



Moderator's Report

Principal Moderator Feedback

Summer 2017

Pearson Edexcel GCSE
In Design & Technology (5FT01)
Paper 01: Food Technology
Creative design and Make Activities

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As the series draws to an end it was a pleasure to see more centres show a greater understanding of the expectations of the requirements for the 5FT01 course. The level of work seen this year was very good with a high level of practical skill shown that demonstrated a good understanding of practical application. As with previous series, there was an even split between centres carrying out combined or separate tasks. As explained within previous reports, the ability to carry out a separate design and make task appeared beneficial for some centres where students may have struggled with the design section however, when producing the make section were allowed to express themselves in a practical situation thus producing some excellent outcomes.

If you would like further information or clarification about the two different types of portfolio options, as well as the titles, please visit:

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

To complete the 5FT01 portfolio 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 address relevant sustainability issues related to their choice of design brief. Some good examples seen this year 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 to 25 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.

Similarly to the last few years the main topics chosen for completion this series were celebration and multicultural. Most of the centres seen saw all candidates use the same topic however, when separate design and make tasks were undertaken centres did show variation of topic that can prevent some projects from stagnating and introduce a new lease of life into candidates. Although many centres used a common topic, many allowed

candidates to personalise this depending on their own likes and dislikes or individual needs e.g. in one centre, although the topic of celebrations was selected, candidates took this down various avenues for instance producing products for a birthday party, valentine's day, wedding day etc. The personalisation of a topic allows each candidate to feel a sense of ownership towards the task and will in many cases allow candidates to express themselves particularly regarding the making of food products and quality of outcome. Allowing candidates the ability to personalise their topic to produce individual outcomes often provided candidates with the opportunity to demonstrate a wide range of practical skills often resulting in high quality products. Within the making section of the portfolio a large number of centres used the celebration theme. This was carried out well and allowed candidates to access a high number of marks when demonstrating a wide range of skills and processes. This choice often allowed candidates stretch and challenge opportunities and differentiation was evident by the choice of products produced.

The selection of topic is very important and cannot be underestimated as this will hold the key to product choices, stretch and challenge as well as going some way towards dictating the overall level of complexity and demand that can be evidenced.

If centres have a wide range of abilities within a cohort the utilisation of the separate design and make tasks is often very useful as a standard topic can be chosen for a class but then adapted according to ability or interest. When arriving at the make task candidates can all be given the same topic and specification e.g. produce a range of multicultural main course meals to be sold in a local restaurant, however, differentiation can be applied to the range of products produced by each candidate as well as process and techniques used. This can allow weaker candidates to be guided through a make practical or use standard components within production whilst stretching the more able allowing them to demonstrate a wide range of high level skills e.g. pastry making, piping and finishing skills etc. This was seen more frequently this year however, it often allowed candidates to maximise the number of marks gained in the making task whilst indicating the level of skills, application and success on the witness statement including clear photographic evidence.

Please see below for some issues that remain regarding the moderation process:

- Centres must remember that candidate CMRBs must contain a signature for declaration from the assessor and the candidate. Where this is missing, a delay in the moderation process occurs.
- Please ensure that all marks have been added up correctly on the CMRB with the correct total shown that matches the mark given on the OPTEMS form.
- Where an 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 marks.
- The CMRBs are removed from candidate's portfolios during the moderation process. It is time consuming to remove the CMRB from a

folder if it is attached, it would be advisable to include a stapled CMRB within the candidate work but please do not attach it to the portfolio.

To summarise, there have been some excellent application of the assessment criteria this series to produce a wide range of skilful, challenging products that are suitable for KS4. There were fewer products seen that were simplistic in nature and demand e.g. biscuits, pizzas and pinwheels. The inclusion of clear photographic evidence along with a detailed witness statement greatly aided the moderation process whilst the inclusion of a quality of outcome page (although not necessary) further demonstrated the level of skills and processes carried out during the making section.

