

Moderation Feedback – Central - 2005

Assessment Panel:

Technical Education

Qualification area

**Subject(s) and Level(s)
included in this report**

**Product Design:
Advanced Higher, Higher, Intermediate 2**

General comments on moderation activity

Advanced Higher

- **D130**
This Unit was generously marked by a number of Centres. Many candidates did not demonstrate the depth of knowledge to justify the marks awarded by Centres.
- **D129**
All Centres were successfully moderated in this Unit.

Higher & Intermediate 2

- **Unit 1 : Design Analysis**
This was the Unit which caused Centres the most problems.
In Outcome 1, PC(a) many candidates described aspects of the product rather than justifying their selection. PC(b), research strategy tended to be superficial. The research carried out by many candidates was simply gathering of archived material which was unsuitable for the purpose.
In Outcome 2, PC(a) was again poorly done. Many candidates made specification type statements instead of justifying the selection of an issue. The research in this Outcome was generally poorer than the research in Outcome 1. This appeared to be due to the lack of a research strategy. The specifications produced by many candidates were very vague and could have been produced without any research.
- **Unit 2: Developing Design Proposals**
Although 6 of 21 Centres were not accepted, candidates generally performed well in this Unit. One of the “not accepted” Centres had been too severe and another two had made minor misinterpretations of the marking guidelines.
Candidates demonstrated a good range of graphic techniques.
The generation and development of ideas was inconsistent across Centres. A number of candidates had difficulty in this area due to the type of design task they had been given and/or the whole class had been given an identical task.
A number of candidates produced a good range of quality modelling. However, many candidates produced models which were of limited quality and did not use them to develop or present design proposals.
- **Unit 3: Manufacturing Products**
Candidates performed very well in this Unit. Candidates demonstrated good understanding and ability in both Outcomes. The orthographic drawing tests were particularly well done.

Specific issues identified

Advanced Higher

Many Centres appear to be unaware of the reduction of assessment and assessed candidates using the old marking schemes.

Higher and Intermediate 2

Many Centres did not submit the Candidate Progress Sheet. This made it difficult for moderators to provide detailed feedback

A significant number of Centres did not complete the MS00 form correctly. A number filled in details in the wrong columns and gave estimate **Course** grades.

A number of specific issues were evident in Higher & Intermediate 2 Units:

Unit 1: Design Analysis

- The justification of aspects/issues was not understood by many candidates.
- Research is often inappropriate and misdirected.
- Specifications are often very vague.

Unit 2: Developing Design Proposals

- The use of computer modelling caused some problems for a few Centres. Computer generated models can only be counted as one type of model and therefore awarded a maximum of 4 marks.
- Modelling was often used inappropriately, appearing at the end of the folio regardless of the type of model.

The moderation event ran very smoothly and the SQA administration and procedures were very effective.

Feedback to centres

Advanced Higher

Centres should note the reduction in assessment.

Candidates must provide answers which demonstrate the level of knowledge required at this level. Care must be taken not to award too many marks for vague or superficial answers.

Higher and Intermediate 2

Unit 1: Design Analysis

Outcome 1: General Points

The choice of product to be evaluated is important. Candidates who evaluated products which they were very familiar with (eg mobile phone) tended to simply describe the product and express their personal opinions.

A range of products should be evaluated – a whole class should not evaluate the same product.

- PC(a) Candidates must be made aware that they have to justify the selection of aspects. Many candidates gave specification type statements, “The product must...”, instead of justification type statements, eg “Function is an important aspect to be evaluated because...”
Candidates must be made aware that the aspects selected must be relevant to the product they are evaluating. Candidates often selected aspects which were very difficult to research. Aspects of the product can include design factors but candidates may also include features of the product as relevant to the evaluation, eg the grip of the handles on a bike.
- PC(b) To be awarded full marks in this PC candidates must consider alternative strategies and justify research techniques they have chosen. They should also match each of the aspects identified in PC(a) to a specific research technique. A list of research techniques will not attract full marks.
Although this PC is not included in Intermediate 2, candidates should be encouraged to at least match techniques to aspects. This helps to focus their activity in PC(c).
- PC(c) Candidates who spent time and developed an appropriate research strategy picked up more marks in this PC.
The research carried out must be aimed at the product being evaluated. Descriptions of design factors, eg “Ergonomics consists of three main areas, anthropometrics...” is not suitable research and attracts no marks.
- PC(d) The conclusions about the product must be drawn from the research carried out. Conclusions based on candidate’s opinion should not be awarded marks.
Candidates should ensure that they carry research results into their conclusions (some candidates produced very sound research but did not draw conclusions from it).

Outcome 2: General Points

This Outcome requires candidates to establish a specification from a brief. Candidates should be continually reminded that that all their analysis and research for this task is aimed at producing a detailed specification. The brief given/selected is extremely important for this Outcome. The brief must be open enough to allow a range of research but detailed enough to direct candidates. It is important that the target market is identified in the brief as it allows many areas of research to be more focused.

The brief should be realistic and take into account the ability and experience of the candidates. It is unrealistic to give candidates a very complex brief or a brief requiring specialist knowledge in the time allowed for this Unit.

- PC(a) Candidates must justify selection of issues (see Outcome 1 PC(a))

- PC(b) Although candidates are not required to give a research strategy for this Outcome, carrying out the same procedure as Outcome 1PC(b) helps them to clarify what they intend to do and how they intend to do it.
Research must be aimed at the brief.
The purpose of the research is to draw up a specification.
- PC(c) The specification should come from the research and should be specific. Statements such as “It must be the right size for the target market” or “It must be a reasonable price” are not appropriate at Intermediate 2 or Higher level. The details for these statements should have been found during the research.
If candidates have drawn up vague specifications they should be encouraged to go back and carry out the research required to add the necessary detail.

Unit 2: Developing Design Proposals

Outcome 1

The choice of task for this Outcome is important. Again, the experience of the candidate has to be taken into account. Candidates who are given complex tasks such as “design a mobile phone” produce very limited initial ideas which usually consist of cosmetic changes to shape and form and then have difficulty in developing their ideas.

Candidates must record the decisions taken and the reasons for them. This can be done in the form of annotations throughout the folio and/or summary tables.

Outcome 2

Up to 2 marks can be awarded to each graphic type. However, the graphic must be a recognised type, e.g. a cross between an isometric and an oblique cannot be awarded marks.

To receive marks at the top end of the range for rendering candidates must make more than a token effort.

They must effectively communicate the form, texture and material of the object and use at least three media.

Outcome 3

Candidates must be encouraged to use modelling throughout the design process and to record its use at appropriate points in their folios. They should also record design decisions they made based on their models. To achieve the 20 marks for PC(a) candidates require to produce 4 **different** types of models (5 marks each). Marks cannot be awarded twice for the same type of model, e.g. two rough card models in idea generation could only be awarded a total of 5 marks.

A computer model can be awarded a maximum of 5 marks.

Care should be taken in awarding the marks for practical skills (PC(c)). A number of Centres were generous in their marking of this PC.

Computer models cannot be awarded marks for practical skills.

Unit 3: Manufacturing Products

Outcome 1

Centres can accept other correct answers as alternatives to those given in the NABs.

Outcome 2

Centres should note that there are 2 marks awarded to dimensions.