National Qualifications 2006

Senior Moderator Report

Subject: Product Design

Assessment Panel: Technical Education

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

NATIONAL UNITS

TITLES/LEVELS OF NATIONAL UNITS MODERATED

DF4V: DESIGN ANALYSIS – INTERMEDIATE 2 AND HIGHER
DF4W: DEVELOPING DESIGN PROPOSALS - INTERMEDIATE 2 AND HIGHER
DF4X: MANUFACTURING PRODUCTS - INTERMEDIATE 2 AND HIGHER

FEEDBACK TO CENTRES

General comments:

An additional moderation event took place in January this year. This was to allow Centres which were not accepted more time for resubmission.

It will be noted that Unit DF4V, Design Analysis which had produced the largest number of issues in 2005 was the focus of moderation of this year.

Many Centres had the same problems with DF4V with 58% of selected Centres not being accepted.

Almost all Centres were accepted on resubmission. This was a result of submission of additional evidence based on moderator feedback, changing candidate level of presentation or changing candidate result.

Advice on good practice and areas for further development:

GENERAL
A large majority of Centres submitted the Candidate Progress Sheet. This allowed more detailed feedback.

DF4V: DESIGN ANALYSIS – INTERMEDIATE 2 AND HIGHER
OUTCOME 1: EVALUATE A COMMERCIAL PRODUCT

PC(a) Aspects to be included in the evaluation are identified and justified.

This PC was marked too generously by a large number of Centres. Candidates must give valid **justification** for the aspects selected. One mark can be awarded for each valid point (up to maximum as per NAB). Candidates cannot receive marks for vague statements or for descriptions of the products. This PC cannot be marked holistically.
Candidates should select aspects which are relevant to their product and which they will be able to carry out research on. A number of candidates selected aspects which were very difficult for them to carry out any real or meaningful research.
A number of candidates followed the exemplars too closely, simply using the same justification for the same aspects even although they were not appropriate to the product they were evaluating.

*PC(b**)** An appropriate strategy for evaluation is developed.* (Higher Only)

There was a general improvement in this PC. A number of candidates gave full descriptions of not only the techniques they were going to use but also why they were appropriate, which aspects they were to be used on, how they were going to implement the strategy and what they were going to do with the results.

A number of Intermediate 2 candidates included a strategy in their report. Although this is not required at this level it undoubtedly improved the evaluations and conclusions.

PC(c), (b) A comprehensive evaluation of the product is carried out.

This PC was too generously marked by a large number of Centres. One mark can be awarded for each valid point (up to maximum as per NAB). Many candidates based their evaluation on personal opinion or simply pulled archived material from the web.
Candidates who scored well followed the strategy they had laid out in PC(b), ie, they used particular techniques to gain information about certain aspects and clearly extracted the appropriate information.
Many candidates are still giving descriptions of the aspects to be evaluated, eg lists of different materials or definitions of ergonomics. This type of information cannot be awarded marks.
There was evidence of "false" research. This was particularly true with questionnaires where a number of candidates produced data which MORI would have had difficulty compiling. Questionnaires of this type invariably led to shallow information and poor conclusions.
A large number of candidates are still basing most of their research on personal opinion.

PC(d), (c) Valid conclusions about the product are given

Candidate's performance in this PC largely depended on how well they had performed in the other PCs. A sound strategy and evaluation generally resulted in good solid conclusions.
There are still instances of Candidates carrying out good evaluation work but not including it in their conclusions.

OUTCOME 2: ESTABLISH A DESIGN SPECIFICATION FROM A BRIEF

PC(a) The brief is analysed and relevant design issues are identified

A few Centres used last year's Design Assignment as the brief for this Outcome. This is not recommended as Candidates could gain access to the research material supplied with the D.A. thus making the assessment invalid.
The major problem with this Outcome was that many Candidates were given an inappropriate brief as a starting point. Many were given products to design ("I have been asked to design a…") instead of being given a problem situation. This resulted in Candidates describing existing products or analysing the brief by writing specifications for what they thought the product should do.
Candidates who were presented with a problem situation in a context, with a target market and often with some detail of who was going to sell/distribute the solution produced much better work.
Careful thought has to be given to what a candidate can realistically research and it must always be borne in mind that the purpose is to produce a detailed specification

PC(b) The design issues are fully researched.

There were similar problems to those described in Outcome 1 PC(c), (b).
Poor, invalid or shallow research leads to vague specifications.

PC(c) A detailed specification is derived from the design issues researched.

An improving number of candidates produced detailed specifications. However, too many candidates are still producing very vague specifications with statements such as " It must be attractive", "It must be cheap". This is a clear reflection of the lack of valid research or understanding of PC(b)

DF4W: DEVELOPING DESIGN PROPOSALS - INTERMEDIATE 2 AND HIGHER

Evidence for this Unit was good across all Outcomes.
It should be noted that modelling and graphic techniques must be demonstrated "during the production of a design proposal". It is not appropriate to use evidence from other areas (such as a graphic communication drawing) or from other levels (such as a model produced during Standard Grade Craft and Design). The evidence must be produced during the production of a design proposal at the appropriate stage and level. In order to satisfy the criteria for appropriate modelling it is likely that Candidates will produce models throughout the folio.

DF4X: MANUFACTURING PRODUCTS - INTERMEDIATE 2 AND HIGHER

Evidence for this Unit was very strong, particularly the orthographic drawings.