



# **Critical Thinking**

Advanced GCE A2 H452

Advanced Subsidiary GCE AS H052

# **Report on the Units**

June 2009

HX52/MS/R/09

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This report on the Examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the syllabus content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the Examination.

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Any enquiries about publications should be addressed to:

OCR Publications PO Box 5050 Annesley NOTTINGHAM NG15 0DL

Telephone:0870 770 6622Facsimile:01223 552610E-mail:publications@ocr.org.uk

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# **Chief Examiner Report**

The new specification affords greater opportunity for differentiation between levels of response and strong candidates are taking full opportunity to demonstrate precise analysis, incisive evaluation and well planned further arguments. Partial performance marks were attracted by those answers that fell short but did sufficient to evidence a lower skill level. The extent of focused answers suggested that this was again a well prepared cohort.

Whilst the entry for F501 was split almost equally between January and May, the vast majority for F502 entered in the summer. Those entering candidates for unit 1 in January were able to concentrate on the additional skills required for unit 2 with good effect. Where candidates were entered for both units in the summer, they risked confusing the different skills required and were more often found to be using misplaced unit 2 skills in unit 1.

Candidates paced themselves well in both units, as gaps in answers were extremely rare and not evidenced in the final questions. The topics appeared to be within the immediate experience of candidates, who drew adeptly upon a wealth of examples and personal experience in the final questions on both papers. This often made for lively, astute answers.

In order to maximise candidates' performance, centres may like to be aware of the following:

- It is heartening that candidates no longer paraphrase when asked to state argument elements such as conclusion or reasons. However ellipsis appears to be creeping in, which cannot be credited. Only the words that are written either side of the ellipsis can be counted, as these questions seek to reward accurate answers that use the precise words of the document and do not include other argument elements that are sometimes embedded. Using an ellipsis does not enable this discrimination to take place.
- Whilst the majority of candidates in both units were guided by the number of lines available as to the length of their answers, a large number in F502 requested additional sheets this session to complete their further arguments. The latter are intended to be technical questions which seek a tight logical structure, rather than a lengthy loosely constructed response listing ideas. Here it is the quality of the reasoning that attracts the marks and the lines provided are a guide as to the length of answer in which this could reasonably be expected to take place. Lengthy answers very rarely equated with the level 4 top band of marks.

It is anticipated that the AS level entries will rise in 2010 with the inclusion of those centres that remained with the legacy specification this year. The question papers and mark schemes for 2009 will be available for preparing candidates and can be accessed on the OCR website through the interchange arrangements with centre examination officers. The A2 new specification begins in January 2010 and sample assessment materials for these can be found directly on the OCR website: www.ocr.org.uk.

# **F501 Introduction to Critical Thinking**

### **General Comments**

The candidature for 2009 was almost evenly distributed between the January and May sessions, with over 14,000 entries this summer in addition to a sizeable entry for the unit 1 legacy paper. Entering both units 1 and 2 together in the summer session did have a slightly negative impact upon some candidates' answers in certain questions eg Q2(a), Q2(b), Q4(b), and Q5, where unit 2 skills were employed inappropriately. Centres might like to consider using the January session to enter for unit 1, to avoid possible confusion between the skills assessed in the Introduction to Critical Thinking and the more advanced skills assessed in unit 2.

With a slightly larger summer entry it was very encouraging that highly astute performance achieving marks in the seventies was evidenced, as well as nuggets of good performance in the high twenties. Candidates engaged well with the topic, with Q9 prompting insightful answers that explored several possible outcomes. It was here that the strongest candidates had ample opportunity to be rewarded for the quality of their answers, which they grasped with fully fledged perceptive judgements. Many made good use of the impact of the credit crunch in their answers, whilst others discussed the possibility of influencing young minds to consider altruistic acts.

