

Design & Technology (Food Technology)

General Certificate of Secondary Education **GCSE 1954**

General Certificate of Secondary Education (Short Course) **GCSE 1054**

Report on the Components

June 2006

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Chief Examiners Comments

During the assessment of the Specification the standard achieved by many candidates in both the coursework and examination papers remains encouraging.

Generally, responses in both the foundation and higher tier papers clearly indicate that Centres are preparing their candidates' effectively for the final examination with many answers reflecting a thorough understanding of the subject content. The weakest responses in all papers, were seen in questions requiring candidates to give an explanation of their answers, and in the higher tier paper, questions, related to current food issues. Highlighting key words in a question would help candidates focus on the requirements of the question, as would, careful reading of the questions before attempting to offer a response.

The standard of coursework this year remains consistent with that seen in previous years. The standard of presentation continues to improve with a number of candidates showing excellent use of ICT throughout the whole project. Evaluations in Assessment Objectives 2, 3 and 4 and consideration of the possibilities and implications of quantity manufacture still remain the weakest areas within the coursework project. However, many centres are now advising candidates to design a Product Specification at the conclusion of Assessment Objective 4, although the quality of these varies greatly.

Careful note must be taken of the detailed report on coursework as some candidates are still completing sections of work that are no longer required but omitting other aspects as required by the Specification.

1954 Paper 1 and 2 General comments

The overall performance of candidates was good. The standard for the foundation paper was similar to last year, whereas the higher tier was slightly better. There is still some evidence of candidates being entered for the wrong tier. Some candidates continue to repeat part of the question in their answer therefore having insufficient space to complete detailed responses. Candidates need to read the questions carefully, candidates often gave answers from the wrong perspective e.g. wrote from the consumers view point when the question stated the manufacturer.

On the foundation paper most candidates attempted all the questions. Towards the end of the question paper some answers lacked the detail to score high marks.

On the higher paper many candidates achieved high marks for the first three questions, but their inability to explain, and discuss meant they failed to score high marks on questions four and five. Question 3b related to areas covered by the coursework project. Centres are reminded that aspects of the coursework project can be examined in the written papers.

When questions ask candidates to explain or discuss, simply writing a statement is a low level response, with marks being awarded accordingly. There was very little evidence of candidates highlighting the key words of a question before answering it. Candidates need to practise answering questions during the course.

The quality of drawings in the design based questions has improved. Those candidates who made use of colour and annotation seemed to spend longer on the questions and their scores were notably higher. Candidates should be encouraged to make use of colour when completing design questions.

Foundation Paper 1954 / 01 Comments on individual questions

- 1 (a) This was well answered by the majority of candidates. The microwave symbol was the least known.
 - (b) Some candidates did not read the question carefully and wrote 'ingredients' which was the question. Many candidates did not know the correct way to express 'best before' and 'use by' date. Not all candidates clear on legal requirements for packaging.
 - (c) The majority of candidates identified whole wheat as the correct answer; some weaker candidates stated other ingredients.
 - (d) The majority of candidates scored full marks for this question.
- 2 (a) The majority of candidates answered this correctly with the most common answers being refrigerator or fridge.
 - (b) Many candidates knew the operating temperature of a refrigerator. However a significant number of candidates had minus temperatures and a surprisingly large number of candidates had temperatures above 8°C.

Report on the Components taken in June 2006

- (c) (i)** This was not well answered, many candidates could not identify milk as the high risk food.
 - (ii)** Cornflour was recognised by many candidates as the thickening ingredient in the custard, weaker candidates stated sugar or vanilla essence.
 - (d) (i)** The majority of candidates answered this correctly.
 - (ii)** This was poorly answered by many candidates. They did not relate the ways to improve the product to the trifle. Often answers too vague to score marks e.g. change the shape, add colour.
 - (e)** Some candidates wrote from the consumers' perspective rather than the manufacturers. Candidates need to be encouraged to underline the key words in a question so that they focus on the requirements of the question. Most answers related to the product being produced more quickly.
- 3**
- (a)** Most candidates scored at least one mark with the most popular answers being questionnaires and surveys. Some candidates put this as two different answers and consequently only scored one mark. This part of the question draws on the candidates experience from their coursework, so it was disappointing that more candidates did not score full marks.
 - (b)** Most candidates scored highly for this. Weaker candidates did not identify the type of fruit they were putting in the bar. Candidates who annotated their designs fully scored highly and used their information for part c.
 - (c)** More able students scored high marks and clearly related their answers to part b. Many candidates did not say which ingredients were providing the different textures in the biscuit bar. More able candidates were able to explain how they had achieved layers in the bar e.g. by sandwiching ingredients together, providing a coating to the top of the bar.
 - (d)** The majority of candidates were able to correctly identify a suitable packaging material for biscuits.
- 4**
- (a)** Many candidates did not read the question carefully and gave examples of making rather than relating them to the development of the pizza. Some candidates still do not know the difference between CAD and CAM. The question required candidates to explain the benefit of CAD many candidates simple stated a function of CAD.
 - (b)** Most candidates scored one mark, popular answers relating to the same amount being deposited, it being quicker than humans doing it. Candidates need to be discouraged from simply writing one word answers such as quicker.
 - (c)** The majority of candidates scored full marks.
 - (d)** More able candidates answered accurately and precisely. Weaker candidates referred to visual checks and packaging with out any further detail.
 - (e)** This question required one well explained answer. The majority of candidates scored at least one mark, with popular responses relating to recycling and environmental issues. The more able candidates were able to give a well reasoned answer.