For further guidance on the expectations and outcomes required for this series we would like to remind you that exemplar materials are available on the Edexcel website at the following address:

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

I would like to take this opportunity to thank centres for their hard work over the legacy of the specification. It has been an absolute pleasure to moderate the 5FT01 course and see improvements each year from centres ranging from the implementation of the design portfolio or practical application. As a moderation team the level of photographic evidence and detail in the CMRB witness statement as always has been extremely helpful. It is with a heavy heart that we say goodbye to the 5FT01 Food Technology course but I wish centres all the very best for the future.

Design Activity

Analysing the Brief

The analysis of the task and brief were carried out well by the majority of candidates seen. Where candidates failed to gain high marks, it was difficult to see a justification and clarification of the task wants and needs including showing a clear direction that the portfolio would be taking. Centres must remember that in order to gain the full marks in this section, candidates must demonstrate a clear understanding of the task including what is required, who the target market will be, any foreseen issues and how the task will be carried out including potential research. This should build the picture for the reader and be the initial starting point of the portfolio.

Research

The range of research seen this series was good with many centres rightfully condensing the evidence to ensure that all information shown was relevant and useful in order to move the task forward. Where research was selective and well analysed this often led to candidates producing a range of technical and measurable specification points in the following section. The most common forms of research seen this series were supermarket surveys, disassembly and questionnaires. Where questionnaires are used candidates must ensure that questions are specific to the tasks needs ensuring valuable information is gained that will help with the task e.g. there is little need to ask the age of the participant if the task is for a teenagers birthday celebration as only the required age bracket should be asked.

Where some candidates did not fully evaluate their research findings, they could not access the highest marks available. It is very important to note that when research is carried out, a full analysis of the findings is essential to demonstrate and justify the research inclusion. The research analysis should be the starting point to link candidate thoughts from the initial task through to the creation of technical and measurable specification points. A recommendation for some centres may be to include a research summary at the bottom of each piece of research to clarify the findings or summarise all of the research on a separate page. Either way, this information is crucial not only for the awarding of high marks in this criterion, but also to aid the writing of specification points.

Specification

This section was carried out well this year with most centres using the Edexcel headings of form, function, user requirements, performance requirements etc. It is really important at this point of the design process that candidates demonstrate a good understanding of the research findings and link them to the specification points in a clear and measurable way. There was some evidence of technical and measurable points being included but it was felt that this may be an area of improvement for some centres. It is important to note that top box marks cannot be awarded unless points are technical and measurable with links shown back to research.

When points are created, candidates must ensure that information from research is used effectively. An example of this might be when nutritional statements were included and often quite generic e.g. it should be low in fat. It would be much more beneficial for a statement to explain how much fat the product should include and give a clear reason that is linked to the research.

Initial Ideas

It was pleasing to see more candidates trialling their ideas this series with some excellent outcomes. Although candidates do not have to physically produce each of their ideas, the level of evaluative detail shown on each idea page is usually higher where ideas were produced. Candidates are required to produce 4-6 different ideas that are each suited to the task with a full description and rationale for selection included as well as photographic evidence. Contained within each idea page there should be links and reference to research including reasons for selecting as well as descriptions of strengths and weaknesses that could lead to developments that will enhance the idea, user feedback with comparisons to the specification and a full ingredients list with clear and precise functions of ingredients.

One area that could be improved by some centres relates to the function of ingredients within products. This was mentioned last series as something that could be improved and is still something that needs more clarity than simplistic comments about "taste" and "colour". Comments made must be specific and should build from the knowledge taught through the theoretical strand of the course (5FT02) relating to specific functionality of ingredients e.g. coagulation, fermentation and emulsification and the reasons for this occurring within the specified product.

It should be mentioned that nutritional analysis of each idea is not a requirement unless this has been clearly identified within the original task and specification. There is no need to carry out a nutritional analysis on every product as some tasks will not require this due to them being a luxury product more suited to a "one-off" product eaten for a special occasion.

