NEA1: Food Investigation

The task involves investigating the working characteristics and the functional and chemical properties of an ingredient through practical investigations. The assessment is a report of 1500-2000 words.

Section A: Research

Evidence of concise and focused research was seen. It was encouraging that students could explain and justify their research, resulting in relevant and purposeful content. There was good evidence of the use and application of prior knowledge gained through the learning activities taught during the specification.

When students used a range of different sources to explain the working characteristics, functional and chemical properties of ingredients this resulted in high quality work. Diagrams were used well to explain the working characteristics, function and chemical properties of the ingredients. This was a good strategy to demonstrate some of the scientific properties of ingredients.

Most students had a good grasp of how to write a hypothesis. It was encouraging to see students carrying out additional research, throughout the investigation, to explain some of the findings from their practical investigations. When students had analysed the research well, the hypotheses were relevant and linked well to the planned investigations.

Recommendations

- When one task was presented, evidence was seen of a more teacher led approach. It is appreciated that students may need support and guidance; however, a formulaic approach to NEA is not permitted and assistance given to students must be detailed using the candidate record form.
- To be awarded the top mark band, detailed research and understanding is required related to how ingredients work and the reasons why. The analysis of the research findings must be explicit. The research findings should be referred to throughout food investigation tasks to be awarded the top mark band.
- Links between the research, hypothesis and planned investigations need to be more explicit in many students’ work.
- Research must focus on the working characteristics, function and chemical properties of the ingredients mentioned within the task. It is important that research is not copied directly from source. Students need to reference their sources throughout the report.
- Some students went off on a tangent and therefore some research lacked focus and was irrelevant, this was particularly evident for the gluten task. Students focused on ingredients for bread making rather than gluten formation.
- Research was not always interpreted correctly showing a lack of understanding at the investigation stage.
- The planned investigations did not always relate to the hypothesis or the research findings and this was an indication that some students had not understood the research they gathered.
Section B: Investigation

Evidence of sound investigation work was seen across the entire mark range with various amounts of detail and breadth. Even the simplest investigative work was carried out in a logical manner with very good use of photographs to explain the findings. When teaching the specification, it is good practice to carry out some examples of investigation work e.g. testing the viscosity of sauces etc. This will develop students’ investigative skills and guide them in how to write up an investigation for the NEA tasks.

It was encouraging to see students, of all abilities, recognising the working properties of ingredients. Students adopted a scientific approach to the food investigations. Very good understanding of the controls required to ensure fair testing was seen. Sensory analysis was the most popular method used to record results and good evidence was seen of the use of well identified sensory descriptors. Results were recorded well using a variety of methods e.g. graphs, charts, annotated photographs etc. It is acceptable to produce some small group investigation work, but it is essential that candidates record their input and evaluate the results independently. Teachers should record students’ input on the Candidate Record Form.

Recommendations

- The investigations must link to the research analysis and hypothesis, investigations often showed no relation to the research and the hypothesis.
- Students that produced one or two investigations were not always able to have sufficient rigour to meet the requirements of the higher mark bands.
- Centres need to teach students different methods of recording practical investigations which can then be applied to the NEA.
- A more varied range of testing methods needs to be evident to achieve the top mark bands. There was too much sensory testing and little else in terms of testing methods.
- The emulsion task was done well, however, several students failed to understand what an emulsion was, and the investigations were more focused on gelatinisation.
- The investigation work must be fully explained, and the research used to explain the working characteristics, function and chemical properties of the ingredients.
- Students should not work in small groups throughout the entire NEA project.
- Whole class investigation work is not permitted i.e. all the class doing the same practical investigations throughout the task.

Section C: Analysis and Evaluation

When analysis and evaluation was carried out throughout the food investigation, students could reach the top mark bands. Very good examples of analysis and evaluation were seen with clear understanding and explanation of what happened and importantly why it happened. When students related the findings back to their research, they could explain the working, characteristics, functional and properties of the ingredients.

