



## External Assessment Report 2010

Subject	<b>Health and Food Technology</b> <b>Fashion and Textile Technology</b> <b>Lifestyle and Consumer Technology</b>
Level	<b>Intermediate 2</b>

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

### General

- ◆ Learning and Consumer Technology, and Health and Food Technology: candidates' attainment in the Technological Project is similar to the question paper.
- ◆ Fashion and Textile Technology: candidates' attainment in the Technological Project is higher than in the question paper.

### Technological Projects: all contexts

All centres are using the new pro forma, allowing candidates to access the full mark allocation. There were however a small number of Technological Projects submitted on the Higher pro forma, which may disadvantage some candidates in the concluding steps.

Candidates should proofread their Technological Project carefully prior to submission.

### Question papers

- ◆ Health and Food Technology and Lifestyle and Consumer Technology: candidates generally demonstrated improved depth of core subject-specific knowledge.
- ◆ Fashion and Textile Technology: candidates generally lacked depth of some core areas of subject-specific knowledge.

The vast majority of candidates made the correct choice when drawing conclusions. There was evidence of candidate improvement in making relevant links to the questions in Drawing Conclusions answers. There is evidence of poor evaluation skills.

## Areas in which candidates performed well

### Technological Projects

#### Step 1.1: key points and explanation

Most candidates correctly identified all key points, gaining the candidates maximum marks for this section.

Explanations generally were appropriate.

#### Step 1.2: specification

Candidates were, in general, listing appropriate specification points.

Most candidates were listing an appropriate number of specification points.

Most specification points identified contained more detail than the brief, gaining the candidates maximum marks for this section.

### **Step 1.3: plan for investigations**

Most candidates identified appropriate investigation techniques.

Most correctly identified a relevant group/interviewee.

### **Step 2.2: solution**

All candidates presented a solution which was appropriate to the brief.

All candidates provided a description of the solution which could be visualised.

### **Step 3.1: manufacture**

Most candidates submitted plans for the manufacture of the solution only.

Most candidates included relevant dates.

### **Step 3.2: test**

Most candidates identified appropriate tests.

Most techniques identified were appropriate to the tests.

### **Step 4.1: evaluation**

Most candidates correctly transferred specification points from step 1.2.

## **Question papers**

### **Health and Food Technology**

Many candidates demonstrated improved depth of knowledge of the functions and food sources of nutrients and Scottish dietary targets. The vast majority of candidates made the correct choice in Drawing Conclusions questions.

- ◆ Question 1 (b): many candidates could explain the term 'balanced diet'; most candidates could state one function and one food source of fat and calcium.
- ◆ Question 2 (a): all candidates chose the correct 'ready to steam' meal and linked most reasons to the case study.
- ◆ Question 2 (c): almost all candidates demonstrated good knowledge of information on food labels.
- ◆ Question 3 (a): all candidates demonstrated good understanding of advantages and disadvantages of buying organic produce.
- ◆ Question 3 (c): most candidates chose the correct dishwasher and linked most reasons to the case study.
- ◆ Question 4 (a): all candidates chose the correct snack bar and linked most reasons to the case study.
- ◆ Question 4 (b): most candidates demonstrated good knowledge of advantages of food packaging.

- ◆ Question 4 (c): most candidates demonstrated good knowledge of conditions for multiplication of bacteria.
- ◆ Question 5 (a): most candidates demonstrated good knowledge of Scottish dietary targets and made correct adaptations to the product.
- ◆ Question 5 (b): all candidates chose the correct fruit drink and linked most reasons to the case study.

### **Lifestyle and Consumer Technology**

Many candidates demonstrated improved depth of knowledge of the functions of nutrients.

The majority of candidates made the correct choice in Drawing Conclusions questions.