Review

The majority of centres seen this year used a tabular format that allowed candidates more direction within their statements. The review section is the link between the ideas and development stage and therefore should be used by candidates to clearly explain which specification points have been met by an idea whilst also including information as to why this might be the case or, if a point has not been met, how this could be rectified through development.

Many more candidates this year explained if a point had/n't been met but were not able to gain the full marks unless they clearly justify their comments. It is imperative that candidates are explicit in their thought

process as to why a point has or has not been met giving clear reasoning that should come from the idea pages and user feedback.

Development

As with previous years, this remains one of the most challenging parts of the portfolio for candidates to grasp and understand although there was noted improvement seen this year compared to previous series. The majority of centres seen this year correctly took forward three products (a range) to be changed/improved in relation to user group and research results. Where developments are carried out, this should be developed in relation to their initial brief and should be accompanied by clear evidence of their outcomes. Developments can be physical or paper based activities e.g. costing, nutritional analysis or sustainability developments. 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 although developing each product further will often allow candidates to access the higher marks more easily.

Where candidates could not access the highest marks, this was due to the lack of direction that the development was headed. It is a good idea for candidates to start to consider potential developments at the end of the review stage by looking at which points of the specification have not been met, reasons as to why this has occurred and consideration to how development would help this. Each development page must contain a rationale stating why it is important and linking to the specification is a useful tool here. Developments must then be carried out that move the product forward in such a direction that they will evolve to answer the original design question. The development stage should be used to show the progression of an original idea that may not have been completely suitable for the task at the ideas stage, develop and evolve into something that suits not only the task but the final users' needs. This stage of the design process should detail the journey that the idea(s) goes on in order to fulfil the tasks requirements.

There was still some evidence of simplistic developments being carried out that only provided simple and cosmetic changes to the original idea and these will not be worthy of high marks. Centres are reminded that an idea can evolve in such a way that it develops into a new final solution as long as there is clear evidence as to why this has happened with links to the original idea. An example of this could be a chocolate brownie developing into a chocolate brownie based cheesecake. This change may have been required due to the user feedback and review comments showing that a varied texture and appearance was required for the final solution. For further development ideas, please refer to the exemplar materials on the Edexcel website.

There were some really good examples of clear developments seen this year where candidates had included the photograph of the original idea on the development page along with the developed final proposal. This allowed the reader to clearly see what changes had occurred and where.

Final Design

The final design stage requires candidates to include a page(s) showing each of the final developed products that should now be suitable for the task. This section was carried out with variable success by some centres due to the lack of detail about some of the main technical aspects of each product for some. In order to gain high marks in this criterion, candidates must demonstrate, for each of the three products, a clear list of materials or components with specific functions and techniques that may have been used as well as a brief manufacturing specification.

There was much better evidence this series of photographic evidence and sketching including percentage of final product but the functionality of ingredients was sometimes simplistic. As with the design ideas, it is important for candidates to demonstrate a clear level of understanding about the materials and components to explain what they do in a technical way. Instead of simply stating that eggs provide flavour and colour, coagulation could be mentioned.

On the whole, improvements were shown in this criterion but further improvements could allow candidates to access the highest marks available.

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. multicultural 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

If a centre is undertaking a separate make activity, please remember that a new specification is required. This can be teacher led with some excellent examples seen this year, most notably centres focussing on luxury desserts.

Production Plan

This criterion was assessed leniently by many centres due mainly to the lack of specific quality control points provided. Centres are reminded that candidates are only required to produce one production plan that could be in the format of a HACCP chart or flowchart but must contain enough detail to allow manufacture if high marks are awarded. The most common type of plan seen this year was the HACCP chart with many candidates making reference to how their product would be made though often missing out clear and relevant control checks at each stage. There was little reference

by many to dimensions, types of contamination (chemical/physical/biological), temperature ranges etc. which would have been useful. There were for examples several candidates that simply stated 'check the pastry is rolled' when the description of the visual check would have demonstrated a higher understanding e.g. 'check that the pastry is 2mm thick'. When commenting on food safety again many candidates were vague in describing 'check temperature' rather than stating the required temperature that the cooked food needs to be or refrigeration/freezing temperatures that may have been used.