Photographic evidence helped with the evaluation of practical outcomes and there was some excellent annotation evidenced by lower ability students. Excellent use of key subject vocabulary was evidenced throughout many projects.
Recommendations

- It is important that centres devote sufficient time, within the 10 hours, to allow for the findings of the investigations to be fully explained.
- To achieve the top mark bands, students must include high level understanding of the working characteristics, functional and chemical properties of ingredients. Section C was marked too leniently in many centres.
- To achieve the top mark bands there must be subject specific vocabulary used throughout the report.
- All centres must follow the requirements, regarding the word count of 1500-2000 words. This was not always the case. Students must not be allowed to exceed the capped word limit.
- Centre must ensure that students do not exceed the recommended 10-hour time limit for this task.
- When reviewing their work, students should be encouraged to remove any irrelevant text and repetition and edit their work to fit within the word count.
- A bibliography or alternative referencing of sources must be included in the report.

NEA2: Food Preparation

In this task, students prepare, cook and present three dishes to meet the needs of a specific context.

Section A: Researching the task

Excellent, focused and concise research related to the: life stage, dietary group and culinary tradition was seen. When centres spent the required amount of time on research, this allowed students to focus on the making element. Good practice was seen when clear aims were set for each piece of research, allowing for focussed research.

Research in some cases was irrelevant and not used to help in the selection of dishes to make. The primary research was not always relevant to the task e.g. questionnaires and shop surveys/product appraisals etc.

Students used mainly secondary research sources to gather purposeful research to help select appropriate dishes. Annotated mood boards were used well to identify different technical skills within dishes. Students were creative in the methods used to record their selection of dishes. Some excellent examples were seen.

Recommendations

- Research analysis varied in quality - often students failed to clearly state what they have found out and how they would use it. It would be helpful to include some analysis after the research to show the link between the research and the choice of dishes.
- When selecting the dishes, students need to select and justify a range of technical skills used in the making of the dishes – this was done superficially in many centres. Good practice was seen when students produced a table to show their ideas and the technical skills.
Often ideas were produced that had no or little relation to the research or the task e.g. the children’s task dishes did not include fruit or vegetables.

Students need to consider the dishes they make carefully to enable a good range of technical skills to be demonstrated.

Section B: Demonstrating technical skills

There was some outstanding work produced which demonstrated technical skills showing excellent coverage of the specification. Making which offered both complexity and demand was evidenced well when demonstrating technical skills. Good photographic evidence showed the quality of the dishes made.

When students were aware of different technical skills: basic, medium and complex, exemplified throughout the teaching of the specification, they produced some very good dishes. The quality of practical work and the finish was impressive when demonstrating technical skills. When students reviewed their technical skills, this generally resulted in appropriate and justified final dishes.

Recommendations

- Most centres understand the requirements of the marking criteria, unfortunately several had not interpreted the task sheet or specification correctly (see page 42), and used this section as an opportunity to practise 3 identical dishes that were made in the 3-hour assessment. This unfortunately resulted in a reduction in centre marks.
- Identical dishes should not be made in Section B and Section D. Students need to use and add to the skills they have developed. There are clear examples of how this can be achieved on page 42 of the specification.
- Photographic evidence must be provided for this section. Moderation was difficult when no photographic evidence was available and limited commentary was added to the Candidate Record Form.
- To authenticate students’ technical skills, photographic evidence should be clearly marked with the student’s name and/or number.
- In some cases, basic skills/poorly executed skills were awarded high marks.
- It is important that complex technical skills are executed to a high standard. Just because a student has attempted to fillet fish, this does not automatically result in high marks. Photographic evidence quite often showed poorly executed skills yet awarded high marks.
- Repetitive skills were often awarded high marks by the centre.
- Copies of methods/equipment lists for Sections B and D are not required.
- There was limited review of the technical skills. The making needs to be justified with a review of the technical skills.
- Candidate Record Forms did not always provide qualitative comments related to the technical skills to justify the marks that had been awarded. It is essential that the commentary related to the skills is provided, not just copied statements from the marking criteria.
Section C: Planning for the final menu

Students performed well in this section when they reviewed and fully justified their choice of dishes related to: nutrition, ingredients, cooking methods etc. Students showed good understanding of linking the skills between Sections B & D and were able to explain the introduction of new skills. There was excellent evidence of time plans, that were detailed, realistic and logical. It was clear that students had spent time learning how to dovetail tasks. Good examples were seen when colour coding was introduced. There were good examples of detailed understanding of food safety in the time plans but overall this is an area for development.