- ◆ Question 1 (a): many candidates demonstrated two links between diet, lifestyle and obesity in children.
- ◆ Question 1 (b): the majority of candidates demonstrated good knowledge of food sources of dietary fibre.
- ◆ Question 2 (a): many candidates demonstrated understanding of the importance of folic acid and iron in the diet of a pregnant woman.
- ◆ Question 2 (b): most candidates demonstrated good knowledge of lifestyle factors important to the wellbeing of a pregnant woman.
- ◆ Question 2 (c): all candidates chose the correct buggy and linked most reasons to the case study.
- ◆ Question 2 (d): most candidates demonstrated good knowledge of fabric labelling.
- ◆ Question 3 (b): all candidates chose the correct fabric and linked most reasons to the case study.
- ◆ Question 3 (c): all candidates chose the correct packaging and linked most reasons to the case study.
- ◆ Question 3 (d): almost all candidates demonstrated good knowledge of information on food labels.
- ◆ Question 4 (c): all candidates chose the correct bag and linked most reasons to the case study.
- ◆ Question 4 (e): most candidates demonstrated good knowledge of the benefits of regular exercise.
- ◆ Question 5 (d): all candidates chose the correct shoes and linked most reasons to the case study.

### **Fashion and Textile Technology**

The majority of candidates made the correct choice in Drawing Conclusions questions.

- ◆ Question 1 (a): most candidates correctly identified one natural fibre.
- ◆ Question 2 (c): most candidates gave one correct reason for using market research.
- ◆ Question 2 (d): all candidates chose the correct track top and linked most reasons to the case study.
- ◆ Question 3 (a): many candidates demonstrated good knowledge of methods of increasing consumer appeal in a fashion outlet.

- ◆ Question 3 (b): all candidates chose the correct trousers and linked most reasons to the case study.
- ◆ Question 3 (d): all candidates correctly identified one point of information found on a garment label.
- ◆ Question 4 (b): all candidates chose the correct duvet covers and linked most reasons to the case study.
- ◆ Question 4 (c): all candidates correctly explained the importance of the leather mark.
- ◆ Question 4 (d): most candidates correctly described one way the Citizens Advice Bureau can help the consumer.
- ◆ Question 5 (d): all candidates chose the correct decoration.

## **Areas which candidates found demanding**

### **Technological Projects**

#### **Step 1.1: key points with explanation**

Some candidates joined too many key points together, and although they could be awarded the marks for identification of the key points, they often failed to give an explanation which encompassed all the key points identified, so could not be awarded the mark.

#### **Step 1.2: specification**

A few candidates are still providing a specification which contains too many points. This may disadvantage the candidate at step 4.1, where they are required to evaluate all the specification points successfully. A four-point specification is required at Intermediate 2.

If a specification point is identified in relation to cost, the candidate must carry out a costing exercise as a method of measuring or testing. Candidates often failed to do this.

Many candidates failed to identify appropriate measures and identified 'investigations', not 'tests'.

A small number of candidates failed to identify the appropriate target group or 'expert'.

#### **Step 1.3: plan for investigations**

A number of candidates failed to identify investigations which were essential to the brief, and consequently could not be awarded the full mark allocation.

A number of candidates who completed brief 1 investigated 'healthy' instead of 'nutritious'.

#### **Step 2.1: investigations**

A number of candidates failed to achieve the aims stated on page 6 of the Technological Project and so were penalised.

Some candidates did not show the results of their investigations, instead providing only a summary of results, ie star profiles, results expressed as percentages, or pie charts which

were not quantified. With no indication of how these results were arrived at, they could not be awarded marks.

A number of candidates did not draw conclusions from the investigations and simply repeated the results. Many conclusions did not show progression to future investigations or explain how the results might influence the solution, so they could not be awarded marks.

### **Step 2.2: solution**

Some candidates presented solutions which were not based on the results of their investigations.

There was evidence that some candidates had decided on their solution before carrying out their investigations.

### **Step 3.1: manufacture**

Some candidates lost marks for failing to include quantities or for the use of imperial or handy measures. All measurements should be metric.

A number of candidates did not include the day and date of manufacture, and therefore lost marks.

Some candidates did not include sufficient breakdown of time or detail in the work sequence to be awarded the full mark allocation, particularly in the Fashion and Textile Technology context.

A number of candidates allocated a very extended period of time in which to manufacture their solution, and so did not gain marks.

