

University of Birmingham

Outcome of the Moderation Working Group:

**Amendments to the 'Code of Practice on Taught Programme and Module Assessment'
with respect to moderation practices**

Topic and Purpose of Paper

1. APRC is invited to **consider**, and if thought appropriate, **approve**, proposals for preparing and consulting upon amendments to the *Code of Practice on Taught Programme and Module Assessment* with respect to moderation practices, to take effect from 1 August 2012.

Background

2. One of the 'advisable' recommendations in the report of the QAA Institutional Audit 2009 was that the University should:

 'develop a more closely defined and transparent mechanism for establishing the boundaries within which the moderation of marks should occur to ensure greater consistency across the University.'
3. A Moderation Working Group was established in March 2010 to consider this recommendation. In autumn 2010, a survey of moderation practice within Schools was carried out, in order to obtain more detailed information about the variability of practice. In addition, research was conducted into the regulations regarding moderation of assessment adopted by a sample of Russell Group and other institutions. The detailed findings were reported to the Learning and Teaching Committee in February 2011 (paper LTC.11.02.03).
4. It was agreed that some draft amendments to the *Code of Practice on Taught Programme and Module Assessment*, where the guidance on moderation practices is located, should be prepared for consultation, in order to address the areas for improvement noted in paper LTC.11.02.03:
 - a) Greater clarity in definitions of terms such as moderation, sampling, double-marking, etc.
 - b) Clarification as to whether or not different approaches to moderation are required for marks contributing to the final degree classification
 - c) More detailed guidance on selection of a sample for review, including minimum percentages for pieces of work at different levels, taking account also of the total number of scripts and the need to check the full mark range
 - d) Guidance on moderation of sub-components of modules (is there a threshold below which moderation is not required?)
 - e) Guidance on moderation practices suitable for different types of assessment
 - f) Guidance on the use of statistical information about the range of marks for a course, with comparisons, and how this should inform any sampling

- g) Guidance on how to deal with a significant differences between the first and second marks (e.g. when to award the average mark; when to use the first marker's mark; when to consult a third marker, or exceptionally, the external examiner)
 - h) Guidance on whether moderation should be carried out at the level of the piece of work (e.g. exam script or coursework essay), or at the level of the individual question (e.g. within an exam script), or both.
 - i) Guidance on the level of information which should be provided to students about moderation practice.
5. At a later stage, the Group also addressed the issue of scaling of marks and has developed new proposals regarding this issue.

Proposal

6. A new section of the *Code of Practice* regarding moderation and scaling has been drafted, as set out in **appendix 1**. This has been developed as a result of extensive and detailed consultation with Schools. In addition to several discussions amongst the Working Group which had two representatives from each College, a lunchtime discussion meeting was held in April 2012 in order to allow a wider group of interested staff to contribute to the development of the new provisions. Approximately 30 staff (including Heads of Schools and Examinations Officers) attended this event and approved the new provisions, subject to a number of minor points of clarification which have been addressed in the final version enclosed.
7. The section regarding scaling of marks has been the subject of detailed discussions with the Schools within Engineering and Physical Sciences which have been following this practice (even though it is not permitted by the current *Code of Practice*), particularly the School of Physics and Astronomy and School of Mathematics.
8. The proposed new provisions have been approved by the University Quality Assurance Committee on 1 May 2012 and by the University Education Committee on 10 May 2012.

Arguments in support of the proposal

9. The intention of the new section of the *Code of Practice* is to set out requirements which apply to all Schools for the most important aspects for assurance of academic standards (e.g. that all assessment which contributes to the final award must be internally moderated), whilst allowing room for discipline-specific variations within certain parameters in other areas (e.g. the type of moderation applied). In addition, the new provisions have taken account of existing practice in moderation revealed by the survey, such as that a number of Schools do not moderate first year work which does not count towards the degree classification (notwithstanding the fact that this contravenes the current *Code of Practice*), and compared this with the moderation guidance in force at other institutions.
10. It is worth noting that the new provisions on moderation have been developed in a different format to the rest of the *Code of Practice*. As the new provisions are more detailed than the existing ones, it was decided that a series of questions and sub-headings was easier to navigate than paragraphs of continuous text. For this reason, it is proposed that the new provisions are appended to the existing *Code of Practice*, rather than incorporated within it. Members of the Working Group and those at the lunchtime discussion were supportive of the proposed format for the new provisions.