Report on the Components taken in June 2006

- 5**
- (a)** This was well answered by the majority of candidates.
 - (b)** This was well answered by the majority of candidates.
 - (c)** Many candidates did not know the function of fibre.
 - (d)** This was poorly answered; candidates often looked at the ingredients on the food label and simply said to add more of a certain ingredient. Some candidates did say to add vegetables but were not specific about which ones.
 - (e)**
 - (i)** The majority of candidates scored at least one mark for this section. Frequent answers referred to it being suitable for vegetarians, costing less money and containing less fat.
 - (ii)** This was not well answered – many candidates gave opposites to part (i) e.g. meat eater's won't like it. More able candidates were able to write about the difference in flavour, texture.
 - (f)** Many candidates answered from the consumers' perspective rather than the retailer. The most common correct answers referred to the increase in shelf life and the reduction in the amount of waste.

Higher Paper 1954 / 02

Comments on individual questions

- 1
- (a) Many candidates did not read the question carefully and gave examples of making rather than relating them to the development of the pizza. Some candidates still do not know the difference between CAD and CAM. The question required candidates to explain the benefit of CAD many candidates simply stated a function of CAD.
 - (b) Most candidates scored one mark, popular answers relating to the same amount being deposited, it being quicker than humans doing it. Candidates need to be discouraged from simply writing one word answers such as quicker.
 - (c) The majority of candidates scored full marks.
 - (d) More able candidates answered accurately and precisely. Weaker candidates referred to visual checks and packaging with out any further detail.
 - (e) This question required one well explained answer. The majority of candidates scored at least one mark, with popular responses relating to recycling and environmental issues. The more able candidates were able to give a well reasoned answer.
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(ii) This was not well answered – many candidates gave opposites to part (i) e.g. meat eater's won't like it. More able candidates were able to write about the difference in flavour, texture.
 - (f) Many candidates answered from the consumers' perspective rather than the retailer. The most common correct answers referred to the increase in shelf life and the reduction in the amount of waste.

Report on the Components taken in June 2006

- 3** **(a)** The quality of the sketches and notes varied. Where candidates had used colour in their design they appeared to think more carefully about what the question required. Some candidates did not address all the specification points in their sketches and notes. The specification point which was most frequently not included was suitable for freezing.
- (b)** This was poorly answered by many candidates. They related their answers to the initial research a manufacturer may carry out e.g. asking surveys. This question relates to the coursework tasks they have completed. The most common correct answer referred to the refining of the taste of the product.
- 4** **(a)** Most candidates were able to give two reasons why consumers buy ready prepared meals. However some candidates are still writing one word answers such as 'easier' or 'quicker'.
- (b)** This was not very well answered by many candidates. Many candidates described the star diagram and did not discuss what the implications would be for the product development team. More able candidates were able to look at how they could correct the level of spiciness, shape or texture.
- (c)** Many candidates scored two marks for this part of the question, they failed to score the full marks because they did not explain their answer they simply stated two other factors the manufacturer should consider.
- 5** **(a)** Many candidates simply repeated information in the question e.g. manufacturers had reduced the fat, salt and sugar but they did not go on to give any details of how or examples. More able candidates were able to go on and explain in detail their answers. They discussed the changes in labelling and the marketing of products.
- (b)** The most common correct answer related to high blood pressure. There were a lot of incorrect answers relating to causing heart attacks, cholesterol and obesity. It is important that nutrition is still taught to candidates.
- (c)** Many candidates could identify the factors which affect an individual's choice of food, but they did not go onto discuss these points. Where candidates did discuss they showed their understanding and gained marks. These candidates often based their discussions around cultural, ethics/moral beliefs, advertising and marketing campaigns and personal preference.

1954 : D&T Food Technology Paper 03/04 Report 2006

Overall performance of the candidates.

Most candidates performed well on the foundation paper. Every candidate made some attempt at the paper, however, many candidates failed to understand what was actually required from them, particularly question 4. There were far too many one word answers.

Most centres had prepared candidates thoroughly for the themed questions on vegetarianism. Candidates at both levels achieved well on this question.

At both higher and foundation level there was insufficient understanding of batch and continuous flow production. Many candidates in answering question 4 Foundation, question 1 Higher, did not give use of sensors nor could they explain how CAD has improved packaging. Many just lifted the answer from the question. Few candidates achieved above 40 on Foundation or Higher with the majority attaining between 20 to 30 marks. Many candidates scored below 20 on both papers. The term 'explain' and 'describe' are not fully understood by candidates. Many were listing or stating facts/points rather than explaining or developing their answer, thus attaining half marks or less on a question.

