

Moderators' Report/ Principal Moderator Feedback

June 2011

GCSE Design & Technology
5FT01 Food Technology
Controlled Assessment

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Introduction

Most centres have made a very promising start to the new specification and there were a range of levels of outcome from very good to weak. It was obvious where centres had been to training meetings, accessed the website support through 'Ask the expert', exemplar work, Edexcel GCSE Food Technology Textbook or free online support meetings focusing on developing good practice. The work was generally better organised with a greater degree of clarity through out the design process and enabling candidates the opportunity to access all the assessment criteria.

Candidates are required to produce either a combined design and make project or separate design and make projects (new for GCSE09). This year there was approximately a 50/50 split between the two options; the centres with the perceived lower ability candidates used the separate option to enable their candidates to achieve higher making marks, with mainstream schools of average ability taking the more traditional combined approach. For clarification of the two different options and the titles to select from can be found at

<http://www.edexcel.com/quals/gcse/gcse09/dt/Food/Pages/default.aspx>

Candidates are required to identify a gap within the food market, employ design skills to produce a design proposal and to make a range of food (a range being more than two) products that match the design proposal. A range is required to allow candidates the opportunity to present a wide range of different skills and techniques for at least three products; the range of products is unique to Food Technology. Within the 40 hours given for this assessment, a candidate needs to make a range of products to display their true range of making skills; other subjects within this suite of qualifications can do this within one final product.

As with all the Design and Technology subjects, centres need to mention address relevant sustainability issues related to their selected theme and choice of design brief within their work. Examples of this include the use fair trade products, air miles of the ingredients, amount of water used during the making of the product and the recycling of any packaging used to transport the ingredients or final product. A high level candidate could focus on the use of fair trade ingredients within their final products coupled with the amount of air/land miles the ingredients have had to travel; this would illustrate awareness of global as well as local issues. A lower candidate may on the other hand state that they 'purchased their ingredients from their local shop so they cut down on the food miles'; which shows no real understanding of what food miles are and their importance to the sustainability process.

Each candidate has to produce a folder of 20 A3 pages in approximately 40 hours of work; containing work from the research to ideas to the final products and evaluation of a new concept food item. Candidates must choose themes that are published by Edexcel which the centre must follow, and conduct their own developments to develop a range of final food items. Overall the topics/design briefs were interesting and well thought out. The choice of topics and briefs allowed candidates to show their creativity and

imagination to create new and interesting food products. Some of the most interesting briefs were in relation to 'Fusion Foods', but these were not the usual 'East meets West' ideas, these contained the fusion of African and French or American and Japanese for example. The centres with a wide range of candidates utilised the separate design and make tasks by allowing candidates their own choice for the design project e.g. cakes for a children's party, a main course for a dinner party or a 'finest' range of desserts for sale in a supermarket. But then giving them the make project specification, for example family main meals or a range of dinner party desserts. This allowed the weaker candidates to be guided or to use standard components with the stronger higher ability candidates to show their skills, e.g. their own pastry, piping and finishing skills. This allowed the centre to utilise all candidates making skills to ensure that they all got medium to high marks in this section which raised their overall attainment in this controlled assessment.

There have been many issues surrounding the ease of moderating folders:

- With regards to packaging of the work, large cumbersome packaging and folders continue to fill moderator's homes; please only use treasury tags to secure your work.
- CMRBs continue to be sent without signatures of the candidates/assessors or both; which delays the moderation process as the moderators then have to chase schools for these signatures.
- Witness statements only apply to the make section of the controlled assessment and need to contain enough detail to justify the marks awarded; centres often wrote 'chopped vegetables' or 'made white sauce' and awarded higher marks without any justification given. We need detailed observations of the candidates, e.g. 'made roux sauce independently using semi-skimmed milk and gluten free flour'.
- Photos of all final items need to be on the candidate CMRBs as well as in the folders.
- Photographs to illustrate the quality of manufacture and outcome need to be 3 to 5 for each product; one photo will not illustrate the complexity of the dish or justify the awarded marks.
- Where a teacher assessor has clearly annotated the CRMBs, it greatly helps the moderation process; clear annotation includes page numbers, teacher observations and general guidance to why they awarded those marks.
- The majority of centres submitted their work on time; Edexcel sets clear deadlines for submission of all coursework so that the moderators have a window of time to fairly and accurately assess all work given to them; if a centre does not keep to these deadlines without just cause, it causes issues for the moderators regarding time and resource management.

Candidates presented a wide range of variations on most of the topic headings; the most popular topics seemed to be celebrations and multi-cultural foods. The most common design brief for celebrations was children's parties with other good examples being prom parties, wedding breakfasts and engagement parties. With multi-cultural foods, the most popular briefs centred on Italian, Indian and Chinese foods; with

international centres focusing on 'fusion' foods. Where other cultures were used as the focus, the work produced was generally more interesting and challenging.

