



General Certificate of Education

Science In Society 1401/2401

SCIS4 Case Study of a Scientific Issue

Report on the Examination

2010 examination - June series

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General Comments

This was the first sitting of the paper and the first use of pre-release material in Science in Society. The standard of scripts seen by the examiners was, in general, very pleasing. Many candidates showed evidence of having prepared well for the exam, and were a credit to both themselves and their teachers/lecturers. It is perhaps difficult to know exactly how to approach the teaching of a new specification, and it would appear that many Science in Society teachers/lecturers had been able to prepare both themselves and their candidates very well, and are to be congratulated on doing so.

Centres are thanked for preparing so thoroughly their candidates to work with the new numbering system and the new style answer book. The majority of candidates responded well to the changes to the June 2010 exams, but where difficulties were experienced, centres are asked to draw candidates' attention to the comprehensive range of guidance material that is available on this subject in order that they are confident about what is required of them in future examinations. Support available on this issue includes Guides for teachers and students, and specimen question papers and mark schemes showing the changes in action. All documents published in support of the changes to exams can be accessed via notices published on all qualification homepages, all subject notice boards, and on the parent and student area of the web.

There was a good range of marks scored, with all candidates being able to achieve some marks. There was no overall evidence that candidates ran out of time, especially amongst those who scored highly on the exam. However, lower ability candidates would perhaps benefit from some help with their time management skills, as they sometimes wrote a lot when answering the first few questions, and less when answering the longer section B questions.

In this exam there were only a few marks available for Science explanations relating to genetics, and the level of knowledge required varied considerably amongst candidates. The knowledge of How Science Works terms also varied. Candidates who achieved the higher grades, unsurprisingly, tended to do better on the section B questions.

Section A

Question 1 & 2

These were generally well answered, with many candidates being able to identify the solutions suggested by David King and Robert Watson to the problem of feeding the world's population.

Question 3, 4, 5 & 6

Many candidates were able to gain marks on these questions, showing that they were successfully able to extract information from the previously unseen source F. The identification of claims that could be, or could not be, tested scientifically was less well answered, although many candidates appeared to be able to gain at least one of these claims.

Question 7

A number of candidates suggested that patents were used because they were simple to understand and suitable for the public to read. It might be worth introducing candidates to examples of patents to disabuse them of this erroneous idea.

Question 8

Many candidates appeared to have misread this question, and discussed the importance of the peer review system in general. Candidates who scored fully were able to discuss the importance the authors of scientific papers of other scientists making use of the published research.

Question 9, 10, 11 & 12

Many candidates were unable to explain correctly the use of these biological terms. This is slightly disappointing as they all appear in AS Science in Society, and we would expect candidates to be able to recall work from previous units in the course.

Similarly, candidates struggled to explain the meaning of 'statistically significant differences'. Candidates who were able to refer to the data given in the case study were usually able to obtain a mark for their answer to this question.

Question 14, 15 & 16

Meta-analysis was often correctly defined by candidates scoring higher in the exam, as was the benefits of the meta-analysis.

Question 17 & 18

Many candidates were able to identify at least some of the importance of public institutions, and others were also able to give examples of why trust might be lacking in these public institutions.

Section B

Q19 was marked using points based marking system, and candidates who made use of the bullet points and suitable headings to structure their answers were able to score reasonably well in this question. Examiners expected to see supporting evidence from the source material in candidate's answers, especially when discussing the application of the principles by a regulatory body. Candidates at the lower end of the marking range were unable to do this, and so tended to score few marks in this section.

Q20 was marked using a level based marking system. It would be helpful if candidates were familiarised with the standard 4 level mark scheme that is used for this 12 mark question. An example of this is given in the mark scheme for the unit and includes indicative content for the answer.

Examiners saw some outstanding examples of argument and counterargument. The best candidates were able to make use of referenced information from the sources, balancing different arguments, and finishing with a well supported conclusion giving their own opinion in answer to the questions. On the whole, the quality of argument seen in answer to this question was very pleasing. Candidates showed a level of maturity which made their answers enjoyable to read.

Mark Ranges and Award of Grades

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