Recommendations

- Several centres misinterpreted the specification and the same dishes were made in sections B and D. Students should not produce identical dishes and use Section B as a practice run for the making of the final dishes – see page 44 of the specification.
- When producing the children’s task many students did not include fruit and/or vegetables in their dishes, which was a requirement of the task.
- The justification of the final dishes was poorly done and is an area to be addressed by many centres. There must be clear links between each section of the NEA.
- When justifying the final dishes, students could refer to: research findings, technical skills and processes, cooking methods, sensory properties, presentation of the final dishes, nutritional value/healthy eating, food provenance and the cost of ingredients/portion size.

Criterion D: Making the final dishes

Many centres and students showcased their best work in this section. Students worked hard in the 3-hour practical, demonstrating good technical skill and presented their work with a good level of finish and decoration.

There were some creative and imaginative practical outcomes. The quality of finish of the practical dishes was excellent with a wide range of finishing techniques used to accurately present dishes. Students had clearly gone to great efforts to present their dishes to a high level. Making was often supported by excellent photographic evidence. The detailed commentaries on the Candidate Record Forms were appreciated by moderators. Centres that provided detailed and qualitative comments on the Candidate Record Form supported their students and this greatly assisted the moderation process.

Recommendations

- Teacher annotation must provide qualitative comments related to the making ability of students, not just copied statements from the marking criteria. It can be difficult for moderators to validate the centre marks without qualitative comments related to students’ making skills.
- When students repeated the same three dishes in Section B and Section D this limited the marks that could be awarded for this section.
Section D was over rewarded in several centres. Students were incorrectly assessed as being in the top band when a wide range of complex skills and processes were not evident.

To achieve high making marks, Students need to show a comprehensive range of making skills. Low skill products and reliance on standard components cannot achieve marks in the top mark bands.

Some dishes were poorly executed and/or finished yet awarded high marks by the centre.

To authenticate students’ technical skills, photographic evidence should be clearly marked with the candidate’s name and/or number.

The three final dishes must be presented and photographed together.

Section E: Analyse and evaluate

To achieve high marks, students need to demonstrate an excellent knowledge of nutrition by fully explaining and drawing conclusions from the nutritional data. Sensory testing was carried out well with detailed analysis and evaluation included. Detailed, relevant and creative improvements were suggested for the final dishes. Most folders were concise and focused.

Recommendations

Section E was over rewarded in many centres. To achieve the top band, accurate and excellent knowledge of nutrition is required. This was not evident in many folders, yet high marks were awarded by many centres. In many cases, a nutrition chart was presented with no reasoning/explanation yet awarded marks in the top bands.

Timing was an issue for some centres and this section may not have had the time devoted that was required to ensure the marking criteria was sufficiently covered.

Students need to explain the nutritional data and costing. Marks were given for the production of data rather than analysis and evaluation.

General points

For both tasks there need to be links between the sections, each section should not be seen in isolation.

Centres are reminded that the time allocation is not to exceed 20 hours (including the 3-hour final assessment within a single block period) for NEA 2.

Unfortunately, several centres over rewarded particularly for NEA2. High mark projects should be exemplary. All elements of each marking criterion should be comprehensively addressed. The portfolio must have rigour, be creative, detailed and fully justify all decisions made. The practical element should be inclusive of a range of complex skills finished to a high standard.

NEA Advisers are available to support teachers with the interpretation of the NEA requirements. NEA Advisers can answer questions related to both elements but they are not permitted to comment on students’ work.
**Administration and Assessment**

- Many centres provided detailed justification of the marks for Section B and D of NEA2, unfortunately this was lacking in others.
- There were many errors in the addition of NEA marks and moderators needed to correspond with examination officers to ensure correct marks were submitted.
- When including photographic evidence this must be of the dishes/investigation/technical skills only. Photographs of students must not be included in the reports.
- External social media sources of guidance are not AQA endorsed and centres should seek guidance and support from AQA NEA Advisers.
- Centres are reminded to submit a Centre Declaration Sheet when sending the sample to the moderator.
Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the Results Statistics page of the AQA Website.