On the higher paper, in many cases knowledge was very poor on manufacturing, just in time and genetic engineering. Candidates in both papers showed a good understanding and caring attitude to the environment but at the higher level there was a lack of knowledge of moral and social issues.

A number of centres are still entering candidates for the Higher Tier who then find it difficult to interpret and answer questions 3, 4 and 5.

**Comments on individual questions
Foundation Paper 1954 /03**

Foundation

- 1 (a) This question was generally well answered. Most candidates mentioned aprons, hair nets, and hats, some gave special footwear and mouth protection.
- (b) There were many popular responses including; wash hands after going to the toilet, short nails, no jewellery, don't eat, no smoking near food and cover cuts with a blue plaster but very few mentioned reporting illness to a supervisor and some misread the question.
- (c) Many candidates failed to notice that the question was about the safe use of knives. Popular answers relating to the safe use of knives included; point down when cutting, point away, keep fingers away from blade, store correctly, take care when washing. Many candidates gave factors that were not concerned with use, such as don't run with knives, keep away from children.
- (d) The majority of candidates answered this question well. Common popular responses included; chopping, blending, mixing, slicing, and making into liquids. Some candidates also mentioned making into breadcrumbs and soup.

Report on the Components taken in June 2006

- 2**
- (a)**
 - (i)** Most candidates achieved the mark for this (14.9) however a minority gave 14.4 or 14.7 as the answer.
 - (ii)** The majority of candidates understood the term “use by date”, however, some responses related to use within two days.
 - (b)** This question gave disappointing results. Diagrams of the shapes of pasta were poorly completed. Many candidates did not give an example of a crunchy food and many who gave a colourful food mentioned its colour but did not highlight it as part of the specification.

Those who spent longer on the question, made good use of colour and annotation and scored noticeably higher.
 - (c)** The most common correct suitable material identified for the container was plastic.
 - (d)** Apart from the amazing variety of spellings the majority of candidates stated pasta products from a range of; spaghetti bolognaise, lasagne, macaroni cheese, with pasta bake being the most popular response.

A small number of candidates gave spaghetti/macaroni alone and not the name of the dish.
 - (e)** The majority of candidates gained full marks for this question. Popular responses included; to check the food against specification, to decide on methods of cooking, to check for quality, to make improvements, and to see if it will sell.
- 3**
- (a)** This question was generally well answered with a range of flavourings being given.
 - (b)** Generally well answered. Cherries, chocolate chips, nuts, coconut, all being included.
 - (c)** The majority of candidates gave sweetening or flavour as the correct answer.
 - (d)** The majority of candidates suggested, cooking for longer or using brown sugar or wholemeal flour. A few mentioned using cocoa. A common incorrect response referred to food colourings.
 - (e)** This question was very well answered by candidates, with a great variety of responses, namely; different types of icing, marzipan, cream, chocolate shapes, flakes, candles etc. A large proportion of the candidates gained full marks.
 - (f)** Candidates produced some good responses which included; minimum use of packaging, use of recycled material, or material that can be recycled, use of recycle symbol, and use of biodegradable material. Some candidates repeated their answer, and gave two materials that could be recycled thus gaining only one mark.

Report on the Components taken in June 2006

- 4 (a) A large proportion of candidates gave responses which were more suited to continuous flow than batch production or they gave 'quicker' or 'cheaper' without qualifying it.

No one mentioned job satisfaction or some skill being needed.

Many candidates were aware that it was easy to alter the product, alter the number being produced, same quality and accurate.

- (b) (i) The majority of candidates understood that this system was non-stop for 24 hours and all products the same. Some realized it was inexpensive to run with minimal staffing.
- (ii) A number of candidates mentioned that this production method was expensive to set up. Many realized that if anything went wrong it would prove to be expensive and wasteful.
- (c) A large number of candidates stated the name of a sensor without giving the use thus gaining no marks. Correct answers referred to; temperature to make sure food cooked correctly, metal detection to see if any foreign bodies present, volume sensors to see a consistent amount is used.
- (d) Most candidates only gained one mark for this part. They gave responses regarding the net, and the accuracy and speed by which this could be produced and altered if necessary. However, candidates did not show how the quality of the information could be improved by digital imaging etc.
- (e) Well answered by candidates. Popular responses included; tasting, money off coupons, leaflets, BOGOF. Many however, gave some sort of advertising twice, thus gaining only one mark.

- 5 (a) Bacon/Lard was generally correctly given.

- (b) The majority of candidates included positive responses such as TVP, beans, lentils, tofu, and nuts. However, many candidates gave Quorn and vegetables without clearly identifying which type. A small minority of candidates gave items from the original list.
- (c) This question was very well answered. Candidates clearly stating two ways in which packaging would indicate whether the contents are suitable for vegetarians. Common responses included; read ingredients list, vegetarian symbol, "suitable for vegetarians."
- (d) A mixed response with many candidates only gaining two marks as they just gave a list briefly referring to religion, weight loss, don't like meat, don't like the way animals are treated but not explaining in detail.