Some centres set a common topic, but students need to be encouraged to take ownership and personalise their work and to produce individual outcomes; for example food for a celebration and a multi-cultural themed meal. A good choice was desserts within the celebration theme; this allowed the candidates the opportunity to display a broad range of skills and processes with good scope for design and developments. This choice offers stretch and challenge opportunities to candidates. Whereas some centres allowed design briefs to be too narrow, e.g. a chocolate cake for a 6-8 year old boy, this stifled creativity and limited the range of practical skills at the design and make stages. Where there is limited scope the design and make work compared to that of low level KS3 and were not demanding enough at KS4 level; simple all-in-one cakes decorated with readymade icing and pizzas made with readymade bases are examples of this. The innovation and creativity seen across the board was pleasing to see, ideas ranging from fusion foods involving African and Asian cuisine to a new range of diabetic based products and children's hand held party foods.

The CMRBs are removed from candidate's portfolios during the moderation process. Candidates are therefore strongly advised to include their centre number and candidate number on to their portfolios; avoiding portfolios getting muddled and enabling the moderators to ensure that they are returned to the appropriate centres. Page referencing on the CMRB is very useful to the moderator and particularly if the teacher examiner wishes to highlight evidence for a criterion that might be out of chronological order. Also, annotations are a valuable means of the moderator understanding why marks may have been awarded.

Design Activity

Analysing the Brief

The majority of candidates chose a wide range of design briefs that allowed them to show a 'route through' from the initial idea to the research section; many produced clear design needs. Mind-maps were a helpful aid to focus thoughts and start to think out problems; however the problem finding activities were not always rounded off. Candidates would benefit from summarising the mind-map and explaining what they now realise they need to 'find out' about their target audience and brief (what they need to research).

Research

There was too much information in many candidates sections containing large amounts of unnecessary and unanalysed secondary research and being awarded high marks. The research must include a product analysis relevant to their brief, including sensory testing and evaluation; product analysis must lead the research as this enables the candidate to uncover problems and identify key features and attributes in existing products. Without this research the candidate can't then produce a detailed design ideas page leading to the manufacture of three or four items. Please monitor page numbers for this section, 3 pages are adequate. A suggestion can be made that one page can be used for a detailed supermarket survey, one page for a product analysis on two relevant products and the final page can be on another area related to the brief, e.g. different types of Italian foods, sustainability issues of using fish in a celebration dish, the use of fair trade ingredients and what fair trade means. Please remember that any research is suitable as long as it is relevant and selective however, for medium/high grade boundaries candidates must include a product analysis. It is the analysis of the research results that allows candidates to enter the medium and higher grade boundaries with the discussion of sustainability.

Specification

Candidates on the whole appeared to understand how to write a specification that contained points that were technical, measurable and justified. For example the statement 'It must cost between £2 -£3 because that was the average price found in the supermarket survey' is justified, whereas the statement 'the item must cost between £2 and £3' is not. For high marks, the specification must be detailed and there should be evidence of how specification points have developed from research. As a guide, candidates would benefit from organising their specification under headings such as Form; Function; User requirements; Performance requirements; Materials; Scale of production and costs. In order to access the high mark band, candidates must also address relevant issues of sustainability that have been identified from the research.

Initial Ideas

This section was on the whole marked correctly and the ideas reflected the chosen design brief. Candidates need to remember their chosen client group when designing, as a dish containing high levels of sugar is not suitable for diabetics. Candidates need to evidence a minimum of three products that include the recipe (function of ingredients, skills and processes), sensory test and evaluation, and final evaluation (modification ideas). Nutritional analysis is only required if it is relevant to the design brief; nutritional analysis of celebration desserts would not be appropriate. Candidates should communicate their ideas with communication techniques such as photos, scanned images, 2D sketches, plan/cross section drawing and CAD drawings. It is possible to present a paper based design idea to accompany three other design idea practical pages; this all has to be achievable within the 40 hours.

Review

Candidates tended to use tick boxes to check their ideas against the specification, this was adequate only for the lower marks. Where Candidates did endeavour to give good feedback on their testing of ideas, they were subjective and needed to be more objectively based on the opinions of their target market. To achieve a mark in the high grade boundary, candidates must grade each point of their specification against all products trialled. The products must then be discussed in depth and a clear indication of what products are moving forward and why; please remember this is a selection and rejection process to make development decisions.

Communication

A good range of appropriate techniques were generally used; word processing, internet, photos and diagrams.