### **Step 3.3: test**

Some candidates did not show results, but provided a summary of results. (See comment at step 2.1.)

Many candidates did not draw conclusions based on the results of the test, offering personal opinion instead.

### **Step 4.1: evaluation**

Many candidates based their comments on prior knowledge/personal opinion and not on the results of testing/investigations. All comments in this section must be backed up with evidence that can be found within the Technological Project.

Candidates often failed to write evaluative comments.

## **Question papers**

### **Health and Food Technology**

In general, candidates demonstrated poor evaluation skills, and failed to link evaluation comments to the case study.

- ◆ Question 1 (d): poor evaluation skills shown. Candidates failed to relate to the needs of the man.
- ◆ Question 2 (c) and (d): candidates demonstrated poor knowledge of product development.
- ◆ Question 3 (b): poor evaluation skills shown. Candidates made general comments about benefits of the organic fruit and vegetable boxes, but failed to relate these to the needs of the couple.
- ◆ Question 3 (d): candidates demonstrated poor knowledge of Consumer Acts.
- ◆ Question 5 (c): candidates demonstrated poor knowledge of ways of improving the nutritional quality of foods.

### **Lifestyle and Consumer Technology**

In general, candidates showed lack of depth of subject-specific knowledge in some areas, demonstrated poor evaluation skills, and failed to link evaluation comments to the case study.

- ◆ Question 1 (a): candidates failed to identify all three factors linked to diet and lifestyle that may contribute to childhood obesity.
- ◆ Question 1 (c): poor evaluation skills shown. Candidates failed to relate to the needs of the girl.
- ◆ Question 4 (a): poor evaluation skills shown. Candidates made general comments about benefits of the bank account but failed to relate these to the needs of the student.
- ◆ Question 4 (d): candidates demonstrated poor knowledge of Consumer Acts.
- ◆ Question 5 (a) and (b): candidates demonstrated poor knowledge of product development.

### **Fashion and Textile Technology**

In general, candidates showed lack of depth of core subject-specific knowledge, demonstrated poor evaluation skills, and failed to link evaluation comments to the case study

- ◆ Question 1 (a): candidates demonstrated poor knowledge of regenerated and synthetic fibres.
- ◆ Question 1 (c): candidates demonstrated poor knowledge of construction methods.
- ◆ Question 1 (d): candidates demonstrated poor knowledge of smart fabrics.
- ◆ Questions 2 (a), (b), and (c): candidates demonstrated poor knowledge of product development.
- ◆ Question 2 (e): candidates demonstrated poor knowledge of Consumer Acts.
- ◆ Question 3 (c): candidates demonstrated lack of subject-specific terminology of textile care labelling.

- ◆ Question 4 (a): poor evaluation skills shown. Candidates made general comments about benefits of the sewing machine but failed to relate these to the needs of the textile business.
- ◆ Question 5 (a): candidates demonstrated poor knowledge of information found on the back of a paper pattern envelope.
- ◆ Question 5 (b): candidates demonstrated poor knowledge of transferring pattern markings.
- ◆ Question 5 (c): candidates demonstrated poor knowledge of methods of removing fullness in garment construction.

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

### **General**

Course content grids are available on the SQA website. All examination questions are sourced from these, so centres should use these grids as the definitive guide to essential knowledge for candidates.

Revised pro formas and teacher and candidate guides for the Technological Project are available on the SQA website. Centres should use these to support candidates.

Exemplification of the Technological Project in all contexts is available on the SQA website. Centres are encouraged to access all contexts, as annotated examples of the most common errors are included.

Exemplification of questions revised to accommodate the removal of half marks is available on the SQA website. These guidelines should be used in the preparation of prelim papers and other examination preparation materials.

### **Question paper**

Centres are reminded that past question papers are available to download from the SQA website.

Knowledge mark allocation is 30–37 marks and will test knowledge from Management of Practical Activities, Product Development, and Consumer Studies. Candidates' marks may be improved if their answers are backed up by subject-specific knowledge.

Drawing Conclusions mark allocation is 15–20 marks. Candidates should be taught to justify their choice linked to the needs of the case study.

