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General Certificate of Secondary Education June 2011

Additional Applied Science

AASC3

Using Scientific Skills

Unit 3



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Additional Applied Science AASC3

Activities

Most centres were undertaking investigations which included the required range of tasks and which demonstrated the ethos of this vocational qualification. However, simplicity of tasks and inadequate number of tasks was still an issue for some centres. It needs to be remembered that this unit represents 40% of a GCSE qualification and one or two simple tasks are not enough to satisfy the criteria. Those centres whose candidates were successfully achieving stage 3 marks had ensured that the tasks included at least one which generated quantitative data.

Assessment

The assessment of this unit was broadly in line with the AQA standard for most centres. Where there was generosity of marking, this was, as in previous series, mainly at the higher end of the mark range. The standard of assessor annotation was generally much improved. A small number of centres still need to ensure that, especially in strand C, annotation is specific to the actual mark being given, so 3C1 should also say 'select' or 'record' for example.

There was evidence of internal standardisation in the samples from most centres. These centres have realised that internal standardisation can reduce the chances of moderation raising concerns such as marking differences between assessors and administration errors.

Presentation of work to the moderator

Work was well presented for moderation in most cases. There was less evidence of the staples, plastic wallets, bulky folders and loose pages that hinder the moderation process. Most centres sent in their marks on or before the deadline and their samples were sent promptly upon request. This was much appreciated by the moderation team.

Centre Declaration Sheets and Candidate Record Forms were correctly completed by the majority of centres. There were very few administrative errors this series.

Strand A: The Use of Science in the Workplace

This strand was generally marked in line with the AQA standard. High scoring candidates were able to describe the vocational context and link their research to the task by explaining the vocational significance. There was, however, still some evidence of centres giving marks where the candidate had simply repeated the instructions given and for research that was not linked by the candidate to their own investigation. For example, research on a forensic scientist should be related to the actual techniques used in their investigation or perhaps an actual investigation found from news articles or the internet.

Strand B: Working Safely in Science

This strand was well marked by most centres. Most plans seen were correctly written in the future tense. Some centres should note that, at stage 3, it is expected that plans would include all necessary detail such as quantities used etc. and should probably include an overall plan for the investigation as well as for individual tasks. Most centres had acknowledged the necessity for risk assessments at stages 2 and 3 to be comprehensive as well as with varying degrees of independence. It is important that the moderator can clearly see the level of guidance given and it was pleasing to note that most centres had shown this by appropriate assessor annotation.

Strand C: Research and Communication

This strand was marked reasonably in line with AQA expectations.

A small number of centres need reminding that for 2C1 'suitable format' tables should include headings and units, and that this mark cannot be awarded if a template for the table has been provided for candidates. Annotation was less clear than in strand B. It is necessary for centres to break down each stage and annotate for each individual mark either by code or by words in order to make it clear what credit has been given. For example, the first mark for 3C1 might be 3C1i, 3C1a or 3C1 'independently select'. Any of these will allow the moderator to see which marking point is being awarded, rather than just 3C1.

Strand D: Processing Information and Drawing Conclusions

Where centres had completed an appropriate number of tasks and included a task which generated quantitative data, candidates scored well in this strand. The quantitative data enabled candidates to perform calculations and write comprehensive conclusions. Candidates that had done several tasks but had not pulled their findings together to draw conclusions for the whole investigation could not be awarded stage 3 marks. Credit was given for an overall conclusion if this was found in with 3E3 the use of the investigation.

Strand E: Evaluation and Explanation

Generally evaluations were marked in line with the AQA standard. However, little was seen that was worthy of stage 3 marks even in some of the high scoring candidates work. Some centres appear to be putting little emphasis on evaluating the investigation.

A number of centres are still allowing candidates to write 'repeat' to gain the 2E1 improvement mark. There must be suitable improvement to the method or equipment and there must be a reason given for the improvement. In 3E1 the review of the task must contain a detailed account of the strengths and weaknesses.

More candidates were successfully achieving 2E2 and 3E3 by suggesting the use of their findings in a vocational context. A small number of centres were getting confused between strand A (the vocational context of the investigation) and strand E (the vocational use of the findings) and had incorrectly awarded marks in both strands for the same brief information.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the <u>Results statistics</u> page of the AQA Website.

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