Higher Paper 1954/04

Higher

- 1 (a) A large proportion of candidates gave responses which were more suited to continuous flow than batch production. They gave 'quicker' or 'cheaper' without qualifying.
- No one mentioned job satisfaction or some skill being needed.
Many candidates were aware that it was easy to alter the product, alter the number being produced, achieve the same quality and greater accuracy.
- (b) (i) The majority of candidates understood that this system was non-stop for 24 hours and all products the same. Some realised it was inexpensive to run.
- (ii) A number of candidates mentioned that this production method was expensive to set up. Many realised that if anything went wrong it would prove to be expensive and wasteful.
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- (c) This question was very well answered. Candidates clearly stating two ways in which packaging would indicate whether the contents are suitable for vegetarians. Common responses included; read ingredients list, vegetarian symbol, "suitable for vegetarians"
- (d) A mixed response with many candidates only gaining two marks as they just gave a list briefly referring to religion, weight loss, don't like meat, don't like the way animals are treated. Others gave well reasoned answers showing a good understanding of thoughts about animal rights, religious views, health concerns and trends.

- 3 (a) Most candidates gained the full three marks for this question.
- (b) Popular correct responses included, sun dried tomatoes, garlic, peppers and anchovies.
- (c) A large number of candidates gave two detailed benefits of using plastic as a packaging material for bread. E.g. transparent, lightweight, cheap, waterproof, strong, recyclable.
- (d) A large number of candidates illustrated knowledge and understanding in their answers by referring to temperatures and control of bacteria, stacking and securing goods carefully to avoid damage, refrigeration lorries with correct suggested temperatures. Marks were lost by some candidates for not explaining the issues or using the phrase 'going off'.
- 4 (a) This was not very well answered, very few candidates could explain "just in time". Vague answers referred to food being received close to sell by date, but candidates had no understanding of why. A few were aware that food was delivered to a deadline and that food was prepared and dispatched when needed. There was little reference to wastage of stock and lack of need for storage space.
- (b) (i) Most candidates were aware that additives extended shelf life, added colour and flavour, but very few gave a clear explanation of why it was used.
- (ii) A mixture of responses from candidates. Common popular responses included hyperactivity and allergic reactions. Many candidates stated that they were 'not healthy' with no reasons given.
- (c) Very few candidates gained any marks for this question. Candidates **had little** or no understanding of what a moral or social issue entailed. A small number commented on fair trade and organic products.
- 5 (a) Most candidates were aware of the importance of vitamins and minerals, many gave the importance of fibre and the link to a healthy bowel. Some gave low in fat and link with cholesterol. However, there were many vague references to keeping healthy and well.
- (b) A reasonable attempt by the majority of candidates. Long shelf life, easy to store, stored in own juices, all frequently given. Some candidates were aware that the product remains almost as their fresh equivalent. Many suggested it was cheap without qualification.
- (c) Very few candidates gained more than one mark for this question. Many talked about "smart" foods or modified starch rather than "genetic engineering". A small minority gave the correct definition. Some were aware that the genetic makeup had been altered to give a particular characteristic. Link with tomatoes, maize, was frequently given.

Principal Moderator's Report

GENERAL COMMENTS

Generally the standard of presentation continues to improve by most candidates organising their folders into the separate objectives. A4 work is now rarely sent in ring binders, however a number of centres send work in thick plastic folders making the parcels very heavy. Some Centres are still submitting work where each objective is in a separate plastic wallet. This is very time consuming for the Moderator and makes it difficult to look back at previous objectives during the moderation process. Centres need to label coursework clearly with both the candidates name and number. Generally, folders are more concise but some candidates are still including vast amounts of irrelevant research and aspects of the coursework, which are no longer a requirement for the Specification.

Overall, the standard of coursework projects this year varied little from last year. Moderators saw some excellent coursework projects from centres that had obviously fully understood the requirements of the specification. However there still remain a number of centres that are unclear as to the requirements of certain Assessment Objectives, resulting in coursework projects of a much lower standard.

The Specification requires candidates to produce a product that can be batch produced and marketed. Candidates are not required to consider the different Commercial Production Methods in Assessment Objective 2, but are required to discuss why batch production is a suitable method in Assessment Objective 4.

When developing the product the candidate needs to consider the implications for quantity manufacture. This should involve the candidate in the development and use of a control system that will ensure consistency over a small batch production run.

It is not sufficient for the candidate to merely talk about how this could be done or how industry would do it. To score the higher mark ranges in Assessment Objective 4 and Assessment Objective 6, the candidate is asked to analyse the performance of the product and the planned control system in the manufacture of the product.

