AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Education

General Studies 2761
Specification A

GENA4　　　Science and Society

Report on the Examination
2010 examination - June series

(GENA4   AS Science and Society)

General Comments

The optimism about performance shown by examiners after the first GENA4 paper in January was maintained by a much larger summer entry and the exam seemed to be at the right standard for the vast majority of candidates. It is obvious that some centres are taking full advantage of being permitted to teach to the pre-released Case Study sources and equally obvious that some candidates seem to approach the examination with little or no previous acquaintance with the sources.

Similarly, the move to a 2 hour examination allows all candidates the opportunity to show their talents to the full. At the upper end of the range the fact that some candidates scored full marks in an examination that tests such a wide range of skills is remarkable and a great tribute to the students concerned and their teachers.

The Case Study theme in this session was *Transport and the Environment* and this seemed to be well received by most candidates. Many students were well-informed about the main issues and showed awareness of key issues and controversies. They demonstrated competence in using evidence from the sources and often made good use of their own knowledge.

Essay performance was more variable. Some candidates are genuinely gifted writers with a keen sense of critical awareness and the ability both to analyse and, more rarely, synthesize. Other candidates, despite the choice of essay themes available, struggle to fill a single page of A4 and seem to have little experience of extended writing. Sometimes, potentially good candidates either fail to develop points fully or answer only one part of the two-part questions asked. Unfortunately, the lack of appropriate examples to support arguments remains a perennial complaint.

Individual Questions Section A (Case Study)

Question 1

This question discriminated well in that stronger candidates focused on the question and extended their interpretation across the 6 figures in Source A that made up the data. Having examined the data, these candidates moved towards a conclusion often highlighting the government's dilemma over how far it could seek to address concerns about transport and the environment without losing too much political support or damaging economic growth.

Weaker candidates either wrote about the data descriptively or tended not to go beyond Figure 1. Although these areas of fiscal policy were important they offered only a limited perspective. A more common weakness was to write in general terms about transport policy, often drawing from other sources in the Case Study when the question clearly indicated that only references to Source A would be relevant.

Question 2

Candidates were allowed to draw from both Source B and their own knowledge to answer this question. The Source contained detailed information about arguments used by the two main protagonists in the debate: environmentalists who pointed to EU emission-reduction targets and supporters of global economic growth at a time of recession. Both sides used recent developments in technology to support their position.

It was a question that produced many good answers with the best producing arguments and counter-arguments to underline the complexity of decision making and the way ahead. The most informed candidates brought the debate fully up-to-date by stating that the recently formed Conservative-Liberal Democrat coalition government had indicated that it would not, at present, support the construction of a third runway at Heathrow.

Question 3

There was plenty of awareness of the latest developments in electric vehicles in the UK and the best answers took full advantage of the information provided in Sources C and D.

Some answers were rather generalised and perhaps easily seduced by the promotion of more aesthetically pleasing electric cars such as the Tesla Roadster and made much of government support via development grants and the acquisition of electric vehicles by public sector organisations. Pre-release of sources gives candidates the chance to update their knowledge and only the best responses added the point that, since May 2010, a new government had been formed.

There was some cynicism in a number of the best responses but the corresponding sense of realism was probably not misplaced. The technical advantages of electric vehicles did not seem to outweigh some of their limitations and it was felt that, on the demand side, which most potential buyers would stick to petrol driven vehicles. On the supply side, manufacturers were unlikely to invest large capital sums in a product for which demand was so uncertain. Most thought that we would see more electric cars on the road but that the chances of large-scale development in the short-term were remote.

Question 4

Now that candidates have an additional 30 minutes for their answers, time is less of a factor for this question. Candidates were able to draw from the experiences of the congestion charge in London, as set out in Source F, and to consider proposals to introduce congestion charging in the centre of Manchester as outlined in Source E. Most did so with a reasonable measure of success.

Once again, candidates needed to ensure that their preparation incorporated the most recent information and many didn't. They made much of what seemed to be equally divided opinion over whether or not the charge would be beneficial but failed to extend their reasoning to the vote in the Greater Manchester referendum which took place soon after the source was published. Knowledge of this – when the proposals were overwhelmingly rejected by voters in all 10 Manchester metropolitan boroughs – would have been very advantageous.

Individual Questions Section B (Essays)

Question 5

This proved to be the most popular question and produced many different, but equally valid, viewpoints. Weaker answers tended not to see beyond the generalisations and stereotypes that the question offered as a target. Young people wanted the bright lights of the city while 'older people' apparently could not wait to experience the restful tranquillity of the countryside.

Most answers, however, emphasised that much depended on the nature and personality of the individuals concerned. City life carried unwelcome characteristics such as more crime, noise, environmental pollution and costs. Similarly, the 'chocolate box' image of rural life was challenged by some who pointed to the closure of post offices, pubs and schools and the absence of public transport for those who lacked their own car.

Not all answers paid much attention to the second part of the question which asked about the difficulties of adapting to a different environment. Again, emphasis was placed on the response of different individuals, and some clearly thought about an imminent change in their own lives as they looked forward – sometimes with some reservations – about moving from home to university.

Question 6

This was the least popular question and too many people who did attempt it wrote almost randomly, and in very general terms, about advances in science and technology which had had little or no impact on unemployment – and often had resulted in more job opportunities rather than less.

These answers ignored the important word 'contemporary' in the first line of the question and there was certainly nothing contemporary about the Industrial Revolution or many of the other innovations that were mentioned. Better answers pointed, say, to advances in robotics, or the way in which certain skills had been made surplus to requirements by developments in areas like ICT.

Perhaps the economic uncertainty of the last two years had made people better informed about the impact of unemployment on the lives of individuals and families. Some answers demonstrated a good grasp of the economic and psychological impact of unemployment especially for older workers and those who lacked transferable skills.

Question 7

The controversy surrounding theories about the origins of life has generated a lot of debate in recent years and this was reflected in the often good, and sometimes excellent, answers to this question.

Evolutionary thinking was usually described clearly and effectively with some answers extending into philosophy and moving to Darwin to contemporary thinkers such as Richard Dawkins. Creationism was equally well-known although fewer candidates were familiar with more recent thinking surrounding intelligent design. American examples were often, and legitimately, quoted and answers to this part of the question were usually well-executed.

Many candidates were less secure when called upon to consider the case for teaching creationism or intelligent design in the science curriculum. Either by accident or design, some disregarded the word 'science' and just wrote in general terms about teaching all theories 'in the curriculum'. More sophisticated answers compared scientific thinking and methodology as applied to evolution, creationism and intelligent design. While acknowledging that nobody had absolute proof, they argued that there seemed to be far more scientific backing for evolution, seeing creationism and intelligent design more as matters of individual faith and belief which were less empirically based.

Question 8

This question was generally well-answered although less successful responses tended to attribute rapid population growth in Less Economically Developed Countries (LEDCs) to the lack of availability of contraceptives and then moved to the second part of the question, often writing about the consequences of such growth in very general terms.

Higher scoring answers extended their writing on contraceptives to include cultural, economic and religious factors, sometimes developed their answers to include reasons for a combination of high birth rates and falling death rates. Consequences were examined in more detail and were often extended to include political and support issues although relatively few candidates included examples from specific countries save for China's 'one child' policy.

New Numbering System and New Style Answer Book

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.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the **results statistics** page of the AQA Website - http://www.aqa.org.uk/over/stat.html