

Higher National Qualifications

And

Scottish Vocational Qualifications

Senior Moderator Report

2006

Subject: Electronics & Instrumentation (CG 232)

Sector Panel: Engineering, Science and Mathematics

The purpose of this report is to provide feedback to centres on moderation which has taken place within Higher National and Scottish Vocational Qualifications in this subject.

HIGHER NATIONAL UNITS

FEEDBACK TO CENTRES

General comments:

Six centres were subject to HN visiting moderation this session, including 1 centre in the Middle East. Only 1 centre experienced a hold on certification. For 5 centres, the units sampled were mainly tried and tested units with most centres being experienced in delivering these units. Consequently, no real major issues were identified as most centres have comprehensive IV systems in place with master folders for most units comprising all teaching and assessment material. The sixth centre visited offers the new HNC and HND Electronics with new units being delivered for the first time and is using SQA assessment exemplars this session. Most centres, although not all, were prepared for the new style EV8a forms. As reported last session, the main area that centres require to do further work in is in the provision of marking schemes or guidelines. Some were comprehensive but in other centres only scant “model answers” were available allowing varying degrees of interpretation. In 2 centres, the graphical work of the candidates caused some concern. It was noted that HN Engineering candidates should possess a reasonable grasp of technical diagrams and sketches and this should be reflected in the responses of the candidates.

Advice on good practice and areas for further development:

One centre uses a candidate evaluation form at the end of each unit. Candidates’ responses are used to inform the moderation process. This technique may be of value for other centres to consider.

In general, further work needs to be carried out by centres in the provision of marking schemes or guidelines.

Centres need to be aware of the importance of candidates’ graphical communication skills.

HIGHER NATIONAL GRADED UNITS

TITLES/LEVELS OF HN GRADED UNITS MODERATED

HNC Electronics Graded Unit DG2T 34

A team of moderators reviewed the candidates' scripts from the five centres offering the award this session at a central moderation event.

HND Electronics Graded Unit DG2V 35

A team of moderators reviewed the candidates' scripts from the one centre offering the award this session at a central moderation event.

Separate reports for each of these events were provided for the HN Electronics QST but the main points are given below.

FEEDBACK TO CENTRES

General comments:

HNC Electronics Graded Unit DG2T 34

1) Last session, most candidates answered questions in a sequential fashion, i.e. starting at question 1. It was assumed that candidates might need coaching in standard examination techniques such as reading the entire paper initially then attempting the most familiar questions first. This has changed this session with most candidates attempting questions in what appears to be their strongest subject first.

2) As reported last session, not all centres used examination style paper for candidate responses. Centres that did use appropriate examination paper were more accurate in totalling the candidates' marks and it was also easier for the moderators to track all decisions made by the markers. Some inaccuracies were found in totalling candidates' marks where examination paper was not used and it was also much more difficult to track marking decisions made by markers. The inaccuracies discovered did not change any candidate's grade. Some markers used half-marks although this is not in the marking scheme and the use of half-marks should be avoided.

3) Only in one centre was there evidence that internal moderation had been carried out. It may well be that internal moderation had been carried out in other centres, but just that there was no evidence of it. The team of external moderators expected to see evidence of internal moderation on the actual candidates' scripts in order to make judgments as to whether internal moderation was effective or otherwise.

HND Electronics Graded Unit DG2V 35

1) The material provided by the centre included internal moderation evidence with detailed comments regarding the grade awarded for each candidate for each grading checklist point. This amounted to 24 grading points per candidate. This good practice is to be encouraged in each participating centre and the checklist provided in the Assessment Exemplar could be expanded in future to include a comments column.

2) The internal moderation information was well documented and easy to follow.

3) The project titles used were in line with samples given in the Assessment Exemplar but the depth of technical detail was less than expected for HND candidates. There was little in the way of testing strategies and actual test results. This also gave rise to a lack of faultfinding techniques and results.

4) There was little evidence of logbook submissions. The group felt that systematic and frequent logbook entries are key to successful projects and they should be submitted.

- 5) Project progress reports should be used to provide constructive feedback to candidates at appropriate milestones throughout the life cycle of the project.
- 6) Candidates require guidance, at the start of the project, with regard to the differences between project objectives and tasks and without this it made it difficult for them to be truly evaluative at the end of the project.
- 7) The project reports provided broadly followed the guidance given in the Assessment Exemplar but many spelling and grammatical mistakes were not highlighted.
- 8) No evidence was provided with regard to the oral presentation despite the fact that the Assessment Exemplar contains a simple checklist for this on page 44.
- 9) Although data sheets are required for completeness of the project report, it should be reinforced to candidates that it is their own efforts and findings that are being assessed.

Advice on good practice and areas for further development:

HNC Electronics Graded Unit DG2T 34

- 1) Centres should ensure that proper examination paper is used for candidates' responses.
- 2) Internal moderation activity should be clearly visible to all.

HND Electronics Graded Unit DG2V 35

- 1) Project activities should be commensurate with the SCQF level of the HND award and include sufficient depth of technical detail
- 2) Logbooks should be submitted along with the final report.
- 3) Project progress reports should be used to provide constructive feedback to candidates at appropriate milestones throughout the life cycle of the project.
- 4) It should be reinforced to candidates that it is their own efforts and findings that are being assessed and not their ability to collate a wealth of data sheets.

NATIONAL UNITS

(i.e. Freestanding units which contribute to NPAs or NCs etc.)

TITLES/LEVELS OF NATIONAL UNITS MODERATED

15 centres were subject to NQ visiting moderation, covering 40 units and involving 8 moderators. Only 1 centre experienced a hold on certification.

FEEDBACK TO CENTRES

General comments:

As was reported on HN visiting moderation, the NQ units sampled were mainly tried and tested units with most centres being experienced in delivering these units. Consequently, no real major issues were identified as most centres have comprehensive IV systems in place with master folders for most units comprising all teaching and assessment material. The main area that centres require to do further work in is in the provision of marking schemes or guidelines. Some were comprehensive but in other centres only scant “model answers” were available allowing varying degrees of interpretation.

Advice on good practice and areas for further development:

- 1) The role of prior moderation and the use of NABs still causes confusion for centres with some centres not using the available NABs and not getting their own assessments prior moderated. Some centres are unaware that NABs may be available. Other centres use parts of the NABs to suit. The methods can vary within one centre.
- 2) Due to the nature of the enrolment and registration process, it is often difficult to get an accurate picture of what each centre is delivering. On most occasions, external moderators have to rely on information from centres.
- 3) Most of the NQ external moderation activities for session 2005/6, involved tried and tested units and assessments with most problems ironed out by now. However, challenges will arise in the coming sessions, with the introduction of the new engineering framework.