Next steps

11. If the amendments to the Code of Practice are approved to take effect from 1 August 2012, Schools (Examinations Officers in particular) will be informed of the changes in writing and, if possible, via the University website.
12. The University will report on how it has considered and responded to the Institutional Audit recommendation regarding moderation practices within its mid-cycle Audit follow-up report, which is due to be submitted by 25 June 2012.

Professor Jeff Bale

Deputy Pro-Vice-Chancellor (Teaching, Learning and Quality), Chair of the Moderation Working Group

Sarah Letters

Academic Quality Manager

3 May 2012

Proposed new section of the Code of Practice on Taught Programmes and Modules Assessment

The purpose of moderation

This Code of Practice sets out a number of parameters and minimum requirements with regard to moderation, which must be followed by all Schools. However, it allows Schools discretion to determine the most appropriate approach in certain areas, provided this is recorded in a School Policy on Moderation (see below).

What is moderation?

Moderation refers to a range of processes conducted by an academic member of staff (i.e. an Internal Examiner) to ensure that assessment tasks and marking are accurate, appropriate to the level of the assessment and comparable with equivalent assessments. It is additional to the checking of the accuracy of marks recorded.

It is necessary to have a process of internal moderation carried out by academic staff of the University¹, and a subsequent process of external moderation carried out by External Examiners.

When is moderation needed?

All work submitted for assessment must be marked by an internal examiner. All assessment that contributes to the weighted mean mark used to calculate the final award must be internally moderated where the individual component of assessment contributes more than 10% to the module mark. Where individual components of assessment are excluded from moderation on the basis that they do not contribute more than 10% to the module mark, Schools must ensure that at least 60% of the assessment for the module is moderated (See also 'Which pieces of work should be moderated', below). It is not necessary to moderate undergraduate first year work, although Schools should check and confirm any fail marks between 30 and 39 awarded for assessed work by first year undergraduates (whether that assessed work is a first attempt or a resit attempt).

Where undergraduates in the second year or above are studying a module at Certificate level which contributes to the final award, the assessment for those students should be moderated in line with this Code of Practice.

What forms of moderation are required in different circumstances?

There are three methods of moderation used by Internal Examiners, defined and used as follows:

Method of moderation	Definition	Application
Single marking plus non-blind sampling	Where a specified sample of the range of assessed work is reviewed by a member of academic staff other than the first marker (or team of	Sampling is likely to be used for the majority of types of assessment.

¹ Or other appropriately qualified individuals, e.g. Part-Time Visiting Lecturers or Honorary Teaching Staff

	markers) to assess the standard and consistency of the marks allocated by the markers, with reference to the marking criteria.	
Non-blind double marking	Where ALL pieces of work are marked by two or more markers, and the marks and annotations of the first marker are available to the second marker/s.	<p>Required for all undergraduate and Master's level projects and dissertations and other substantial, individualised pieces of work.</p> <p>Recommended:</p> <ul style="list-style-type: none"> • for modules at levels I, H and M which are assessed by a single piece of assessment. • where first markers are less experienced, or where there are several first markers and consistency may be an issue.
Blind double-marking	Where ALL pieces of work are marked by two or more markers, but the marks and comments of the first marker are not available to the second marker/s.	Not required in any circumstances but strongly recommended for assessments where it might be difficult to ensure the anonymity of the candidate (e.g. projects).

Apart from the requirements noted above, for all other assessments, Schools should determine the most appropriate form of moderation, taking into account the nature of the assessment, the contribution made to the module mark and the overall contribution of the assessment to the degree classification or to the achievement of the award (determined by the level and credit value of the module).

Which pieces of work should be moderated?

Subject to the requirements set out in the paragraph above ('When is moderation needed?'), Schools should define which components of assessment within modules should be subject to moderation, in consultation with the External Examiner/s. In some circumstances it may be appropriate to moderate marks for components of assessment which fall below the minimum threshold requirement of 10%.