Tasks have, in the main continued to be suitably worded, allowing candidates the opportunity to design and make a quality Food Technology product, but this title needs to be evident at the front of the folder. One team of Moderators commented that some Centres had given some interesting tasks which had allowed their candidates to develop their own skills and knowledge. There continues to be evidence of some Centres using tasks that are too prescriptive therefore preventing candidates the opportunity to investigate the situation or the user. Reference to industrial / commercial practices and the application of system and control has continued to improve but some candidates fail to refer to this important aspect in their Coursework Project.

There continues to be lack of written evidence in some candidates' folders of the adaptations/modifications to the recipes being trialled in Assessment Objective 3. Clearly, this is not within the philosophy of Design and Technology. Candidates should be encouraged to use their own ideas creatively throughout the whole design and make process.

Many candidates are now demonstrating good use of ICT, not only in the production of questionnaires, graphs, packaging designs, photographic evidence, etc. but in word processing the whole folder.

The presentation of work is a very important aspect of the project. To achieve high marks candidates need to present their ideas adeptly in a logical and concise way. An increasing number of candidates are using A4 paper and whilst Moderators saw some very good A3 folders, there are still a number of candidates who present very little information on a page, consequently not meeting the criteria required for presenting the work concisely.

APPLICATION OF ASSESSMENT CRITERIA

The level of response is an important part of the mark scheme and should be carefully considered when assessing candidate's work. The levels should equate to the quality of the evidence, the capability and depth of involvement that has been employed to produce what is on offer. Within an Assessment Objective the quality of evidence to fulfil a particular level of response at a lower level must be very different from the evidence that might fulfil a similar level of response at a higher level. The capability and depth of involvement must be evident to gain the marks at the higher level. The mark scheme continues to be misinterpreted by a number of centres. Moderators once again noted a number of candidates using structured proforma sheets produced by teachers. Whilst these are useful for weaker candidates they limit the initiative and individuality often shown by high-attaining candidates.

Moderators were very appreciative of the Centres who had annotated the work in detail. This greatly assisted the moderation process.

The procedures for annotation of candidates' work are outlined in paragraph 7.4 of the specification.

"The sample of work which is submitted to the Moderator for moderation must show how the marks have been awarded in relation to the internal assessment objectives defined in Section 7.3 of the specification".

If it is not clear within a coursework project folder where the marks have been awarded by the candidates' own presentation of work, annotation must be carried out by the teacher marking the work.

A separate cover sheet containing reference to the criteria applied and their location within the project is recommended.

There must also be written teacher comments of the practical work carried out during Assessment Objectives 3, 4 and 5, and a photograph of the final product. When this is included, it is helpful in checking marks for Assessment Objective 5, particularly for the lower attaining candidates where there is little written evidence in their folders. There are still too many centres sending work without teacher comments and although there was an increase in the number of centres making good use of a digital camera, a few centres are still providing very little evidence of the practical marking, in some cases only a final mark was given, without the necessary photographic evidence. This clearly does not help the moderation process.

ASSESSMENT OBJECTIVE 1

Generally, this Assessment Objective was reasonably well addressed, with many Centres using a questionnaire to identify a need/target group. More candidates had used newspaper articles or news items from various websites to stimulate tasks this year, especially those concerning healthy eating.

Some candidates had given a good concise response when considering the user and the situation before arriving at a clear design brief for a marketable product. However, some Centres are crediting candidates with full marks when there is little supportive evidence for the choice of the design brief and when a precise design brief has not been given. Many candidates do not justify their choice of target group.

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A high level of response to this section would include:

- carrying out the necessary research to provide a detailed description of both the situation and the user(s) e.g. through questionnaires, statistical information. Questionnaires should be structured so they allow candidates to identify a need/opportunity; target group;
- providing a detailed analysis of the results in order to identify the need/opportunity, target group, which then leads to a clear and precise design brief of a marketable product.

Weaker candidates tended to offer information which was not specific to the task and/or showed little evidence of consideration of the user and the situation, resulting in rather vague briefs, with no reference being made to the research. This would be regarded as a low level of response.

The final product needs to be one that can be sold 'off the shelf' and the many candidates are now adhering to this by including the word 'marketable' in their design brief. A few candidates this year had presented their design brief as a long and wordy "mini-specification", whereas others had been too specific e.g. "design and make a pizza", both limited the marks that could be achieved in the following assessment objectives.

Candidates need to be encouraged to present a clear and concise design brief. Centres are advised to include a copy of the task at the beginning of each candidate's work.

For the Short Course:

- The questionnaires do not need to be distributed to a very large group of people, this in turn will reduce the work required when analysing responses.
- The design brief could be a little more focussed from the outset. This would allow the investigation and generation of design solutions to be more focused (Assessment Objectives 2 and 3) which in turn will reduce the complexity of the work required for Product Development (Assessment Objective 4). However care must be taken not to limit the range of practical skills that the candidate can demonstrate.

ASSESSMENT OBJECTIVE 2

Research into the design brief, which results in a design specification, needs to be explained carefully to candidates. It is essential that they have sufficient direction and focus for their work through an analysis of what needs to be done so that data identified and collected is relevant to the design brief.