Although candidates performed more evenly over the two sections in this session, the strongest performance was again in Q6 and Q8 (a) assessing the credibility of documents and personal claims; the weakest again in Q2 identifying and explaining argument elements. The latter had the highest incidence of no response, suggesting that it is an area of the new specification that is not widely understood. On the whole the transition to the new specification has worked well with no evidence of widespread misunderstanding of what the questions entail, although in a few papers, Q9(a) was answered as if it were the last question on the legacy paper.

There were some instances of candidates not reading the questions carefully as in Q8 (a) where the strengthen/weaken element was not always covered. Also some answered Q9 as if it were about the initiatives rather than their outcomes, or as if it were the same as the January question ie assessing plausibility and credibility.

Specialist vocabulary was widely used to good advantage by most candidates at some point in the paper. Where this was lacking, it was more evident in Q6 and Q8 (a) where candidates could gain no marks without use of credibility criteria. Problems also remain for a sizable minority with the use of basic terms such as conclusion, reason and evidence.

Candidates appear to have apportioned their time wisely. There was very little evidence of candidates running out of time, as NR (no response) was evident on various questions where candidates were weak, rather than at the end of the paper.

### **Comments on Individual Questions**

### Section A

1 The vast majority of candidates were directed by the paragraph numbers in each part question. Although a minority did wander off into other areas of the argument, there were only isolated instances of candidates straying into other documents. Highlighting the paragraph numbers for each question might be a useful strategy to focus weaker candidates upon the relevant paragraphs.

Pleasingly many candidates quoted accurately and appositely from the text. However there was still a common tendency to copy out whole sentences rather than to select precise argument elements, which cost even the strongest of candidates marks. The use of ellipsis crept in this session, which again prevented access to marks, as only the words written could be credited.

- (a) This question was answered better than in January, with more than half of the answers gaining full marks. The most common incorrect answer given was the title, 'Money can't buy you happiness.' However of those who cited this as the conclusion, quite a few went on to give correct reasons in Q1(b).
- (b) The majority of candidates correctly identified either one of the reasons. A common mistake was to give a piece of evidence, typically Professor Dunn's study, '... giving as little as £2.50 ....'
- (c) Relatively few candidates gained full marks, often losing two marks by including the phrase 'Others who rate themselves ...', which is technically not part of the example. A small minority of candidates gained no marks, most frequently by citing 'American multimillionaires ....'
- 1 (d) The vast majority scored full marks for this part of the question. Those who only gained one mark often did so by including *'where people were asked to rate their sense of happiness'*.
- 2 If candidates were to have a NR (no response) anywhere on their paper, it was likely to be on this question. As this occurred almost equally on strong and weak papers, it perhaps indicates that this new part of the specification is not widely either recognised or understood. The argument elements are listed in the specification at 3.1.1.7 within the section The Language of Reasoning. Focusing upon this short list could lead to very accessible marks.
- 2 (a) Surprisingly, very few candidates correctly identified this argument element. However more recognised that it was in some way opposed to the main conclusion and cited 'counter argument' or other cognates, gaining partial performance marks in both parts of the question. There was a wide range of incorrect answers including 'assumption', 'belief", 'principle', 'judgement', 'generalisation', 'appeal to popularity', 'appeal to tradition', 'straw man', 'restricting the options' and 'stereotyping'. This is where the confusion with unit 2 skills can cost candidates marks. If the units are being taken together in the same session, candidates need to be able to make a clear distinction between argument elements identified in analysis questions and terms that describe points of evaluation.
- 2 (b) The correct element in (a) tended to prompt a correct explanation in (b), although not always so, as some candidates conflated assertion and argument or conclusion. However many picked up partial performance marks for the identification of going against the main argument.
- 3 There was an interesting range of responses, with most candidates being able to question whether a visit to the beach is inexpensive or not. Those that gained partial performance marks did so by omitting to mention either wealth, or happiness or a connection to the image. Those that focused on the over-generalisation that a cartoon could be susceptible to contrivance could not be credited.