Examinations

When moderating marks from examinations, Schools should determine whether moderation should be carried out either:

- a) at the level of individual questions within an examination paper (i.e. the mark awarded for each separate, substantive question); or
- b) at the level of the paper as a whole (i.e. the overall mark for the examination).

Where different questions within an examination paper are marked by different markers, it is necessary for moderation to take place at the level of the question. Where there is a single marker for the examination paper, it may be appropriate to moderate the marking for the paper as a whole.

Coursework

The same principles apply to moderation of coursework assessment: if the overall mark for the coursework element of a module is derived from the aggregation of marks for a number of different, distinct components which have been marked by different markers, it is **recommended** that each component mark be moderated separately, unless each individual component of assessment does not contribute more than 10% of the mark for the coursework element and provided that at least 60% of the assessment for the module is moderated. If the components of the coursework assessment are all marked by the same marker, it may be appropriate to moderate the overall mark for the coursework element.

Practical assessments

For practical assessments such as presentations, oral examinations, musical or dramatic performances etc which individually contribute more than 10% to the overall module mark and where marking takes place at the time of the assessment, it is **recommended** that moderation takes place at the time of the assessment, by having more than one Internal Examiner present, and, where appropriate, the External Examiner/s. Where this is not feasible, there should be a formal record of how the mark was arrived at, with reference to the marking criteria, and also, wherever possible, an audio/visual recording of the assessment, which can be used for moderation purposes.

Allocation of moderation duties

Moderation can be carried by a team of staff, or by an individual. The allocation of moderation duties will be approved by the Head of School/Department, or nominee.

The moderator/s should have a good understanding of the general discipline, but may not necessarily be an expert in the subject of the assessment being moderated.

For all types of moderation, the moderator/s must be provided with the relevant marking criteria and statistical data and may also be provided with a model/outline answer, in order that s/he can fulfil the role properly.

How to carry out sampling

Although only a sample of work will be reviewed, it is necessary that the moderator has access to ALL the pieces of assessment from the cohort.²

² Within this context, a 'cohort' is defined as 'a group of students who have taken the assessment in question for a particular module', thus ensuring that students who take the same assessment but are registered on different modules, and are therefore subject to different learning outcomes, are not regarded as a single homogeneous cohort.

In order to select a sample for review:

Stage 1

- a) Review the range of marks provisionally awarded for the assessment.

(Other relevant statistical information may also be considered, if available, such as the mean mark, some indication of variation (e.g. standard deviation), and comparative data for previous years and for other similar types of assessment at the same level within the programme).
- b) Determine the total number of pieces of work submitted for the assessment which is subject to moderation.
- c) Determine the level of the assessment (e.g. Undergraduate Certificate, Intermediate, Honours, or Master's level).

Stage 2

Determine the sample for review in accordance with the following criteria:

- a) The sample must be representative of the full range of marks, including some fails, where they occur.
- b) The sample must meet the minimum sample size, as follows :

Number of pieces of work in the cohort	Minimum sample to be reviewed
100 or more	Square root of the total number, rounded up
Between 10-99	10 pieces of work
Below 10	All pieces of work

Note: **a greater sample size than the minimum may be appropriate** in the following circumstances:

- If the statistical information indicates a significant disparity between the marks awarded by different markers for a particular assessment or within a module, or where the marks awarded by a single marker appear to be unusual in any way (e.g. a particularly high or low mean mark; marks out of line with the normal distribution for the assessment / module etc.)
- Where there is a large number of first markers
- Where the marker is a new or inexperienced member of staff
- If the assessment is taken by students from a range of programmes, in order to include examples from students on the full range of programmes

Stage 3 – what to look for

When reviewing the sample of work, the moderator should be looking for trends or anomalies in how the marker has marked and should not make adjustments to the marks awarded for individual pieces of work. It is inequitable to change the marks for only the sample reviewed.

Outcomes of all methods of moderation:

When all the pieces of work subject to moderation have been awarded marks by the first and second marker or moderator/s, the marks should be reviewed by both markers.

Markers are unlikely always to agree exactly on the appropriate mark to be awarded for a piece of work, particularly in discursive subjects. Therefore, it is necessary to decide when the difference between the marks awarded by the first and second markers, or moderator/s, is considered to be of sufficient significance to warrant further action.

