergraduate	139	Bentley, Mauritius	417	417	Paid tutors additional marking time
Hums	Year 2 undergraduate	152	Bentley	456	0	Did not use funding
Hums	Year 1 undergraduate	223	Bentley, Miri, Distance	669	340	Paid additional staff
Hums	Year 1 undergraduate	171	Bentley	513	510	Attend moderation meeting, tutorial presentation class
S&E	Year 1 undergraduate	367	Bentley, Miri	1101	1584*	Attending moderation meetings
S&E	Year 1 undergraduate	340	Bentley, Miri	1020	0	Did not use funding
		<b>7853</b>		<b>\$23,559</b>	<b>\$13,537</b>	

\* Note that some initial allocations were increased due to an increase in actual enrolments over and above that predicted (column 3) at the start of the project.

## Appendix D: Pilot Project – Unit Coordinator Report Template

### Curtin University: Assessment Moderation Pilot Project

#### Unit Coordinator report—end of semester, 2008

Unit: \_\_\_\_\_

Unit Co-ordinator: \_\_\_\_\_

1. Briefly say which assessments in your units needed moderation, how you went about this, what you needed to help you get this task done, and what you spent the money on

For example

Mid term essay—needed to ensure markers agreed on marking criteria and clearly understood standards. Paid \$x for sessional staff payment to attend meeting.

2. How much in total did you spend? What moderation/assessment problems did this funding help you to solve? Comment on any changes of moderation practice that occurred based on the financial support.

3. What issues did the funding NOT help you to solve (because the money was insufficient or unhelpful). Be specific.

4. What other or more sophisticated moderation and assessment issues need attention in this unit, and what would assist you to solve them?

5. What else would you like to suggest?

Please return this report by email to [Kathryn.Lawson@curtin.edu.au](mailto:Kathryn.Lawson@curtin.edu.au) by COB December 12th