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Moderators' Report/ Principal Moderator Feedback

Summer 2014

Pearson Edexcel GCSE in Design and Technology: Food Technology (2FT01)

Creative Design and Make Activities (5FT01)

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Introduction

As we near the end of the fourth year of the specification centres are showing a greater understanding of the expectations and requirements of the 5FT01 specification. The level of work seen this year was once again very pleasing showing a wide range of outcomes. There remains a fairly even split between centres choosing to undertake the combined or separate design and make tasks and this had varying effects from centre to centre. 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 they were allowed to express themselves in a practical situation thus producing some excellent outcomes. The level of practical work seen this year has been excellent along with some real improvement in the level of detail included in the student witness statement. The level of detail included in the witness statement really aids the moderation process as it allows the moderator to clearly see the level of skill and practical application shown by each student.

For clarification of the two different portfolio options and the titles to select, 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 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 last year the main topics chosen for completion this series were celebration and multicultural. Most of the centres seen saw all students to 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 eg 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. A good choice was desserts within the celebration theme; this allowed the students 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 students.

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 someway 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 eg 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 eg pastry making, piping and finishing skills etc. Where this was seen this year it 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.

As stated last series, where some centres design briefs were too narrow this stifled creativity and limited the range of practical skills at the design and make stages. Some centres were still limiting the scope of the design and make activities and where this was shown, the work was not demanding enough for KS4 level eg simple all-in-one cakes decorated with readymade icing and pizzas made with readymade bases are examples of this. To gain a thorough understanding of the expectations from the portfolio please visit the Edexcel website to view the wide range of exemplar materials or take advantage of either the face-to-face and online training events.

There remain some issues surrounding the ease of moderating folders although these are far fewer than were seen last year:

- 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.
- Page referencing on the CMRB is very useful to the moderator to show evidence of how and where students have met each of the specification criterion.

To summarise there has been a real improvement in the application of the marking criteria in this series in many areas of the specification. The level of practical skills and processes seen were largely in keeping with the expectations of a KS4 course and some fantastic finishing techniques were demonstrated. The inclusion of clear photographic evidence along with a detailed witness statement aided the moderation process greatly, in particular the awarding of quality of manufacture and outcome marks.

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

Design Activity

Analysing the Brief

This section was generally completed well and accurately assessed by centres. Improvements could still be made here by increasing the level of detail shown relating to the chosen task. When analysing the task students must begin to explore the requirements of the task, what are they being asked to do, what types of research will they need to undertake in order to meet the design needs. Where students simply include a mind map of thoughts with no exploration of how the task could be undertaken, marks were limited.

Research

The level of research and methods used this series were often very good resulting in a good understanding of the task that was required to write a specification that was realistic, technical and measurable. The most common methods of research used included product analysis of existing foods, shop surveys and questionnaires. Where students achieved high marks in this section they clearly evaluated their findings in detail resulting in clear findings that were of real relevance to the task moving forward eg identifying average portion size, cost, typical ingredients etc. By carrying out clear, concise research students were able to identify specific requirements of the task that could then be used when writing the specification points in the next section. Centres should be reminded that each of the sections contained within the controlled assessment, although marked individually, must link together in order to gain the highest marks.

Specification

Student success in this section was good this year owing largely to many centres using the Edexcel recommended headings of form, function, user requirements, performance requirements, materials and components, scale and cost and sustainability. Where students were able to access the highest marks they produced detailed specification points that clearly linked to research findings thus being justified plus further containing technical and measurable criteria. There was still evidence of some centres awarding high marks for this assessment criteria where there was little evidence of technical and measurable criteria or any justification from research. We would like to recommend to centres that points must be realistic to the task and should be developed from research findings. For example, if nutritional needs are included, students can state what the percentage of fat should be or the total number of calories required. They then have a measurable point to test.

Initial Ideas

It is pleasing to see that many centres are encouraging students to trial each of their ideas and there was some photographic evidence seen this year of some excellent products. Students are required to produce between 4 and 6 different ideas that are suited to the task with a clear rationale as to how and why each is suited. There should be a link to research findings before including information about key ingredients and their functions, user group testing and links to specification points, clear areas of strength and weakness that could be addressed through development and skills and processes used. The majority of centres this year contained many of these aspects within student work, however there was a lack of specific detail in places leading to unclear design needs. Where this was seen it was often due to the depth of detailed understanding be it links from the research and reasoning behind the selection of each idea or the detailed understanding of materials, processes and techniques. Often, where materials, processes and techniques were included they were very basic referring simply to ‘taste’ or ‘texture’. Students should be encouraged to use their knowledge and understanding of food at this point to highlight clear reasons for ingredients eg eggs – coagulate the milk to thicken the custard.

