



## External Assessment Report 2014

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

The statistics used in this report are prior to the outcome of any Post Results Services requests

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

74 candidates were presented.

6 centres presented for the first time.

## Extended Case Study

The performance in this element ranged from 19–97%. The average mark was 78/150 (2013: 76; 2012: 81; 2011: 90; 2010: 87; 2009: 77).

## Question Paper

The performance in this element ranged from 15–77%. The average mark in the written paper was 48/100 (2013: 48; 2012: 48; 2011: 42; 2010: 48; 2009: 49).

## Overall

The average overall mark was 124 (2013: 119; 2012: 123; 2011: 124; 2010: 138; 2009: 136).

53% of candidates achieved a grade C or better (2013: 53; 2012: 50; 2011: 52; 2010: 61; 2009: 58).

## Areas in which candidates performed well

### Question paper

Question 2 was well answered, with a number of candidates demonstrating good knowledge and understanding of ergonomics, aesthetics and function.

### Extended Case Study

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

This was done very well by a number of candidates with some scoring full marks. Candidates who identified and investigated real problems with situations or products scored well in this area and tended to score well in rest of assignment.

#### Section 2(d) Communication

Many candidates demonstrated excellent communication skills, particularly in graphics. In general the use of models was good. The increased use of 3D-printed models was noted.

## 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.

### Extended Case Study

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

Some candidates struggle to produce appropriate evidence due to the task they were undertaking. This resulted in superficial investigation and many tasks became simple restyling of existing products. Poor investigation into the problem inevitably resulted in poor results for Section 1(b) Requirements of solution.

#### Section 2 Development of Proposal

Although a number of candidates produced very good evidence for this Section, a significant number produced very poor evidence and therefore dropped a substantial number of marks.

The generation of ideas and synthesis towards the proposal was often very shallow, with very little creativity, exploration or testing.

There was often very limited knowledge and understanding of appropriate materials and processes.

## 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 staff. If the candidate cannot define the problem at this stage they should be redirected. **Selection of an inappropriate task will have a negative impact on every Section of the Extended Case Study.**

To score highly in Section 2, candidates have to provide evidence of exploration, refinement, creativity, testing and application of detailed knowledge of appropriate materials and processes. Candidates should be encouraged to refer to the 'Allocation of Marks' section of the Extended Case Study Guidance document.

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

## **Question paper**

Many of the questions require candidates to apply knowledge gained in their Unit work. Candidates should be reminded of this and use that work for revision.

Candidates should be encouraged to illustrate their answers with examples of products/situations/designers they have studied.

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](http://www.sqa.org.uk/secure)) and can be accessed by your SQA Co-ordinator.

## Statistical information: update on Courses

Number of resulted entries in 2013	78
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Number of resulted entries in 2014	75
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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	12.0%	12.0%	9	175
B	9.3%	21.3%	7	150
C	32.0%	53.3%	24	125
D	12.0%	65.3%	9	112
No award	34.7%	-	26	-

## 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.