#### Report on the Units taken in June 2009

- 4 (a) Despite the fact that candidates find assumptions difficult to express and identify, this question was on the whole well answered. The strongest candidates explicitly identified the assumed causal link between giving money away and being happy. Those that implied it, by linking being happy 'after' giving money away, gained partial performance marks. Uncreditable answers claimed that charity champions were happy or referred more generally to 'being happy if you gave your money away.'
- 4 (b) Candidates were often creative in reasoning what might bring happiness, including the capacity to be satisfied from knowing that you can help a great number of people. Although a question with very accessible marks, some were restricted to two partial performance marks by conflating *'money'* with *'wealth'*, often reasoning that that money removed the worry about the basic necessities of life. Other weak answers included extra argument elements such as explanation, thereby restricting credit to one mark. Where candidates are being entered for unit 1 and 2 in the same session, they need to be clear that unit 1 requires a single argument element, whereas unit 2 asks for a complete argument with reasons and conclusion.
- 5 This question was answered less well than in January, with candidates falling short in a variety of ways. To gain full credit, candidates needed to successfully relate the correct reasons to the correct conclusion. It was unfortunate that some candidates who had successfully identified these in Q1 went on to use those that were incorrect here, consequently gaining only partial performance marks. Others failed to refer to the conclusion at all, or seemed to revert to regarding evidence as reasons, even when they had correctly identified the reasons in Q1.

### Section B

6) The majority of candidates appeared to be on a firmer footing in this question, many gaining full marks, presenting succinctly expressed answers, identifying carefully chosen credibility criteria and accurately applying these to the document. Interestingly, they were divided as to whether the government would by nature of its role be more or less likely to tell the truth.

In weaker responses the application of the credibility criterion to the document was minimal or vague, or occasionally absent altogether. Quite a number of candidates could not gain a second set of three marks, as they gave virtually identical explanations in terms of the government's need to maintain a good image in the eyes of the public, substituting 'vested interest' for 'bias'. Additionally some candidates lost the focus on the credibility of the document, by assessing the credibility of the government or the schemes.

7 (a) Many candidates achieved full marks, the majority with the Professor Stephen Joseph quote. However some could only be credited one mark, because they gave an incomplete version of Joseph's claim, which altered its sense from Joseph making a claim about research, to Joseph making the claim himself.

- 7 (b) The vast majority gained full marks quoting the well-known business man.
- 8 (a) Correctly answered, this question provided a large percentage of the total marks for those candidates who had floundered in section A. However a substantial minority failed to add an assessment of 'strengthens' or 'weakens'. Weaker candidates gained credit only for an understanding of the criterion as they made no assessment of the claim or person eg 'Neutrality' he has nothing to gain from being biased, nor does he have any reason to be biased, which strengthens his credibility.' In contrast, the following gained three marks: 'Neutrality may also strengthen the credibility of his claim, because Professor Joseph was not involved in the research, so he does not gain anything by taking sides.' There were some quite cynical answers about academic rivalry and dishonesty, but these were given credit if expressed reasonably.
- 8 (b) This was answered better than in January with the majority of candidates linking their answer back to the previous assessment, albeit often in a very circular manner. No credit could be given for answers that stated what would need to be known about the research, rather than about Professor Joseph's credibility in making the claim.
- **9** The strongest candidates wrote incisive answers relating to plausibility, making full use of the present economic situation to predict an implausible outcome, but tempered this with the probable success of training children to think of others and give charitably, although some were rather scathing about teaching citizenship. They added a simple but effective assessment of evidence which more often related positively to sample size and negatively to the relevance of an American study to the UK. In this way they quickly covered both the positive and negatives of both plausible outcomes and quality of evidence. The additional use of specialist terms and an explicit judgement enabled the strongest candidates to reach the top of level 3.

Middle range responses either tackled plausibility without assessing evidence or came to a judgement and supported this with a one sided assessment of plausibility and evidence, without assessing the merits of the opposing side. In either instance, these candidates could only access half of the marks available.

