

Appendix 1

Senior Moderator and Principal Assessor Reports for session 2000-2001

Senior Moderator Report – Session 2000-2001

Central Moderation of Internal Assessment of National Units

Senior Moderator:

Dr K Khalil

Assessment Panel:

Physics

Lead Officer:

Hugh McGill

Qualification area

**Subject - Levels
included in this report**

**Physics - Intermediate 1, Intermediate 2, Higher,
Advanced Higher**

Central Moderation Statistics

Moderation activity

There was one central moderation event in April 2001; this was complemented by postal moderation.

Date of central moderation event	April 2000	April 2001
Number of centres moderated	62	26*
Number of centres accepted	53	21
Number of centres not accepted	9	5
Number of moderators	12	7

The table below shows the number of centres moderated at each level this session.

Level of National Unit(s)	Number of centres moderated
Advanced Higher	6
Higher	12
Intermediate 2	7
Intermediate 1	1

General comments on central moderation activity

Compared with session 1999-2000, there was a significant reduction in the number of centres moderated.*

A wider range of levels were moderated this session.

***Note** In addition, retrospective central moderation, of National Units delivered in session 2000-2001, took place in October 2001. The internal assessment of a further 39 centres was scrutinised at this retrospective moderation event.

Comments on moderation procedures

- 1 Most centres included Outcome 3 reports in the evidence submitted to SQA. Some centres did not submit evidence for Outcome 3. This issue was explicitly addressed in last session's Senior Moderator Report.
- 2 Most centres clearly identified the version of the NAB test for Outcome 1 and 2 that had been used for the assessment of each candidate in the moderation sample. In some cases, centres did not provide this information which should be identified on the Moderation Sample Form.
- 3 In most cases, there were clear annotations that illustrated the marking of Outcome 3 reports and there was a clear indication of the internal assessment decision (pass/fail) of centre staff. Some Outcome 3 reports did not carry any signs of having been internally assessed; in many cases there was no indication of the assessment decision of centre staff.
- 4 There was clear evidence that cross marking/internal moderation had taken place in many centres. In most cases internal moderation was effective in identifying and resolving inconsistent or inaccurate assessment practices. In some centres internal moderation had not identified serious assessment issues. In other centres there was no evidence of any internal moderation process. For example tests from one centre had been marked by three different members of staff; two members of staff had followed the marking scheme; the marking of third member of staff was not acceptable.

Comments on internal assessment

- 1 For the most part, centre staff were thorough, consistent and accurate in their marking of NAB tests and Outcome 3 reports.
- 2 Instances were found of centre staff failing to penalise the following:
 - wrong Physics in numerical calculations;
 - 'zig-zag' graphs (points joined-up where line of best fit should have been drawn);
 - conclusions of direct proportionality between variables where graphs did not pass through the origin;
 - graphs that were not labelled and/or where no units were stated;
 - inappropriate number of figures in numerical final answers.
- 3 In a small number of cases, marking schemes had not been followed or had been used incorrectly.
- 4 In some cases, there were arithmetic errors in totalling of candidate marks.
- 5 In almost all cases, experimental work was at an appropriate level. A small number of instances were found where the scope of experimental work was so limited that it was not possible for candidates to draw any significant conclusion.

All of the issues detailed in 2, 3, 4 and 5 above would be identified and resolved by a robust internal moderation procedure.

Comments on candidate performance

- 1 Candidates generally performed better in numerical calculations than in questions requiring explanations. Responses to questions requiring explanations were frequently superficial and some candidates had difficulty deciding what was required for a complete answer.
- 2 Most candidates presented their work neatly and carefully. A small number put forward work of a poor standard in terms of both presentation and quality.
- 3 The quality of graphical work was variable. There was some evidence of consistently excellent or consistently poor graphical work in materials submitted from specific centres.
- 4 For Outcome 3, most candidates produced logical reports giving all the relevant details and including diagrams. Almost all candidates made an attempt at a conclusion. Many candidates had quantified uncertainties, often both in experimental observations and from graphs.
- 5 Treatment of uncertainties was poor in some Outcome 3 reports submitted for Advanced Higher candidates. This does not augur well for the Investigation Reports of these candidates.
- 6 Candidates frequently had difficulty with the following:
 - internal resistance;
 - capacitance;
 - op-amp experiments;
 - treatment of uncertainties;
 - evaluation of experimental work.

Feedback to centres

- 1 ***Assessment evidence submitted for moderation must cover all outcomes, including Outcome 3.***
SQA has issued clear instructions on this matter on three occasions:
 - *Physics - National Qualifications Update letter*, 7 February 2000
 - *Senior Moderator's Report on Internal Assessment of National Courses in Physics, Diet 2000*, issued to centres with *National Qualifications Update – Physics* letter of 7 November 2000
 - *Physics – Moderation requirements* – ‘blue’ sheet issued to centres on 1 December 2000.
- 2 Centres should ensure that their marking of Outcome 3 is clear and that, for each candidate, there is a clear indication of the internal assessment decision (pass/fail) of centre staff.
- 3 Where it is not immediately obvious, centres should annotate candidate scripts to show why marks have been awarded or deducted.
- 4 Centres should advise candidates to take care with the use of significant figures and units.