



**Higher National Qualifications
Internal Assessment Report 2013
Mathematics and Statistics**

The purpose of this report is to provide feedback to centres on verification in Higher National Qualifications in this subject.

Higher National Units

General comments

In total, the HN Mathematics and Statistics verification group (142) visited eight sites in the UK, and six international sites in China. From the UK, a total of 21 Unit occurrences were checked, covering 11 subjects at three different SCQF (Scottish Credit and Qualifications Framework) levels. Five of the visits used the mainstream quality assurance approach, and three used the new approach to quality assurance. The international visits are detailed in a China-specific report. This report applies to the visits made to UK sites.

One Hold on certification was issued in 2013, and this was lifted satisfactorily.

In general, the centres visited were found to have a clear and accurate understanding of the national standard for assessment. There were some cases where some degree of deviation from the standard was identified, but overall compliance was satisfactory.

Unit specifications, instruments of assessment and exemplification materials

The assessors were conversant with the Unit specifications and exemplification material. In cases where centres had written new assessments, they either followed the pattern of the exemplification in the SQA Assessment Support Packs or submitted material for prior verification. No cases were found where assessment material used by centres deviated from the national standard in content.

Evidence Requirements

In general, the centres and assessors were meeting all Evidence Requirements for Units.

Administration of assessments

All centres visited appeared to be gathering evidence in accordance with the Unit specification requirements (that is, closed-book assessments were being conducted as closed book, etc). In most cases the marking schemes were followed correctly, and consequently assessment decisions were correct. Internal verification appeared to be generally sound across the centres visited, although selection criteria for material to be verified varied from centre to centre.

General feedback

In general, centres were providing very good feedback to candidates, either through a review of the original assessment paper, or by detailed feedback reports. Candidates interviewed on the verification visits indicated that they felt that access to assessment, conduct of assessments, and feedback were all satisfactory.

Areas of good practice

Many areas of good practice were identified in the course of the visits.

1 Context

Many centres were found to be modifying the context of Unit assessments to meet the needs of the candidates. This gives the candidates a greater sense of ownership of the subject, as it is possible for them to see how Mathematics relates to their own chosen field in a readily accessible way.

2 Marking consistency

Marking was generally clear, and of a high standard.

3 Record keeping

Result record keeping was found to be of a high standard, and material presented for verification was well organised, with class summary sheets.

4 Feedback

Feedback to candidates was of a generally high level. Centres either used feedback forms, or annotated papers with feedback for discussion with the candidates.

6 Prior verification

Centre-devised Units were often submitted to SQA for prior verification. Centres then have confidence that the assessments are valid.

7 Internal verification and cross-marking

Internal verification was found to be of a satisfactory standard, with good planning and detailed records. One centre routinely performed cross-marking on candidate evidence when the mark came within 5% above or below the threshold for achievement.

8 Standardisation

Records of standardisation meetings were well kept and clear.

9 Candidate support

Students at several centres commented very positively on the teaching and learning experience and the level of support available. Many candidates commented on the consistency and fairness of approach at their centre.

Specific areas for improvement

Some areas for improvement were identified.

1 Marking clarity

Some cases were found where the allocation of marks was unclear. Marks should be awarded consistently in line with general SQA marking practice and the marking schemes for the assessments. In cases where a marker is unsure about how a mark should be allocated, advice from another assessor or the cognate lead for the area should be sought. In cases where there is genuine ambiguity in the marking scheme, this should be clarified and documented. Care should be taken when marking to show where marks are awarded, and the totals should also be shown clearly. SQA recommends the use of general marking symbols, which can be obtained from SQA's website. Note that the use of half marks in marking schemes is discouraged.

2 Working shown and implicit marks

Marks should normally be awarded only where working is shown. In algebraic 'short' steps, marks can be awarded implicitly, but it should be made clear on the marking scheme when this is possible. Extended pieces of work must show working.

3 Follow through marking and scored out work

Cases were found where follow-through marks were not awarded. Centres are reminded that in cases where an error is made, subsequent marks can still be awarded where appropriate. Marks may also be awarded for scored-out work, but only as long as no replacement attempt has been made. Note that if two or more attempts have been presented for marking, all should be marked, and the lowest mark awarded.

4 Clarity of wording

Cases were found where wording in assessments was unclear or ambiguous. Care should be taken to minimise uncertainty when preparing assessment instruments, and it should be clear to the candidate exactly what is required to obtain the available marks.

6 Use of exemplars

Centres using exemplars from SQA's secure site should consider moving away from this by re-writing assessments. An increasing number of prior verified assessments are available on the SQA secure website.

7 Performance Criteria being met more than once

A case was found where a centre was using an assessment which required correct responses for all questions in the assessment paper, but candidates were achieving the Unit without completing one of the questions because the Performance Criterion being tested had been met elsewhere in the paper. If this

is the case, then the assessment paper should be updated to reflect this, and the change documented.

8 Remediation not permitted

A case was found where a candidate had failed to meet the required threshold for a pass, but was given the opportunity to remediate in order to correct an error in the original paper. Centres are reminded that very few Units in VG142 allow for any form of remediation. In cases where the assessment is by exam, a candidate who fails to meet the required threshold or Performance Criteria in the first attempt of an assessment should resit the entire Outcome using a different instrument of assessment. In cases where assessment is by project or report submission, then reasonable correction and resubmission would be appropriate.

9 Internal verification selection

A wide range of internal verification selection strategies were found. Care should be taken in selecting for internal verification. Most centres visited had a random selection process for internal verification. Verifiers should also, however, consider deliberately selecting assessments at or near a threshold boundary to ensure that assessment decisions are correct. In cases where systematic errors in assessment practice or marking are found (for example, where some aspect of the assessment is being performed incorrectly), then all assessments in the group should be checked, re-marked or re-assessed accordingly.

Where internal verification has taken place, the Verifier should re-mark the paper in a different colour of ink (green, for example), and discrepancies should be noted and resolved.

10 Assessment material

In cases where a candidate has attempted an assessment and resit attempt, both pieces of assessment evidence should be made available for verification.

11 Staffing

At one centre, it was apparent that not enough staff were available within the cognate area to write, assess and verify assessments in an adequate way. Centres are reminded that they must have appropriate arrangements in place to cope with the requirements of the Units being delivered. If there is any uncertainty about this within a centre, advice should be sought from SQA.