



External Assessment Report 2013

Subject(s)	Product Design
Level(s)	Advanced Higher

The statistics used in this report are pre-appeal.

This report provides information on the performance of candidates which it is hoped will be useful to teachers/lecturers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding. It would be helpful to read this report in conjunction with the published question papers and marking instructions for the examination.

Comments on candidate performance

General comments

78 candidates were presented.

Two centres presented for the first time.

Extended Case Study

The performance in this element ranged from 8–93%. The average mark was 76/150 (2011 81; 2010 90; 2009 87; 2008 77; 2007 75).

Question Paper

The average mark in the Question Paper was 48/100 (2012 48; 2011 42; 2010 48; 2009 49; 2008 45).

Overall

The average overall mark was 119 (2012 123; 2011 124; 2010 138; 2009 136; 2008 122).

53% of candidates achieved a grade C or better (2012 50; 2011 52; 2010 61; 2009 58; 2008 44).

Areas in which candidates performed well

Question paper

- ◆ Q1a) i) and ii) were well answered with most candidates demonstrating good understanding of the use of free hand sketching and reasons for modelling.
- ◆ Q2a) and b) were well answered.
- ◆ Q3a) was well answered with a good range of products used.

Extended Case Study

- ◆ **Section 1 a) Investigation of problem** was done well by a large number of candidates. A significant number scored full marks in this section.
- ◆ **Section 2 (d) Communication.** Many candidates demonstrated excellent communication skills, particularly in graphics.

Areas which candidates found demanding

Question paper

The responses of many candidates continue to be very generic, often not actually answering the question and lacking the depth of knowledge required at this level. Many answers were simply too short.

Very few candidates were able to give examples of products, or detail of materials or processes to support their answers. This is a concern, as a number of the questions were clearly directed to specific areas that should have been covered in Unit work.

- ◆ Q2: Candidates often named an inappropriate material. Many answers lacked detail.
- ◆ Q3: This question was very poorly answered. Again, there was a lack of detailed knowledge. A number of candidates described design issues rather than their influence on the product.
- ◆ Q4: Many candidates described technology 'within' a product rather than how it had influenced the product. Descriptions of evaluation strategy were often a very basic statement.
- ◆ Q5: This question was poorly answered with very general information often not focused on the products. There was a lack of technical knowledge, understanding of materials and the development and design of products.

Extended Case Study

- ◆ Many candidates struggled to produce appropriate evidence due to the task they were undertaking. Many tasks became a simple restyling of existing products, and others were poorly defined.
- ◆ There was often very limited knowledge and understanding of appropriate materials and processes.
- ◆ Many of the specifications were very vague.
- ◆ Many candidates appeared to have spent a disproportionate amount of time on the research and had little evidence of actual 'designing'.

Advice to centres for preparation of future candidates

Extended Case Study

A large number of candidates are undertaking tasks that are inappropriate.

It is very important that Section 1(a), Investigation of problem is carried out correctly and monitored by teaching staff. If the candidate cannot define the problem at this stage they should be redirected.

To score highly in Section 2, candidates are required to apply detailed knowledge of appropriate materials and processes.

Centres should refer to SQA's secure website to access exemplification of standards.

Question Paper

Many of the questions required candidates to apply knowledge gained in their Unit work. Candidates should be reminded of this and use it when revising.

Staff should remind candidates to use past papers available from SQA's website (Product Design, Advanced Higher homepage).

Candidate responses from Diet 2012 are available from SQA's secure website (www.sqa.org.uk/secure) and can be accessed by your SQA Co-ordinator.

Statistical information: update on Courses

Number of resulted entries in 2012	99
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Number of resulted entries in 2013	78
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Statistical information: Performance of candidates

Distribution of Course awards including grade boundaries

Distribution of Course awards	%	Cum. %	Number of candidates	Lowest mark
Maximum Mark 250				
A	3.8%	3.8%	3	175
B	17.9%	21.8%	14	150
C	32.1%	53.8%	25	125
D	3.8%	57.7%	3	112
No award	42.3%	100.0%	33	-

General commentary on grade boundaries

- ◆ While SQA aims to set examinations and create marking instructions which will allow a competent candidate to score a minimum of 50% of the available marks (the notional C boundary) and a well prepared, very competent candidate to score at least 70% of the available marks (the notional A boundary), it is very challenging to get the standard on target every year, in every subject at every level.
- ◆ Each year, SQA therefore holds a grade boundary meeting for each subject at each level where it brings together all the information available (statistical and judgemental). The Principal Assessor and SQA Qualifications Manager meet with the relevant SQA Business Manager and Statistician to discuss the evidence and make decisions. The meetings are chaired by members of the management team at SQA.
- ◆ The grade boundaries can be adjusted downwards if there is evidence that the exam is more challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- ◆ The grade boundaries can be adjusted upwards if there is evidence that the exam is less challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- ◆ Where standards are comparable to previous years, similar grade boundaries are maintained.
- ◆ An exam paper at a particular level in a subject in one year tends to have a marginally different set of grade boundaries from exam papers in that subject at that level in other years. This is because the particular questions, and the mix of questions, are different. This is also the case for exams set in centres. If SQA has already altered a boundary in a particular year in, say, Higher Chemistry, this does not mean that centres should necessarily alter boundaries in their prelim exam in Higher Chemistry. The two are not that closely related, as they do not contain identical questions.
- ◆ SQA's main aim is to be fair to candidates across all subjects and all levels and maintain comparable standards across the years, even as arrangements evolve and change.