The outcomes of the review of marks awarded by the first and second marker or moderator/s, and the action which should be taken, will fall into one of the following categories:

Outcome of moderation	Action to be taken
<p>a) The marks of the first and second marker/moderator/s are consistently in agreement, differing by no more than 5% for all of the reviewed work; or by no more than 5% for the large majority of the reviewed work and by no more than 10% for a small number of pieces of assessment (e.g. 1-2 in a sample of 20).</p>	<p>Where sampling has been carried out: No further action is required and the marks of the first marker are approved as the confirmed marks for the sample and the rest of the cohort</p> <p>Where double-marking has been carried out: The marker and second marker / moderator/s should discuss the reasons for the marks they have awarded, and agree that the confirmed marks will be: (a) the full set marks awarded by the first marker; (b) the full set of marks awarded by the second marker; or (c) an agreed set of alternative marks (e.g. the average or a weighted average of the two marks).</p>
<p>b) The marks of the first and second marker/moderator/s differ by 10% or more for a larger number of the pieces of assessment which have been reviewed (e.g. 5 or more in a sample of 20).</p>	<p>Where sampling has been carried out: The marker and moderator/s should discuss the reasons for the marks they have awarded, with reference to the marking criteria. This may lead to one of the following outcomes: (a) If the marks of the first marker are agreed to be appropriate, they may be adopted as the confirmed marks for the whole cohort; (b) If the differences between the marks of the first marker and moderator are consistently in the same direction and of a similar amount, it may be decided to</p>

	<p><i>adjust</i> the marks of the whole cohort by an agreed proportion or number of marks;</p> <p>(c) If the first marker and moderator are unable to reach an agreement on the marks to be awarded, or if the scale and direction of differences of marks awarded by first marker and moderator vary across the sample the full set of work should be marked by the moderator, and the marks then agreed via the process for agreeing the outcomes of double-marking (below).</p> <p>Where double-marking has been carried out:</p> <p>The first marker and second marker should discuss the reasons for the marks they have awarded, with reference to the marking criteria, and agree one of the following outcomes:</p> <p>(a) that the full set of marks awarded by the first marker be adopted as the confirmed marks; or</p> <p>(b) the full set of marks awarded by the second marker be adopted as the confirmed marks;</p> <p>(c) that the average or a weighted average of the marks awarded by the first and second marker be adopted as the confirmed marks; or</p> <p>(d) the marks of the whole cohort may be <i>adjusted</i> by an agreed proportion or number of marks; or</p> <p>(e) a mark is agreed for each piece of assessment.</p> <p>Exceptionally, if the first and second marker are unable to agree on a course of action, then a third (internal) marker or moderator should be consulted. Only in very rare circumstances should an External Examiner be invited to consider the issue.</p>
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As part of the moderation process, marks may under certain circumstances be *adjusted* or *scaled*.

Adjustment of marks

Adjustment is the process applied to assessments within modules in the following circumstances:

1. When the marks awarded by a first and second marker/moderator differ by broadly the same number and most or all of the differences are in the same direction.
2. Where an error has been identified with one particular question in an assessment; this problem can be overcome by modifying the marking scheme for the question or by excluding the question from the assessment, with the mean mark for the assessment and for the module calculated on the basis of the remaining components of the assessment.
3. Where a mean mark for an optional component of a module differs by more than an agreed level from the mean of all the optional components taken together; the agreed level will be determined by the module team.

The adjustment of marks can take place for work where either sampling or double-marking has been carried out. An agreed adjustment of marks is applied to all students for the assessment. All instances of mark adjustment should be reported to the External Examiner(s), and recorded in the minutes of the Board of Examiners' meeting. Any concerns identified regarding the assessment process or other aspects of the module should be investigated as part of the annual module review process.

Scaling of marks

Scaling is a process which may be employed, on an exceptional basis, to enable the mean mark for a given module to fall within expected ranges derived from:

- (i) previous student performance over an appropriate time period (e.g. 3-5 years); and/or
- (ii) the range of mean marks in that particular year for all modules taken by a given cohort of students.

