

Moderators' Report/ Principal Moderator Feedback

Summer 2015

Pearson Edexcel GCSE
Design and Technology
Food Technology Unit 1 (5FT01/01)
Creative Design & Make

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Publications Code UG041224

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Introduction

As the series progresses it is clear that centres are showing a greater understanding of the expectations and requirement of the 5FT01 course. The work seen this year was good and continues to show a wide range of excellent practical outcomes that is pleasing to see. There remains a fairly even split between centres wishing to carry out a combined or separate task(s) and the success of this varied from centre to centre. As explained within last years report, 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.

I must take a moment to thank centres for their hard work throughout the series but also in the completion of a detailed witness statement. As a moderation team, work may only be judged by what is seen including photographic evidence and a detailed witness statement to provide clarification and explanations as to skills and processes demonstrated. The level of detail included in the witness statements was improved this year by many centres and, where seen, was very helpful in determining the appropriate level of marks awarded in the quality of manufacture section. The quality of photography improves each year and is a further benefit to demonstrate the quality of manufacture and outcomes demonstrated.

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 students 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 students 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 student 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 of 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 student 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 student 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 student 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. Students 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 two years the main topics chosen for completion this series were celebration and multicultural. Most of the centres seen saw all students 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 students. Although many centres used a common topic, many allowed students 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, students took this down various avenues for instance producing products for a birthday party, valentines day, wedding day etc. The personalisation of a topic allows each student to feel a sense of ownership towards the task and will in many cases allow students to express themselves particularly regarding the making of food products and quality of outcome. Allowing students the ability to personalise their topic to produce individual outcomes often provided students 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 students to access a high number of marks when demonstrating a wide range of skills and processes. This choice often allowed students 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 students 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 student as well as process and techniques used. This can allow weaker students 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 students 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 student CMRBs must contain a signature for declaration from the assessor and the student. 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 student'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 loosely include the CMRB with the students work to aid the moderation process.

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>

Analysing the Brief

This criterion was completed well by most centres. Students were able to access higher marks here where they could demonstrate a detailed understanding of the task and its requirements including which direction they may be taking their research etc. with clear reasons. The most common tasks used this year were the celebration and multicultural tasks. In order to gain high marks students must ensure that they fully clarify the design needs.

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 students 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 students must ensure that questions are specific to the tasks needs ensuring valuable information is gained that will help with the task, for example, 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. The inclusion of research that analyses existing products currently on the market is essential to gain high marks in this section and some students could still improve on the level of evaluation and analysis presented to highlight any important technical or measurable points that could aid the writing of specification criteria. Better examples were seen where students provide a summary of research either at the bottom of a given page or collectively before the specification as this allowed them to explain the main measurable aspects of the research findings and how these may be used further to move the task forward.

Specification

This was carried out well by centres this series with many opting to use a tabulated format with the Edexcel guidance headings. It was pleasing to see that many students had included more specific points under the headings of form, function, user requirements etc. that could be measured and also included some technical information e.g. portion sizes and cost. Once a specification point had been provided

students then often justified why it would be important with reference to research undertaken however, where justification was not evident, students could not access high marks for this section. It is essential that students include points that explain what the product(s) will need to do, why the point is important with links to research and start to think about how they will test to make sure that the point has been met. The improvements seen in this section were good although some students could still benefit from linking back to both the analysis of the task and research to provide measurable criteria and justification.

Initial Ideas

It was pleasing to see more students trialling their ideas this series with some excellent outcomes. Although students 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. Students 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. Some students included some limited functions for ingredients this year with simplistic comments relating to taste and flavour alone. 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

This was pleasing to assess this series with the majority of centres opting to use a tabulated format with some clear comparisons made between the idea and each specification point. Where students achieved the highest marks in this section, they made a clear comparison with each idea they clearly highlighted if the idea met or did not meet each point of the specification with clear reasons as to why this had occurred. Where a point had been met examples were given as to why, and where a point had not been met example developments were provided to ensure that it could be met in the future.

The review stage is an important part of the design process as it is here that a student will decide which three of the four ideas will be taken forward to the development stage of the folder. Once each idea has been reviewed, students should then provide a rationale as to which three will be selected.

Development

This remains one of the most challenging parts of the portfolio for students to grasp and understand although there was noted improvement seen this year compared to previous series. Centres must remember that 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. 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 students to access the higher marks more easily.

Where students 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 students 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 students 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

All three final designs must be presented after the development stage and there were some excellent examples seen this year. For each final solution a range of information must be present to enable high marks to be awarded including a clear list of materials or components with specific functions and techniques that may have been used as well as a brief manufacturing specification. Within the final solution page there must be a photograph or sketch of the solution with some dimensions and measurements detailed. Some of the best examples of work carried out in this section included clear details of materials/components and a brief manufacturing specification showing enough detail for a 3rd party manufacturer to understand all of the design intentions.

This section is either the final section of the 'Design' project or the continuation of the combined option. This means that the students 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 students 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 students 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 students 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 students 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 students 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.

Students 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 there was some excellent evidence provided for the quality of manufacture and outcome demonstrated by students 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 students.

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 students

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 student makes a curry by marinating the meat, making their own paste, sauce and naan bread and producing fresh pasta for a Bolognese with home made 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 student 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 student 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 students 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 student 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 student success.

Testing and Evaluation

Many centres are still undertaking the testing and evaluation section on all of the final products. Centres are reminded that students 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 pint students 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 students 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.

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>