Data had been identified and collected showing signs that some candidates are becoming more selective in the information they include in this section of their work. Weaker responses is where data is collected without making reference to it. There were some good examples of packaging and labelling information but many candidates this year made no reference at all to packaging and labelling and environmental issues were frequently omitted.

Many candidates are still including information on HACCP and commercial production methods. This is no longer a requirement of this objective as the Specification states that the product will be batch produced.

Most candidates choose to carry out a questionnaire to identify the needs of the user but it is imperative that questions are relevant to the task title e.g. age, when the target group has already been identified in AO1. It was disappointing to see that results were not always analysed or used to influence the development of the specification and the choice of trailed products.

Report on the Components taken in June 2006

The evaluation of existing products is generally poor. It is often undertaken before the needs of the user have been identified via a questionnaire. In a number of Centres all candidates use the same proforma chart and look at the same 6 products, irrespective of their design brief. Candidates rarely evaluate the products against the needs of the user. In some cases products are evaluated in the form of a table with no conclusions drawn from the results. Many centres still encourage candidates to evaluate packaging and more emphasis is placed on this than evaluating the products.

The quality of design specifications varied widely. Some candidates produced very detailed design specifications which covered all the required aspects, other design specifications were far too brief and in some cases, they tended to be teacher led. In a number of cases the design specification bore no relation to the data recorded in Assessment Objectives 1 and 2. Cost of the product was often omitted or unrealistic. Quantity manufacture when referred to was not always 'batch' but mass or repetitive flow. Criteria relating to packaging no longer needs to be referred to in the design specification.

Making reference to a system to ensure control over the production of the product in quantity is still being omitted from the design specification by a number of candidates.

A high level of response to this section would involve;

- fully examining the intended use of the product with relevant data identified and collected;
- carrying out market research to identify users' needs;
- identifying and evaluating existing products against the needs of the intended user(s);
- analysing all the research before developing a detailed design specification that shows consideration of a system to control production of the product in quantity.

For the Short Course:

The number of existing products to be evaluated does not need to be too extensive, but the products chosen must be relevant to the design brief and be evaluated in depth.

ASSESSMENT OBJECTIVE 3

For marks to be awarded in Assessment Objective 5 there must be evidence of :

- forward planning;
- teacher comments on the practical work;

so that marks can be awarded to Assessment Objective 5.

The standard of forward planning continues to be varied. Many Centres had not encouraged candidates to show evidence of forward planning and sometimes when this was completed, plans were far too superficial. Candidates need to show evidence of planning so marks can be awarded in Assessment Objective 5.

Some candidates are not considering a range of ideas before choosing the products to trial. Most Centres who achieved higher marks are those who encourage candidates to trial 5 or 6 of their ideas. Some candidates still continue to choose products that show little or no skills or only allow them to show the same skills, therefore limiting their level of achievement in Assessment Objective 5. A number of Centres are still failing to encourage their candidates to adapt or modify original recipes to fit their design specification and to record the proposed changes.

Report on the Components taken in June 2006

Candidates are not required to write out the method of making or give a list of equipment for each product.

Some candidates had trialled and tested a wide range of interesting solutions with candidates being prepared to experiment with new flavours and combinations of ingredients. There was good evidence of star diagrams/profiles and rating charts but marks were lost if these results were not always explained or conclusions drawn. Detailed evaluations of solutions against the specification still remains a weak area for many candidates. Evaluations were often cursory with only a ticked chart and this cannot be considered a detailed evaluation. Some candidates had evaluated each solution but then failed to make any reference to the specification.

Nutritional analysis of the trialled products was varied. Marks were lost if there was little evidence of the analysis or reference to the analysis in their evaluations. Nutritional analysis for this assessment objective only needs to be carried out if it is appropriate to the design brief.

Costing of products continues to be an area that needs further improvement. Costing is being carried out in the majority of Centres but often it is done superficially and not referred to during evaluations.

Packaging designs are not a requirement and therefore can not be credited with any marks.

Explanation of the final design proposal is again a weak area and candidates who had scored highly gave well thought out and detailed proposals. but in other projects there was no evidence of a proposal. A number of candidates had stated why they were going to develop a product but had not explained why other ideas had been rejected.

It was pleasing to note that some candidates had continued to use a wide range of appropriate techniques to present their design solutions.

A high level response to this section would involve:

- Proposing a wide range of appropriate solutions – three for the Short Course, four (if the products are complex) to six for the Full Course, with detailed evaluation against the specification, consideration of the need and fitness for purpose.
- Using a wide range of appropriate techniques to present solutions.
- Giving detailed evidence to support choice of final design proposal and explaining why other possible solutions were rejected.

