

General Certificate of Secondary Education June 2012

Additional Applied Science AASC1
Science in the Workplace
Unit 1

Report on the Examination

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Additional Applied Science AASC1

Activities

There were some very pleasing vocational contexts seen and most schools/colleges had demonstrated full coverage of the specification, giving students opportunities to access the full range of grading criteria. School visits, visiting speakers and work experience placements were all used successfully to increase the motivation of students.

Many students had clear evidence that they had used a wide range of resources. Schools/colleges have continued to follow the guidance given regarding the inclusion of unedited downloaded material in students' portfolios and this was seen only very rarely.

Assessment

The assessment of this unit was broadly in line with the AQA standard for many schools/colleges. Where generosity of marking was seen, it was, as expected, at the higher end of the marking grid.

Assessor annotation was generally of a high standard for most schools/colleges. Clear annotation always makes the moderation process run smoothly, as it enables the moderator to see not only what credit has been given, but exactly where it has been given on the students' work.

Good evidence of internal standardisation was seen in the students' work from many schools/colleges. A number of schools/colleges still need to ensure that all their assessors are marking students' work to the same standard before submitting work for moderation. Internal standardisation can highlight problems which can be resolved before any marks are submitted. There is a risk of all students having their marks regressed if the moderator does not agree with the marks given by any of the assessors in a school/college. Internal standardisation is the school/college's responsibility and schools/colleges are required to sign the Centre Declaration Sheet as evidence that it has taken place (unless all the work has been marked by one assessor).

Presentation of work to the moderator

Students' portfolios were, in the majority of schools/colleges, punched and tagged together as requested.

There were fewer schools/colleges using plastic wallets but staples, bulky folders, loose pages and plastic wallets were all still seen in a small number of schools/colleges. This poor presentation can seriously disrupt the moderation process.

Most schools/colleges sent in marks and requested samples promptly. A few schools/colleges did not meet the deadlines or the turn-around times for requested work, potentially risking their students not receiving their results on time.

Centre Declaration Sheets and Candidate Record Forms were generally completed correctly by most schools/colleges. A few schools/colleges had candidate numbers or the required signatures missing and still need to be reminded of the importance of accurate administration.

Strand A: The Use of Science in the Workplace

Many students achieved high marks in this unit that were well deserved. It was clear that these schools/colleges had followed the guidance given in the Specification and the Teacher's Guide very carefully.

Most schools/colleges understand that a 'range of organisations' means three and that the grading criteria for stages 1 and 2 have to be achieved for all three organisations. Students were generally encouraged to describe the locations of the organisations for 2A2 by including a map and address to ensure that the organisation could be located using their information. A very small number of schools/colleges were still incorrectly awarding the mark for simple statements such as the name of a town or 'in the middle of town'. At stage 3, generic statements such as 'good transport links' or 'on the outskirts of town' would not achieve 3A2 without considerable justification.

Schools/colleges that had incorrectly awarded 2A3 for nothing more than a list were often those who had given the students templates to fill in. The templates either did not distinguish between the list and description or did not have enough space for students to write a detailed description.

The guidance given on the number of jobs required for 2A4 and 2A5 has always remained the same – it should be appropriate to the size and type of organisation, but should be approximately three. A small number of schools/colleges are still awarding marks for very little information on one job per organisation. Some schools/colleges also need reminding that 2A4 should include how the jobs use science as well as the qualifications.

At stage 3, the in-depth study should be distinguishable from the other two in the range by the amount of detail included. Students should be encouraged to produce one report that is more thoroughly researched than the other two. For 3A4 the information given should be more detailed than that awarded 2A4. It could, for example, include explanations of why certain qualifications and skills are required for the jobs. For 3A5, there should be a significant amount of research completed on the effect (could be both positive and negative) of the organisation on the environment. Information on the organisations policies or attitudes towards waste, recycling, transport pollution, energy and noise pollution could all be considered.

Strand B: Working Safely in Science

Generally there was good coverage of all three aspects of the specification (hazards and risk, fire prevention and first aid) for the school laboratory at stage 1. A few schools/colleges need reminding that hazards should include risk assessments and that all three aspects should specifically discuss the school science laboratory rather than just be general information. An example of this might be where general first aid was briefly described but the specific types of injuries and first aid required in the school laboratory were not discussed.

At stage 2, the same areas of the specification should be covered again for a named workplace. Students could use their work experience organisation and/or one of the organisations covered in strand A as their scientific workplace in strand B. Any organisation that students can use where they are able to write from their own experiences (for example, a parents workplace), and are not tempted to 'cut and paste' information from the internet, should be encouraged.

A comparison of the scientific workplace with the school laboratory is required to achieve stage 3. A brief comparison, often in a template, with very little information on the workplace for stage 2, will not achieve both stage 2 and 3 marks. In this instance, any stage 3 marks achieved can be used to compensate for a lack of marks at stage 2.

Strand C: Research and Communication

Strand C was generally assessed in line with AQA standards. Students who had done very little work were correctly awarded one mark, those using several sources of information were awarded two, and those who had used and identified many sources and whose work was clear and logically presented were awarded three marks.

A few schools/colleges were too lenient in giving three marks where the student had not identified their sources (either throughout the work or in a resource list/bibliography). There were also examples of schools/colleges giving every student three marks where most of the work seen was not clear and logically presented and, even if a resource list was present, there was very little evidence of any research taking place.

A few schools/colleges were harsh, giving no marks or only one mark where it appeared that research had taken place and several sources had been used.

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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