



## External Assessment Report 2012

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

Although there was a drop in the number of presentations (99) compared to 2011 (111), entries in 2011 were significantly up on previous years.

11 centres presented for the first time.

## Extended Case Study

Performance in this element ranged from 11%–93%. The average mark was 76/150 (2011 – 82; 2010 – 91; 2009 – 87; 2008 – 77; 2007 – 75).

## Question Paper

The average mark in the Question Paper was 48/100 (2011 – 42; 2010 – 49; 2009 – 49; 2008 – 45; 2007 – 52).

## Overall

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

50% of candidates achieved a grade C or better (2012 – 52; 2011 – 52; 2010 – 61; 2009 – 58; 2008 – 44; 2007 – 51).

## Areas in which candidates performed well

### Question Paper

Question 1: most candidates demonstrated a sound understanding of modelling and members of a design team.

Question 7: a large number of candidates drew on their knowledge from the Case Study Unit to provide a solid answer.

### Extended Case Study

#### Section 1 (a) Investigation of problem

This 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**

### **Extended Case Study**

#### **Section 3 (a) Presentation and explanation of design proposal**

A large number of candidates performed poorly in this section, perhaps running out of time.

#### **Question Paper**

As in previous years, candidate responses tended to be very generic and lacked 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 questions were clearly directed to specific areas which should have been covered in Unit work.

Question 2(a): many candidates did not demonstrate knowledge of economic factors.

Question 2(c): many candidates were unable to provide in-depth knowledge of products. Those who used their knowledge from their Case Study scored well.

Question 3: this question was very poorly answered. Again, there was a lack of detailed knowledge. A number of candidates described the design issues rather than their influence on the product.

Question 4: although many candidates scored well in part (b) of this question, there was, again, a general lack of detail in answers to parts (a) and (c).

Question 5: again, many candidates gave very general answers and did not draw on their knowledge and experience from Unit work.

Question 6: many candidates simply did not answer the question. They tended to make lists rather than 'describe' and 'explain'.

## **Advice to centres for preparation of future candidates**

### **Extended Case Study**

A large number of candidates are undertaking tasks that are inappropriate. These tend to be simple restyling of existing products, eg hair dryers and iPods. This type of task makes it very difficult for candidates to score high marks. It is very important that Section 1(a), Investigation of Problem is carried out correctly and monitored by 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 materials and processes.

A large number of candidates appear to be running out of time and not completing their Extended Case Studies. Staff should encourage them to keep to their time plan.

Two exemplar Case Studies with accompanying commentaries are available from SQA's secure website ([www.sqa.org.uk/secure](http://www.sqa.org.uk/secure)) and can be accessed by your SQA Co-ordinator.

### **Question Paper**

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

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

Candidate responses from Diet 2011 are available from SQA's secure website ([www.sqa.org.uk/secure](http://www.sqa.org.uk/secure)) and can be accessed by you SQA Co-ordinator.

### Statistical information: update on Courses

Number of resulted entries in 2011	111
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Number of resulted entries in 2012	99
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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	12.1%	12.1%	12	175
B	9.1%	21.2%	9	150
C	28.3%	49.5%	28	125
D	11.1%	60.6%	11	112
No award	39.4%	100.0%	39	-

## 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.