ASSESSMENT OBJECTIVE 4

There was again great variation in the standard of work submitted for this objective. Some centres have now adapted effectively to the specification with all the required elements achieved. In Centres where this Assessment Objective was done well, candidates showed detailed: -

- trialling and testing with all modifications/adaptations to the product clearly explained with reasons – e.g. changes to ingredients, shape, size, decorations, coatings or cooking methods.
- evaluations highlighting the success/failure of the modifications and any further changes needed to ensure success before arriving at detailed explanations for their final decisions.

Costing and nutritional analysis was evident although once again these were not always referred to in the evaluations. Nutritional analysis during the development of the product is only required if appropriate to the brief but all candidates must analyse the nutritional content of their final product.

Report on the Components taken in June 2006

Assessment Objective 3 requires candidates to trial and test their chosen design solution and then to use this evidence during the developmental work in objective 4. Some candidates developed more than one product and others who did carry out developmental work on one product, showed lack of consideration to tester's opinions throughout the trialling process. Candidates did not gain marks if they had decided on developments at the beginning of Assessment Objective 4. Evaluations in this objective often lacked the necessary detail to be awarded high marks.

In some Centres developmental work did not always lead to a final product and marks were lost if candidates chose one of their developments and referred to this as their final product. In other Centres, candidates were not encouraged to modify/adapt their product but moved straight to the final product.

Reasons for choice of materials was weak in some Centres, a lack of understanding of the functional properties of ingredients was clearly evident. It is important that candidates produce written work when carrying out product development.

Written evidence of an effective control system for the product was evident in many candidates' projects, although some candidates continue to produce controls that are vague and not specific to the product. Please note, a control system for the packaging is no longer a requirement.

Consideration of the possibilities and implications of quantity manufacture still remains a weak area in many centres. Candidates must show a good understanding of the requirements to gain marks. Frequently, projects reflected lack of understanding and evidence of scaling up, accurate costing of the final product and quantity manufacture did not always refer to batch production or the possible use of pre-manufactured components. More Centres are now producing a product specification. However the quality of these varies greatly. Some Centres need to distinguish between the design and product specification.

It is important that within this assessment objective there is evidence of;

- teacher comments on the practical work so that marks can be awarded to Assessment Objective 5.
- A high level of response to this section would involve candidates:
- Carrying out the appropriate testing and trialling – (development on at least one occasion for the Short Course, with the second occasion being the final product. Development on at least two occasions for the Full Course, with the third occasion being the final product.) to:
- identify necessary modifications for the product to meet the design brief;
- arrive at reasoned decisions about materials, production methods and manufactured items.
- Providing full details about the final solution and an effective control system for the product to be produced in quantity manufacture.
- Considering the possibilities and implications of producing their product in quantity.
- Designing a detailed product specification.
- Using a wide range of appropriate techniques to present the final solution.

Centres who had given clear guidance allowed candidates to score well in this Assessment Objective.

ASSESSMENT OBJECTIVE 5

In the best submission, forward planning was thorough and specified an effective order of work (Assessment Objectives 3) and the flowchart for the final product was detailed. High marks cannot be awarded if forward planning is missing from Assessment Objective 3.

Some candidates are producing products that demonstrate a wide range of skills, but it is noticeable that in some Centres, candidates are continuing to be credited highly without evidence of this range of skills or for a few products. Lack or incomplete comments from the teacher about the practical work, comments which do not correspond to the work documented in the candidate's folder, or when the mark given does not match the annotation of the practical sessions, do not assist the moderation process. There are still too many Centres providing little or no written comments.

The wider use of digital cameras has allowed more candidates to include photographs of their work in Assessment Objectives 3, 4 and the final product, Centres are reminded that the minimum requirement is a photograph of the final product.

A final design proposal for the packaging was evident in many candidates' projects but often these were not presented to a high standard. Some candidates' design lacked colour and detail, being no more than a net with spaces for nutritional information etc. therefore were incomplete. Candidates cannot be awarded full marks for the quality of the final product if the packaging is incomplete.

Once again centres are reminded that a model of the packaging is no longer required.

A high level response to this section would be:

- Providing evidence of forward planning (Assessment Objectives 3);
- Producing a detailed flowchart, including their control system.
- Being resourceful and adaptable with materials, foods and equipment.
- Independently combining a range of skills and techniques appropriate to the task.
- Showing a high understanding of safe working procedures.
- Producing a product (food and packaging design) to a high standard that meets the requirements of the specification.

ASSESSMENT OBJECTIVE 6

Moderators noted some good evidence of testing of the final product but conclusions, were often superficial and unsupported, resulting in the evaluations being descriptive rather than evaluative. Evaluations against the product specification were a little more evident this year but many candidates are still referring to their design specification from Assessment Objective 2. Comments tend to lack specific detail stating the product has met the specification without any justification. Reference to final costing was frequently omitted.

Suggesting proposals for further developments, modifications or improvements for the product needs addressing by some candidates. In some cases this had been omitted, in others the comments were too superficial.

Report on the Components taken in June 2006

A few Centres had misinterpreted the marking criteria for this Assessment Objective resulting in candidates not confining their comments to the final product. They tended to discuss the use of time and resources for the whole project and, in some cases evaluated each objective in turn. A few centres had awarded marks for this objective to evaluations carried out in objective 3 and 4. Marks should only be awarded for the evaluation of the final product.

