Analysis of results

Post-Marking Review

This section closely aligns with the moderation process and should be considered in conjunction with information provided on moderation.

The unit coordinator is required to conduct post-marking analysis using one or more of the following methods:

- 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), and
- statistical analysis of results to see if there is any substantial variation between markers.

If any anomalies come to light following the post-marking review, due process should be taken to ensure all students' work is handled fairly and equitably.

Requirement 3.6.1
The unit coordinator will conduct a review of the results….

Requirement 3.6.3
If anomalies are detected, student work will be reassessed and marks adjusted accordingly before work and marks are released to students.

Statistical analysis

Statistical analysis of results between markers (i.e. the distribution of grades and marks) can be analysed to see if there are potential differences between assessors. Despite the best of intentions efforts made to encourage marker reliability can go astray. Some markers, even those using a carefully prepared marking guide/rubric can mark 'harder' or 'softer' than others, some have a tendency to play safe and mark towards the average, whilst others can have pre-conceived ideas about what the assessment task should look like and mark according to that preconception (Dunn, Morgan, O'Reilly & Parry, 2004). Further, markers can be influenced by impressions of students and stereotypes and either distort marks upwards ('Halo' effect) or downwards ('Horn' effect), (Dunn, et al., 2004). Regardless, these factors can all introduce bias that needs to be detected.

Using spreadsheet programs, like 'Microsoft Excel', and the specialised statistical program 'Statistical Package for the Social Sciences', marking data can be summarised using measures of central tendency (mean, mode and/or medium), variability (standard deviation and range). Data can be grouped according to the percentage range corresponding with Curtin's grading system (i.e. fail, pass, credit, etc.) and a bar chart constructed and/or the raw scores maintained and graphed in a histogram. A normal distribution curved line can be plotted on the histogram to provide visual insight into the distribution of the marks. However, marks are not adjusted to fit the curve seen with norm-referenced criterion marking; it is perfectly acceptable with criterion-referenced marking to have a different dispersion of results.

Requirement 3.6.2
Scaling of student marks to a normal distribution is not appropriate within a criterion referenced framework.

References

Dunn, L., Morgan, C., O'Reilly, M., & Parry, S. (2004). *The student assessment handbook: New directions in traditional and online assessment.* London: RoutledgeFalmer.