After completion of the moderation process for each module, and any resulting adjustments to marks have been made, the range of mean marks for all modules within a year of study that contribute to the final award should be reviewed. As part of this review process, Schools may determine expected ranges within which all mean module marks for a year of study should lie, derived from (i) and/or (ii) above.

The range of expected mean module marks may differ between degree programmes, Departments and Schools but in each case will be based on the evidence of student performance.

After investigation of any module with a mean outside the expected range derived from (i) and/or (ii) above, the marks can be either:

- (a) confirmed, if the marks awarded are deemed to be a fair and accurate reflection of student performance on the module in comparison with performance on other modules in the same year of study; or

- (b) Scaled, if the marks awarded are deemed not to be a fair and accurate reflection of student performance in comparison with performance on other modules in the same year of study. Scaling should take place using an appropriate algorithm, agreed with the External Examiners, such that the mean is changed by the least amount to lie within the expected range.

The key principles of any scaling of module marks are that the process is transparent, triggered only when the mean mark for a module lies outside of the expected range, and that the algorithm then applied is the minimum required to bring the mean within the expected range. As such, scaling is envisaged to be a rare event.

Instances of scaling should be discussed with, and approved by, the External Examiner(s); full justification on academic grounds must be provided. Where used, scaling should be recorded in the School's annual review report, along with actions taken to address underlying issues.

Recording evidence of moderation

It is necessary for Schools to provide and retain evidence to demonstrate that internal moderation has taken place e.g. recording details of the particular pieces of assessment which have been selected within the sample for review; recording comments on the script/piece of work, or separately. N.B. Schools should note that the Data Protection Act 1998 enables students to access any comments on their assessed work made by Internal or External Examiners. Comments should be professional and constructive.

School Policies on Moderation and Scaling

Schools may choose to implement a more comprehensive approach to moderation than the specified minimum requirements, for example with respect to the size of a sample to be reviewed, or with respect to the types of work which should be subject to non-blind or blind double marking. All such decisions should be clearly set out in a School Policy on moderation. If it is deemed necessary, separate Policies may be introduced at departmental, or programme level. All School/Department/Programme Policies on moderation must be approved by a College committee with responsibility for learning and teaching matters and be reviewed at regular intervals.

If a School wishes to depart from the University policy on scaling outlined above, and apply an alternative model that conforms with accepted good practice in the relevant discipline, a request for an exemption may be sought from the University Education Committee, via the Pro-Vice-Chancellor (Education).

Information for Students

Students should be provided with an explanation of the purpose of moderation of assessment, for example in a School / Programme Handbook, with details of the School / Department / Programme Policy on Moderation and with reference to this University Code of Practice. The School / Department / Programme Policy on Moderation should be made available as a matter of course to all External Examiners.

Students should not normally be provided with evidence of the moderation process applied to their own work submitted for assessment (e.g. comments of moderators, or provisional marks

awarded); they should only receive the final agreed mark for their piece of work. However, students do have a right under the Data Protection Act 1998 to request to see the details of how the moderation process was applied to their piece/s of work by Submitting a Subject Access Request; any moderator's comments and provisional marks awarded will be disclosed, although students are not entitled to receive copies of actual examination scripts or texts.

2.5.2012
Version 12

Extracts from the Code of Practice on Taught Programme and Module Assessment

Proposed deletions struck through, additions underlined.

10.3 Marking Practices

10.3 .1 Principal academic units should ensure that all written examinations that contribute to the final award are marked anonymously, with anonymity extending to the second marker stage and to the stage at which the scripts are considered by the external examiner.

10.3 .2 Where possible, anonymous marking of assessed work should be undertaken for course work, with the exception of practical assessments and projects.

10.3 .3 Principal academic units should ensure that a technical check of assessment marks is carried out (i.e., to ensure that simple arithmetic errors or omissions have not been made).

10.3.4 Provisions regarding moderation, adjustment and scaling of marks are set out in the appendix to this Code of Practice.