Encouragingly, there were very few weak responses, as most candidates understood the need to make an explicit judgement, support this with an assessment of related points and to refer to the text. Even the weakest of candidates appeared to be enthused by the topic to make common sense judgements about plausibility, which on the whole enabled them to access level 2 marks.

Overall the majority of candidates appeared to have a firmer grasp of specialist terms in this session. There were however often instances of expertise in one half of the paper rather than the other. This was equally balanced between those who could analyse and evaluate argument but were not as well grounded in the use of credibility criteria, and those who gained almost full marks in questions 6 and 8a but were unable to deal as well with assessing argument.

To help develop these skills further there are OCR feedback sessions on the May examination in the autumn term, with marked sample papers illustrating different levels of candidate response. The Heinemann endorsed textbook also provides materials that can help to prepare candidates for the examination.

# **F502 Assessing and Developing Argument**

### **General Comments**

The entry for this paper was as expected significantly higher than in January, going from 400 to 20,000. There was a good spread of marks on the paper and in general the candidates answered the questions clearly and argued well. The candidates looked well prepared for the paper and the skills required. There was no evidence of time being too short on the paper.

There were not many questions left blank and even though Q17 proved to be very difficult, nearly all attempted answers to it and most of these were well written. The level of articulation by candidates throughout the paper was encouraging.

The further arguments questions in section C often showed good structure and the vast majority used several reasons and intermediate conclusions to good effect. On the 'state' questions, the vast majority correctly used the words in the passage and it was rare to see candidates incorrectly try and paraphrase content in their own words.

The good use of the course terminology by candidates was encouraging, particularly on the evaluation question in Q4(b). This question was a more open-style like the equivalent one in January. This time a much smaller number just summarized or gave commentary on the paragraph without any evaluation.

### **Comments on Individual Questions**

### **Section A**

Candidate performance on the multiple choice questions was very strong with just less than half of the candidates scoring double-figures on the 15 marks available for the questions.

In general the questions that candidates found the easiest were the choosing the main conclusion questions (Q1, Q9 and Q12). The candidates found the flaws and principles questions the most challenging (Q6, Q7, Q8 and Q13).

Feedback on performance on some individual questions:

Note that the mark scheme has a rationale on the correct and incorrect options for each question, and this should help to make this paper a good teaching aid to prepare for future exam sessions. The comments below do not reproduce this rationale.

- 2 Nearly all candidates went for options A and B showing that they realized this sentence was countering the argument. Half of this group though went for option A rather than the correct option B, indicating that there is a need to cover carefully the difference between counter-assertion and counter-argument.
- **3** The vast majority of candidates were split between options B and D. A significant number went for the incorrect option of B, where it should be noted that although a potentially upsetting issue, the author is quoting the fact in a very objective and non-emotive way so is not attempting to persuade on emotive grounds.

- 6 The largest proportion went for the correct option of A, but there were significant numbers choosing each of B, C and D. The fact that almost a third of candidates went for either option C or D which are the most clearly wrong, indicates that flaws and the labeling/explaining of them is an area candidates find hard.
- **7/8** Similarly to Q6 many candidates went for each of the incorrect options showing that flaws and principles are found to be hard.
- 11 A significant number of candidates incorrectly went for option A.
- **13** Hardly any candidates incorrectly chose option A which argues the opposite way to the above argument. Significant numbers did go for the incorrect options of C and D indicating that candidates find this tricky.
- **15** Although the majority chose the correct option of C, a large number went incorrectly for D which perhaps implies confusion over use of statistics.

### Sections B and C

Ignoring Q17, which was found very hard, the question types which the candidates seemed to find hardest were the flaws question (Q20) and the principles question (Q18), as has been the case in previous papers.