Candidates must ensure that they create one plan that clearly demonstrates the production of the chosen product from start to finish in enough detail to allow a 3rd party to produce it safely and accurately. Further guidance can be found on the Edexcel website.

Quality of Manufacture and Quality of Outcome

This year, as with the last series, there was some excellent evidence provided for the quality of manufacture and outcome demonstrated by candidates and this must be a representation of the skills being shown in lessons which should be congratulated. This was one of the strongest sections carried out by many candidates.

Quality of Manufacture is the processes used to make the product and the Quality of Outcome is the final appearance in comparison to the specification e.g. the use of finishing techniques, portion control and accuracy. 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 and components for GCSE which could include roux sauces/range of sauce making skills, homemade pasta/noodles, range of pastry making skills, meringue and jelly using gelatine/arrow root. This should be achieved through the production of a range of products demonstrating a range of skills in order to be awarded marks in the top box. The level of demand seen from many candidates this year was excellent although there were still some examples of KS3 products being made e.g. pizzas, scones, cupcakes, biscuits etc. that do not demonstrate enough complexity or demand that is required for high marks to be awarded in this section. Where some products had increased their marks here was the introduction of accompaniments with a dish for example if a candidate makes a curry by marinating the meat, making their own paste, sauce and naan bread and producing fresh pasta for a Bolognese with homemade garlic bread would increase the skill and demand to a level appropriate for KS4. It is the addition of such accompaniments that will demonstrate a higher level of demand and complexity expected at KS4 and will move a candidate from the middle to top box. It should be made clear that we are looking for the level of skill to be high whilst demonstrating the production of fully functional products that contain a variety of components.

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 and was used effectively by centres this year allowing for moderators to clearly see how, where and why marks were awarded. A label should accompany the photos 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.

More and more centres are including a quality of manufacture page whereby candidates could demonstrate the range of products produced whilst including details of processes, skills and techniques that were used. A series of thumbnail 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. Centres should remember that the moderator can only moderate what they can clearly see in front of them and the more help given the easier this process will become. The quality of manufacture sheet is an excellent way of demonstrating the skills and processes demonstrated that might not be seen on the three images included with the CMRB.

As has been seen with previous series, the use of the witness statement is getting better each year with more detailed information about the products produced, components made and skills demonstrated documented. This document is the main link between a centre and the moderator in the awarding of quality of manufacture marks. Where this was completed showing all of the skills and processes used by each candidate it was clear as to how and why marks were awarded. This process was more difficult when simply looking at an image with little mention from the centre about the range of skills and processes but more importantly level of guidance given as well as precision and accuracy. The awarding of marks in both the quality of manufacture and quality of outcome were again greatly improved this year.

There were very few centres that did not produce a range of products for the making section however, where only one product was produced, the level of marks that could be achieved was severely limited as the level of complexity and demand was not demonstrated. Please make sure that only photographs of the completed product range for the making section (or final solutions if you are carrying out a combined task) are required on the CMRB.

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 and photography is a useful way of demonstrating candidate success.

Testing and Evaluation

Many centres are still undertaking the testing and evaluation section on all of the final products. Centres are reminded that candidates are expected to demonstrate a range of tests with some clear analysis and this could be through evaluating one product alone via a range of tests or evaluating three products by carrying out one test on each. At this point candidates should use the original specification points (or the points provided at the start of the making section for a split portfolio) to test the most measurable aspects of the product(s). The types of tests that could be suitable include; weight, costing, user questionnaire, sensory test, sustainability and nutritional analysis. Centres are reminded that nutritional analysis is only relevant where there has been mention of nutritional properties in the specification. There was some evidence of candidates carrying out nutritional analysis where it was not necessary thus making the test redundant. The clear difference between the awarding of top box marks and the middle to bottom level was the level of detail included that often was enabled or limited by the type of specific and measurable points included in the specification.