~~10.3 .4 All assessment that contributes to a module mark must be moderated, where moderation is defined as some form of independent academic checking in addition to the technical check of marks. Moderation may involve looking at pieces of assessed work (e.g. double marking) or it may involve analysis of marks for the cohort for that assessment. The amount of moderation may vary dependent upon the nature of the assessment, the contribution made to the module mark and the overall contribution of the assessment to the degree classification or to the achievement of the award. It is expected that there will be more rigorous moderation of the later stages of programmes.~~

~~10.3 .5 Moderation may be undertaken either on a random sampling basis, or by targeting of individual cases following previous moderation or identification of a potential problem (for example, where there is significant disparity between the different elements of assessment for an individual Registered Student or within a module or where there is significant disparity between the marks of different markers for a particular assessment or within a module).~~

~~10.3 .6 Double Marking is the term used for the assessment of Registered Students' work by more than one marker. This may be done 'blind' or 'non-blind'.~~

~~10.3 .7 In blind double marking, the marks and comments of the first marker are not available to the second marker. A final mark is either agreed by the two markers in collaboration with the module leader or equivalent or the Examinations Officer, or produced by averaging of the two marks.~~

~~10.3 .8 In non-blind double marking the marks and annotations of the first marker are available to the second marker. This latter method is usually used where the role of the second marker is seen as more one of checking the marks given by the first marker, such as where first markers are less experienced, or where there are several first markers and consistency may be an issue. The mark of the first marker usually stands, unless there are significant discrepancies between the marks of the two markers. Principal academic units should determine their own policies in this area, including a clear definition of what would constitute a significant discrepancy, as appropriate to the marking practices in the principal academic unit.~~

~~10.3 .9 Double marking is recognised good practice for all assessments that contribute significantly to the final award. Principal academic units may determine which assessments to double mark but, for undergraduate programmes, it is likely that these will include as a minimum stage 2 and 3 modules with only one piece of~~

assessment. Double marking for all Registered Students is recognised as good practice for all projects, dissertations and other substantial pieces of work.

10.3.10 Principal academic units should ensure that the methods that are used are agreed within the principal academic unit and that clear procedures are in place for moderation and the resolution of discrepancies or disagreements between markers.

10.3.445 For undergraduate programmes, the rounding of marks for classification purposes is as follows:

10.3.446 (a) For degree classification purposes the average mean mark should be rounded to one decimal point.

10.3.446 (b) In determining class on the basis of weighted arithmetic mean, marks between 39.5-40.0, 49.5-50.0, 59.5-60.0 and 69.5-70.0 will be rounded to 40, 50, 60 and 70, respectively.

10.3.471 Average marks for use with the Distribution of Module Class (DMC) Scheme should remain corrected to one decimal point. (Thus, for example 37.9, 47.9, 57.9 and 65.9 are insufficient average mean marks to allow a student to be considered for the Distribution of Module Class Scheme).

11.13 Standardisation or Adjustment of Marks

11.13.1 Where the marks for a module fall outside of the normal range (on the basis of historical data) or where concerns or issues have been raised about the module or its assessment before or during moderation, an investigation should be made into the reasons why this might have happened. Where the reasons are identified as being due to an error in the assessment process (i.e. the format/content of the assessment, marking or assessment criteria) or to some factor, which would have affected Registered Students (such as unavailability of essential research equipment), the marks for all Registered Students may be adjusted. The extent of adjustment should be agreed with the external examiner.

11.13.2 Where marks are adjusted, the rank order of affected Registered Students for the assessment must be maintained and the mark distributions should normally be preserved. The normal method of mark adjustment might be a simple addition or subtraction of an agreed percentage; however, principal academic units may use more sophisticated methods within the above constraints.

11.13.3 There should be no adjustment to marks if they accurately reflect the achievement or otherwise of the learning outcomes and have not resulted from an error in the assessment process or some other factor which would have affected students.

11.13.4 All adjustments to marks must be recorded in the minutes of the principal academic unit Board of Examiners and reported to the University Progress and Awards Board.

11.13.5 Principal academic unit quality assurance mechanisms should ensure that any concerns identified in the assessment process or other aspects of the module result in a review of that module.

11.13.6 Scaling of marks within a single (or linked pair of) module(s) to a previously agreed distribution is not permitted. The marks for one module should not be normalized against the marks for other modules.