



**National Qualifications 2013
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
DF4X: Manufacturing Products — Intermediate 2 and Higher

General comments

In total, 47 centres were verified. Four centres were visited, 36 were verified at the central event in April and seven submitted for postal verification. Fifteen centres were verified in Unit DF4W, 31 in DF4V and one in DF4X.

Thirty centres were Accepted, but 17 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:

- ◆ no evidence for one of the Outcomes
- ◆ no detail of marks awarded
- ◆ NAB marking guidelines not followed
- ◆ no detail of which NAB had been used

Course Arrangements, Unit specifications, instruments of assessment and exemplification materials

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

Evidence Requirements

DF4V Design Analysis — Intermediate 2 and Higher

Thirty-one centres were verified in this Unit. Although the performance has improved on previous years, 10 centres were Not Accepted.

All centres that used NAB 002 were Accepted. Centres are encouraged to use this NAB.

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 carry out 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 within the NAB. A number of centres awarded one mark per correct statement.

DF4W Developing Design Proposals — Intermediate 2 and Higher

Fifteen centres were verified for this Unit. Although there was excellent evidence from a number of centres, seven centres were Not Accepted.

The main reason for Not Accepted decisions was the generous awarding of marks for modelling and graphics. Centres are advised to pay particular attention to the detail in the NAB.

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 which 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:

- ◆ Often, 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 the 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 5 marks for very quickly produced models which have validity during the idea generation and development stages of the folio.

DF4X Manufacturing Products — Intermediate 2 and Higher

One centre was verified in this Unit and was Accepted. There were no issues.

Administration of assessments

All centres made use of SQA NABs. The majority of centres administered the assessments correctly.

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.

Specific areas for improvement

There are still ongoing problems with the assessment of DF4V, particularly Outcome 2. Many of these problems will be addressed if centres make use of the new NAB issued for this Unit.

A significant number of centres were generous in awarding marks for graphics and modelling in DF4W. Reference must be made to the NAB.