



**General Certificate of Education (A-level)
June 2012**

Science in Society

SCIS2

(Specification 2400)

Unit 2: Reading and writing about science

Report on the Examination

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General Comments

This has been a very successful year for the coursework element of Science in Society. It is clear from the feedback forms I have been reading that very few centres have had their marks adjusted, reflecting a great deal of hard work from both teachers and students. Consequently the whole moderating team has been reading some very interesting accounts and I am pleased to say that I learn a great deal about many new issues each year.

Similarly the administration of the coursework has also been carried out very well in most cases. We have received many Centre Mark Forms and work from the students before the deadline, for which the team is very grateful, as it allows more time for consideration and feedback. Fewer arithmetic and administrative errors have also been commented on, but we would still advise that more than one person in each centre helps to compile the work and that internal moderation is very effective in reducing any problems with a sample of work.

Unfortunately some problems did occur with the work from some centres. It is difficult to see simple themes to comment on; however, there are some principles that should be considered. This coursework is part of an AS qualification, in a science context alongside its social implications. Consequently the level of the science explained by the candidates should reflect this. In several cases we noted that science at a much lower level had been awarded very high marks.

Similarly care should be given to the choice of both the literature to be read for the critical account and the choice of the scientific issue. Many students find great difficulty in changing their minds once started on their coursework so it is essential that they make an informed decision from the start. Clear advice from their teacher and the use of the marking criteria from the outset are very important at this stage. The students should discuss their choice with their teacher and explain how their work matches the criteria and it is quite acceptable that the teacher becomes part of this process. Work may also be drafted for a teacher's consideration. Consequently the teacher's knowledge of the marking criteria, and how they are applied, is essential for the student to carry out the exercise effectively.

To help with this, there are several sources of help and advice. The specification for Science in Society is a very readable document and clearly sets out the elements of the assessment. All teachers of the course should read this and refresh their knowledge each year. The AS textbook for the course amplifies these details and gives examples of what may be used in the coursework and how it may be carried out.

These themes are used in the support literature to be found on the Science in Society website (<http://www.nuffieldfoundation.org/science-society>) where advice may be also found to help teach the entire course.

Each centre is allocated a Coursework Adviser by AQA who can be contacted via the Science in Society subject team in Manchester. The subject team is a very important source of advice and also organises standardising meetings for coursework teachers. Those new to the course should try to attend one of these meetings. There is always a great deal more to be said about how to approach this area of teaching than can be written in a report.

Standard of Marking

The standard of marking was in general very good, with only a few centres having their marks adjusted.

Clear annotation of the work is also a very effective tool in both assessing the scripts and communicating to the moderator how these marks have been awarded. Marking grids, of the type found on the Science in Society website (<http://www.nuffieldfoundation.org/science-society>) have been used by many centres and found to be very useful. However, annotations on the scripts, at the point of matching the criteria, are the most appropriate for the moderation process. It should also be noted that, for the highest marks, teachers should refer to the marking criteria in section 3.2 of the specification and not rely on the “student speak” criteria on the website alone.

Some general comments have been made in the previous section but I would emphasise the use of the various areas of support and the effectiveness of internal moderation before submitting final marks.

Critical Account of Scientific Reading

The range of books and articles available to students to read continues to grow and it has been fascinating to read so many interesting and informative “critical accounts”. However, this may lead to the student finding some difficulty in deciding what to base the coursework on. It is to be hoped that careful discussion with the teacher will help, which again emphasises the importance of the advice given at an early stage.

Most centres have managed this exercise very well, but where problems have arisen they unfortunately follow the themes mentioned in previous reports. The key consideration is the choice of material read and the level of science that can be commented on. For the highest marks this must be at AS level and the science must be explained (not just reported) in the student’s own words.

In addition to the science knowledge, students are expected to make comments about “how science works”. The specification makes it clear how broad the definition of this concept may be, by identifying these elements in each of the subject areas in the units. Therefore, it should not be difficult for the students to access these ideas and discuss them with their teacher.

The “personal response” area of the assessment builds on many of the techniques found in literary criticism in a GCSE English lesson. This should give any student a good place to start from and some idea of how to build an answer. However, the specification demands more than this. The personal response should contain something of the reader’s own thoughts on the book or article and the work should be placed in a wider context. The concepts of “how science works” will also be present in this part of the account and the personal response conclusion should be supported by an appropriate example from the text. It is to be hoped that students know that style and language used in a book or article are not the same thing.

Study of a Topical Scientific Issue

The study of a topical scientific issue gives the students the opportunity to investigate an area of science in detail, compare alternative points of view and come to a well-argued conclusion. Their reports should follow a prescribed format, with careful referencing of material, which will give them experience of some of the skills used in higher education.

Consequently, if the “issue” students are looking at does not really contain alternative points of view, it is not going to allow access to the higher marks. We return to the importance of the understanding of the marking criteria, by both student and teacher, and the initial discussion of the topic to be studied. Many teachers have found that discussions with students centred around a “research question” have been very effective. It is important to remember, however, that a question alone does not ensure that there is a debate.

Most students then find it quite straightforward to search for articles and illustrations from both sides of the debate. However, there is a tendency amongst some to “paste” this information into the report, without the correct citation. Teachers should consider their own coursework submission deadlines so that this sort of problem may be addressed. Exemplar material may be found via the Science in Society website or on the AQA website that will help students see how this should be done. Many teachers ask their students to mark some of this exemplar material before their own students embark on the coursework exercise as a means to fully explore the marking criteria.

The “evaluation” section of the “issue” can be seen as the end of the exercise by many students. Consequently, the work can be rushed and lack the depth needed to compare and contrast the opposing points of view and comment on the scientific explanations. The concepts involved in “how science works” are again explored in this section. Teachers may need to “scaffold” good answers to this section to give their students some idea of what should be included and this is another area that may be discussed before the final submission. A high level of maturity is needed in the student to write a good “evaluation” as this should be at AS level. Teachers may like to review the time they give for students to consider their coursework and when in the school year they ask for this work to be completed.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the [Results Statistics](#) page of the AQA Website.