Review

Most centres were seen to be using a tabular format to carry out the review of their ideas. This was seen to be largely successful at demonstrating which ideas were to be taken forward to development, which points of the specification had been met and highlighting any further changes/developments that would benefit the product in better meeting the design task. In order for some students to gain further marks in this section they must ensure that each of the points is written objectively relating to the success of a particular idea against each point on the specification. Where marks may have been lost is if students repeated themselves for many of the points which may have been cut and pasted or included comments that were superficial and lacked justification eg ‘it’s below the cost required’. Centres must use the test results from the detailed analysis in the ideas section for high marks in review.

Communication

The range of communication techniques seen improves year on year but it must be reminded that the marks for communication may only be awarded for the design ideas, review, development and final designs. The level of marks awarded for communication should represent the ease at which a reader can interpret the students thought process with the portfolio from the formation of the initial ideas through to developing them to create a range of suitable final solutions. This should not simply be awarded for the use of ICT.

Development

There was a noted improvement in this section although the main concern remains in students demonstrating a 'significant change' within their products. 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; paper based activities eg costing, nutritional analysis or sustainability developments. The minimum requirement is for one development for each of the three products, eg 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 failed to achieve a high level of marks, developments were often superficial and lacking evidence. Some products seen showed minor and cosmetic changes eg adding ½ tsp more of oregano or changing the lamb mince to pork. Simplistic ingredients changes are not moving the product forward. Centres need to look at changing the shape, pastry type, components, layering as well as flavouring. It is perfectly acceptable to make more than one change at a time eg a student can change the pastry and also add flavourings as well as changing the shape. A product can also develop into a completely new product as long as the student can show how this has happened whilst also satisfying the brief. A recommendation is for students to plan their developments and clearly state which specification point they are trying to improve and how before the task begins. Testing is important at this stage to check that the developments are suitable for the task; this may include user group testing, sensory attributes etc.

Moderation of this section was difficult when there was no link to what the student was doing or clear reasons why it was important in moving the product forward. The development section should be thought of as part of the products story. The development of a product should be done for real purpose relating to the initial task and specification in order to move it forward and end up with a final solution that is not only different to the original but also improved as to better meet the initial task.

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 eg 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. Some of the best examples of work carried out in this section included a brief manufacturing specification including enough detail for a third 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, eg celebration cakes, then being given a new specification by the teacher for the ‘Make’ project, eg 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 section was assessed leniently by many centres mainly due to limited quality control knowledge applied throughout a plan. Many students made reference to specific types of quality control checks including visual checks, chemical, biological and physical but failed to explain how/what would be carried out. There was a lot of evidence of students stating that a ‘visual check’ would be carried out without any mention of exactly what may be achieved. When looking at food safety, many centres mention ‘high risk foods’ rather than stating what they are in the recipe and the correct temperature control required. Again many students stated cook chicken and there was no discussion of core temperatures or the risk of salmonella. For students to perform better in this section they are required to include more detail in their plans to allow for clear and logical quality checks to occur throughout the production process.

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 HACCP chart.

Quality of Manufacture and Quality of Outcome

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 eg 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, these include roux sauces/range of sauce making skills, homemade pasta/noodles, range of pastry making skills, meringue and jelly using gelatine/arrow root. Some students were still producing KS3 products

eg pizzas, crumbles, spaghetti Bolognese, scones, cup cakes, biscuits, fruit kebabs. If standard components are used, again it is difficult for the students to demonstrate a high level of skill, understanding and process. Students can enhance some products with the addition of accompaniments and components eg if a student makes a Bolognese and makes their own pasta then this is evidence of a KS4 product; if a student makes a curry then marinating the meat, making their own paste, sauce and naan bread would move it into the KS4 criterion. 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 which 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. The photos must be accompanied by a label 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 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. 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 may not be seen on the three images included with the CMRB.

The use of the witness statement should be congratulated as more and more centres are using this to good effect. 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.

Many more centres now understand that a range (three) of products must be produced which are all suitable for KS4. Please make sure that only photographs of the completed product range 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

This refers to the student's quality of written communication and the testing and evaluation of one of their final food items. Students that used ICT facilities to support then 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). Students 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.

Where students were assessed leniently by centres they had simply explained what the test was with limited inclusion of any evidence. In order to gain high marks in this section students must include a relevant test (including a test to look at nutritional properties is not suitable if there is not a specification point relating to nutrition), meaningful feedback that is then objectively assessed. The findings should explain how closely each specification point has/n't been met and any reasons why.

Centres should be reminded that they do not need to complete a range of tests for each product that is made in the making section but simply include a range of tests. For example, if a student has produced three desserts then it is perfectly acceptable to carry out a range of tests on one of the desserts or carry out one test on each of the three products as long at the tests are different. 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

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