Evaluation mark allocation is 8–10 marks. Candidates should be taught to make a judgement linked to the needs of the case study.

Detailed marking instructions will be available to download from the website. Centres should use these as guidance to help pupils learn the format and depth of answers that are required.

## **Technological Project**

Teacher and candidate guides are available to download from the SQA website. These give detailed support on the completion of the Technological Project.

Detailed marking instructions will be available to download from the website. Centres are directed in particular towards the support materials at the end of each marking instruction.

Candidates who drop down from Higher to Intermediate 2 should submit the Technological Project on the Intermediate 2 pro forma.

Candidates must work on the Technological Project independently. Centres should discourage candidates from using the same investigation techniques, the production of similar solutions, and the same testing techniques.

Centres are reminded that additional key points are no longer required.

Candidates should ensure that the range of investigations includes all investigations which are essential to the brief.

Candidates should ensure that a different technique is used for each of the three investigations carried out.

Candidates' investigations should include sufficient relevant information on which to base a valid conclusion.

Candidates' results should show the raw data collected from the investigative technique. Summary information, examples of which include star profiles, results which are expressed as percentages, and random selections of merchandise, cannot be awarded marks.

When using nutritional analysis programmes, candidates should be encouraged to identify and include those nutrients relevant to their investigation/test.

Candidates who carry out costing exercises must show pack sizes/unit prices for each ingredient.

Candidates' conclusions should demonstrate progression towards the solution.

Candidates who investigate hygiene or safety procedures or their personal skills are unlikely to demonstrate progress towards a solution.

Candidates should be encouraged to base their solution on the results of their investigations, and should come to a decision on a solution only after their investigations have been completed.

Centres are reminded that Lifestyle and Consumer Technology solutions must be made from either food or fabric components, as indicated in the briefs, as candidates will be penalised for solutions made from other materials.

Candidates' solutions must be sufficiently complex to allow for the construction of a suitably detailed work sequence and requisition, or the candidate cannot be awarded the full mark allocation for manufacture.

Centres should encourage candidates to check requisitions and work sequences carefully, as omissions will be penalised.

Candidates should include the day and date of the manufacture in the sequence of work for the solution.

Centres should encourage candidates to indicate a realistic timescale for manufacture of the solution.

Centres should follow SQA guidelines on the submission of photographic evidence.

Candidates should proofread their Technological Project before submission.

## Statistical information: update on Courses

### Fashion and Textile Technology

<b>Number of resulted entries in 2009</b>	108
<b>Number of resulted entries in 2010</b>	170

## Statistical information: performance of candidates

### Distribution of Course awards including grade boundaries

<b>Distribution of Course awards</b>	<b>%</b>	<b>Cum. %</b>	<b>Number of candidates</b>	<b>Lowest mark</b>
Maximum mark — 110				
A	12.9%	12.9%	22	77
B	26.5%	39.4%	45	66
C	30.0%	69.4%	51	55
D	11.8%	81.2%	20	49
No award	18.8%	100.0%	32	—

## Statistical information: update on Courses

### Health and Food Technology

Number of resulted entries in 2009	301
Number of resulted entries in 2010	315

## Statistical information: performance of candidates

### Distribution of Course awards including grade boundaries

Distribution of Course awards	%	Cum. %	Number of candidates	Lowest mark
Maximum mark — 110				
A	21.3%	21.3%	67	77
B	38.4%	59.7%	121	66
C	27.6%	87.3%	87	55
D	6.7%	94.0%	21	49
No award	6.0%	100.0%	19	—

## Statistical information: update on Courses

### Lifestyle and Consumer Technology

Number of resulted entries in 2009	111
Number of resulted entries in 2010	109

## Statistical information: performance of candidates

### Distribution of Course awards including grade boundaries

Distribution of Course awards	%	Cum. %	Number of candidates	Lowest mark
Maximum mark — 110				
A	18.3%	18.3%	20	77
B	34.9%	53.2%	38	66
C	22.9%	76.1%	25	55
D	11.0%	87.2%	12	49
No award	12.8%	100.0%	14	—

### 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, therefore, SQA 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 Head of Service 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.