



**National Qualifications 2012
Internal Assessment Report
Product Design**

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

National Qualifications (NQ) Units

Titles/levels of NQ Units verified:

DF4V: Design Analysis — Intermediate 2 and Higher

DF4W: Developing Design Proposals — Intermediate 2 and Higher

General comments

In total, 44 centres were verified. Four centres were visited, 38 were verified at the central event in April and three submitted for postal verification at a later date. Nine centres were verified in Unit DF4W and 35 in DF4V.

Twenty five centres were 'Accepted', but 19 centres were 'Not Accepted' and were required to re-submit evidence. All centres were 'Accepted' after resubmission.

Administrative errors in evidence accounted for a number of 'Not Accepted' decisions. Errors included:

- ◆ arithmetical errors in candidate scores
- ◆ no evidence for one of the Outcomes
- ◆ NAB marking guidelines not followed

A large number of centres did not include the Candidate Progress Sheet or supply any detail of where marks had been awarded. This made provision of detailed feedback very difficult.

In a small number of centres there was evidence of a lack of standardisation of marking across different teaching groups. All of these errors could have been avoided by a more robust internal verification process within centres.

Unit specifications, instruments of assessment and exemplification materials

Although all centres used SQA NABs, a significant number did not apply the marking schemes correctly.

DF4V Design Analysis — Intermediate 2 and Higher

The majority of 'Not Accepted' decisions were for this Unit.

Outcome 1 — Evaluate a commercial product

This Outcome was generally well done. However there are still some issues:

- ◆ Marks can only be awarded for justification of selection of aspects. Centres often awarded marks for any correct statement.
- ◆ The evaluation strategy must be marked using the band statements contained in the NAB. A number of centres awarded one mark per correct statement.
- ◆ Marks can only be awarded for valid research. A number of centres incorrectly gave marks for inappropriate research or simple archived materials.
- ◆ Conclusions must be marked using the band statements contained in the NAB. A number of centres awarded one mark per correct statement.

Outcome 2 — Establish a design specification from a brief

This Outcome continues to cause major problems. Many candidates seemed to be unclear about the difference between this Outcome and Outcome 1 and approached it as if they were evaluating a product. There were also a significant number of candidates who treated this as if they were developing a design proposal. Candidates should be reminded to direct their efforts toward producing a specification.

The main reasons for 'Not Accepted' results were:

- ◆ Many candidates started with a very vague brief. This caused problems throughout the whole Outcome. Candidates should be given a brief that is structured enough to allow them to do meaningful research.
- ◆ A number of centres incorrectly gave marks for inappropriate research or simple archived materials. Marks can only be awarded for valid research.
- ◆ The specification must be marked using the band statements contained in the NAB. A number of centres awarded one mark per correct statement.

It should be noted that a new NAB for this Unit has been issued by SQA. Centres are strongly advised to consider the use of this NAB as it will help overcome some of the issues described above.

DF4W Developing Design Proposals — Intermediate 2 and Higher

Again, a significant number of centres produced excellent evidence for this Unit. However, a number of centres were 'Not Accepted', largely due to missing evidence for some of the Outcomes, particularly in modelling and graphics.

Outcome 1 — Produce a design proposal

This was generally well assessed by centres. The only issue was:

- ◆ At both levels, a number of centres accepted evidence that was very weak. The evidence presented must be detailed enough to demonstrate the candidate's design knowledge.

Outcome 2 — Use graphic techniques during the production of a design proposal

A large number of candidates produced very high quality graphics and the Outcome was generally well assessed by centres. Issues included:

- ◆ Occasionally, marks were awarded to drawings that were not recognisable types. Reference should be made to NAB statements.
- ◆ Occasionally, too many marks were awarded for computer-generated graphics.
- ◆ Reference should be made to NAB statements.
- ◆ Often, too many marks were awarded for rendering. Marks in the top range (7–10) can only be awarded if at least three media have been used.
- ◆ It should be noted that if candidates have undertaken more than one design task to generate evidence for this Outcome they are required to submit the folio of work for each task to show that the graphic techniques were used during the production of a design proposal.

Outcome 3 — Use modelling techniques during the production of a design proposal

It would appear that a large number of candidates are not using modelling during the design process but are simply producing a model of their design proposal at the end of the process.

Issues included:

- ◆ Too many marks awarded for computer modelling. Reference should be made to NAB. In particular, it should be noted that practical skills marks cannot be awarded for computer modelling.

- ◆ Inappropriate or very limited use of modelling. Models should be used for a purpose and they should be evident throughout the folio.
- ◆ Lack of range of models. Very often a single model was produced and appeared at the end of the folio. Often several examples of the same type of model appeared at the end of the folio. Centres should note that candidates can achieve the maximum five marks for very quickly produced models that have validity during the idea generation and development stages of the folio.

Administration of assessments

All centres made use of SQA NABS. The majority of centres administered the assessments correctly. An increasing number of centres included information on internal verification processes.

Areas of good practice

Many centres included feedback information that they had issued to candidates. In many cases this information had been incorporated into mark sheets which were used instead of the candidate progress sheet.

A number of centres included detail of internal verification measures which had been undertaken.

Specific areas for improvement

There are on-going problems with the assessment of Unit 1, particularly Outcome 2. Many of these problems will be addressed if centres make use of the new NAB issued for this Unit.