Development

There was a wide range of evidence provided within this area. This ranged from extensive development to no evidence provided. Three products (a range) should be taken forward to be changed/improved in relation to user group and research results; the products need to be developed in relation to their initial brief and should be accompanied by clear evidence of their outcomes; it can be photographic or paper based. Developments can be physical or paper based activities; paper based activities include costing (value products to fair-trade, e.g. sustainability, nutritional analysis or sustainability development. The minimum requirement is for one development for each of the three products, e.g. lemon to forest fruit meringue, or family size to individual portions.

Final Design

Final design ideas need to be the three developed products, including a photograph or sketch, including the changes made and why. To justify the higher level of marks it is suggested that more technical details could be

provided e.g. dimensions or portion sizes and clear and relevant nutritional information for the individual portion sizes. Some of the submitted pieces of work failed to achieve marks due to the lack of a final design proposal. Without a final design proposal and choosing the combined option the candidates then cannot achieve higher marks within the design/develop section.

This section is either the final section of the 'Design' project or the continuation of the combined option. This means that the candidates are either designing the final item relating to their 'design' brief, e.g. celebration cakes, then being given a new specification by the teacher for the 'Make' project, e.g. family main meals. Or, if the centre wishes, the candidates continue with the designing process and make the dishes they have designed in the 'design' section of their work.

Make Activity

Production Plan

It is no longer a requirement to conform to the legacy specification with regards to production plans. Only one plan is now required; it can either be a flow chart, or a tabulated format; a written list of instructions is too simplistic and the candidate would be unable to achieve the higher marks. The plan should include a sequence of manufacturing tasks in the correct order and reference to quality checks. Other considerations might include time, temperature controls, relevant hygiene and safety issues relevant to the chosen product and specific skills and process used to manufacture the product. Candidates need to ensure that their quality control checks are specific in detail and not too repetitive, for example 'check the meat is evenly cut' could be 'check the meat is 1.5cm wide'.

Quality of Manufacture and Quality of Outcome

Quality of Manufacture is the processes used to make the product and the Quality of Outcome is how the final items look and are compared to the specification. In this section, marks are awarded for the quality and manufacture of component parts of final products, how well they are assembled into a completed and fully functioning range of products and whether the tasks and levels of response are appropriate to Key Stage 4 expectations. We are looking for three good quality skills for GCSE, these include roux sauces/range of sauce making skills, homemade pasta/noodles, biscuits, cakes, bread, range of pastry making skills, meringue and jelly using gelatine/arrow root. The KS3 practical level skills often evidenced by centres included simple cakes, pizzas, curries and stir-fries; and it is not possible to access the higher marks for low level practical work.

As evidence of the quality of manufacture and quality of outcome, clear photographs must be submitted; photographic evidence is the only proof of manufacturing quality. The witness statement is the essential part of the moderation. The photos must be accompanied by a label with the name and candidate number, allowing for evidence of manufacture. It is essential

that images convey details of levels of difficulty and complexity of making, so it is unlikely that a single image will achieve this. A series of thumb nail photographs and annotation over a period of time during manufacture is the ideal way of highlighting processes and skills used (a record of decision making) and providing examples of precision and attention to detail that may not be readily noticeable in an image of the finished product. The image of the final products must be attached to the candidates CMRB.

The awarding of quality of manufacture also varied; out of all the sections seen, this was the most generously assessed. A very small minority of centres failed to address the 'range of products' (more than two products). The witness statement and photographic evidence needs to support the marks awarded by the teacher assessor, many centres did this very well and their marks reflected this. Some centres although used the same photographs from their development stages to illustrate their final items.

Health and Safety

This section is a teacher observed assessment. There no longer needs to be evidence in the folder and the marks can be evidenced as teacher observation; relevant health and safety issues will be identified in the production plan.

Testing and Evaluation

This refers to the candidate's quality of written communication and the testing and evaluation of one of their final food items. Candidates that used ICT facilities to support them in the presentation of their work, tended to use the English language with more accuracy. Tests and checks relate to the testing of one of the final products against the measurable points of specification. Where the specification was detailed and measurable, it was possible to effectively judge the success of the product using a range of appropriate tests. A range of tests (more than two) could include: costing, portion size, nutritional analysis, sustainability, or a range of sensory tests (ranking, rating, star profile). Candidates should be testing one of their final products on their target market and using the feedback gained from this information to produce their evaluations. These tests and checks can include photos, taste testing, costing and nutritional analysis.

Many candidates tested all their products. A suggestion can be made for the candidate to discuss each area of the specification and how the product has met the points – some candidates produced this as in the review section (table format). Tests then need to be undertaken to demonstrate how the measurable points have been met. For example, costing, weight check, sensory test. Thorough objective evaluations of these tests are required for high marks.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

<http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx>

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