The evaluation should also include a review of the performance of the control system so it could be used to enable the product to be manufactured in quantity.

A high level of response to this section would be:

- Critically evaluating their product against the product specification, initial design brief and use of resources.
- Carrying out detailed testing (more than one person and they should be possible users) with meaningful conclusions.
- Suggesting proposals for further development, modifications or improvements for both the product and control system.

PRESENTATION

A number of centres are awarding high marks for neatly presented work rather than for work where the candidates have presented their ideas adeptly in a logical and concise way.

GOOD PRACTICE WITHIN ADMINISTRATION OF THE COURSEWORK

Work should be removed from ring binders, presented so that pages can be turned without having to remove sheets from plastic wallets and securely fastened together e.g. by means of a tag, then clearly labelled with Centre Number, Name and Candidate Number. Mark sheet/annotation sheet should be attached to each piece of work. Where questionnaires have been carried out by candidates, only one exemplar questionnaire is needed once the work is called for moderation

Candidates need to be encouraged to present their work concisely e.g. present graphs on 1 or 2 pages. There were far too many clerical errors this year. The transference and addition of marks on the Coursework Assessment Sheets need to be checked thoroughly to reduce the amount of paper work sent to Centres for amendment. If an amend form is sent this should be returned to the Moderator as quickly as possible. A HB pencil should be used to complete the MS1 and teachers initials should be used to clearly distinguish the different teaching groups.

The Coursework Assessment Sheet(s) should be sent to the Moderator with the MS1. Centres need to make sure that this paperwork arrives to the Moderator by the date specified by OCR and Coursework Projects should be sent within 3 days of receipt of the request for the sample.

A copy of the task(s) should be included with the sample. Encourage the candidates to divide their work under headings for the separate Assessment Objectives. Centres who provide effective annotation greatly help the moderation process. The standard of annotation is improving, but it is still poor and in some cases non-existent.(i) Where more than 1 teacher is involved in the assessing of candidates work, the centre should carry out effective internal standardisation to ensure a reliable rank order.

**General Certificate of Secondary Education (D&T Food Technology Short Course) (1054)
June 2006 Assessment Series**

Component Threshold Marks

Component	Max Mark	A	B	C	D	E	F	G
Paper 1	50			32	28	24	21	18
Paper 2	50	28	24	20	16			
Coursework	105	83	71	60	48	37	26	15

Syllabus Options

Foundation Tier

	Max Mark	A*	A	B	C	D	E	F	G
Overall Threshold Marks	175				103	87	71	55	39
Percentage in Grade					18.1	21.7	25.4	18.6	10.3
Cumulative Percentage in Grade					18.1	39.9	65.3	83.9	94.3

The total entry for the examination was 243

Higher Tier

	Max Mark	A*	A	B	C	D	E	F	G
Overall Threshold Marks	175	138	121	104	88	70	61		
Percentage in Grade		16.2	30.5	27.8	18.5	6.02	0.00		
Cumulative Percentage in Grade		16.2	46.7	74.5	93.1	99.0	99.0		

The total entry for the examination was 242

Overall

	A*	A	B	C	D	E	F	G
Percentage in Grade	8.56	16.1	14.6	18.3	13.4	11.9	8.80	4.89
Cumulative Percentage in Grade	8.56	24.7	39.3	57.7	71.1	83.1	91.9	96.8

The total entry for the examination was 485

**General Certificate of Secondary Education (D&T Food Technology Full Course) (1954)
June 2006 Assessment Series**

Component Threshold Marks

Component	Max Mark	A	B	C	D	E	F	G
Paper 1	50			32	28	24	21	18
Paper 2	50	28	24	20	16			
Paper 3	50			34	30	26	22	18
Paper 4	50	31	27	23	19			
Coursework	105	83	71	60	48	37	26	15

Syllabus Options

Foundation Tier

	Max Mark	A*	A	B	C	D	E	F	G
Overall Threshold Marks	175				104	88	72	56	40
Percentage in Grade					28.13	26.0	21.4	13.6	6.4
Cumulative Percentage in Grade					28.13	54.1	75.5	89.1	95.6

The total entry for the examination was 11999

Higher Tier

	Max Mark	A*	A	B	C	D	E	F	G
Overall Threshold Marks	175	137	121	105	90	73	64		
Percentage in Grade		9.63	25.8	32.5	20.9	8.32	1.34		
Cumulative Percentage in Grade		9.63	35.5	68.0	88.9	97.2	98.5		

The total entry for the examination was 10179

Overall

	A*	A	B	C	D	E	F	G
Percentage in Grade	4.50	12.1	15.2	24.7	17.7	12.0	7.25	3.44
Cumulative Percentage in Grade	4.50	16.6	31.8	56.5	74.3	86.3	93.5	96.9

The total entry for the examination was 22178

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