- **16** The vast majority of candidates wrote using exactly the wording of the passage, as asked to. Although on some parts, incorrect parts were selected and extra information sometimes added, it was rare that candidates lost credit for reasons of paraphrasing.
- **16 (a)** The vast majority got this correct and nearly all picked the correct sentence. A small number lost credit by carelessly leaving out "school" or "summer". Some lost credit by including the IC or a reason as well as the MC.
- **16 (b)** The majority of candidates answered this well, most commonly going for a different IC to the one wanted, with high numbers for each of the middle three bullet point examples on the mark-scheme. A small but significant number had the right IC but included the CA within it to lose credit.
- 17 A very small number went for 'explanation', perhaps the candidates not in general considering that this is not an argument element? The most common answer was 'appeal to history' with 'counter-assertion/argument' also popular. A reasonable number picked 'reason' or 'evidence'. Many of these candidates picked up some credit in part (b) within their explanation, showing they understood at least partly the role of the sentence even if they could not label it. Most candidates who picked 'appeal to history' went on not to score well in part (b), clearly thinking along the wrong track.

The sentence is not presented as a reason for why we should have long summer holidays, so this is why it is not a counter-assertion or appeal to history.

The sentence does not itself support the main conclusion or the intermediate conclusion, so cannot be considered as a reason.

**18** This was also a low scoring question, but statistically this discriminated well with the best candidates on the overall paper generally scoring here, implying that it is a more challenging skill.

Many candidates left off imperatives such as "should" or "must" so wrote answers that were more like reasons or claims such as "academic progress is important".

**19** A small number wrote answers describing the analogy or explaining why the use of an analogy is effective as a tool in argument. Some of these were quite detailed, for example explaining that football was popular so this would make this analogy effective. These answers did not score however, as they did not evaluate the analogy and whether it worked or not, as asked for in the question.

Some answers pointed out differences between schoolchildren and footballers but did not relate this to the issue of taking breaks. The best answers pointed out similarities or dissimilarities and did relate back to the break, and there were many examples of candidates answering like that.

A significant number of candidates argued that footballers did take breaks and so reversed the analogy back on itself. These generally scored well, except when candidates discussed break-taking due to injuries.

20 Many candidates answered with "hasty generalisation" which got no credit either in part (a) or for part (b) if they went on to explain it. The example is being cited to illustrate that reducing summer holidays can aid children's academic progress, but it is not being generalised to all schools in the paragraph. If it were true in all schools, this would give stronger support, but the author has not assumed it might be true in all schools in their argument.

Some candidates labelled the flaw as "correlation not causation" or "confusing cause and effect" which did not get credit in part (a). Mostly these candidates then scored 2 marks in (b) however. The name "simplifying cause and effect" did get credit.

- 21 Many candidates scored at least one mark for pointing out the very small percentage that 5% was, but most of these answers then did not go on to explain why this was a weakness to gain the second mark. Candidates that picked up on the statistic being about population not schoolchildren tended to explain the issue clearly and gain two marks.
- 22 The vast majority of candidates answered that the children must have committed the crime without the qualification of "most" or "a significant number", thus scoring one only. There were a number of good candidates that did put this qualification in however.

There were a small percentage of candidates who did go for the other answers on the mark-scheme, where the above issue also differentiated, although in most cases candidates answering with these strands were less over-strongly definitive, so got both marks.

- **23** This question differentiated well between candidates of different calibres, with weaker candidates often giving implications as said in the passage, such as "they feel forced ...", "they were relieved", etc.
- 24 Nearly all candidates correctly spotted the counter-assertion in paragraph 5, a small number losing credit for continuing through to the second sentence. Hardly any lost credit because of paraphrasing.

In part (b) a number of candidates were purely descriptive or explained how the use of evidence in general made for good arguments. Some wrote further arguments or counter-arguments instead of evaluating the reasoning that was there.

Most candidates did evaluate however, the most common answer being that teachers do work longer hours than 9 - 3.30 pm and in the holidays. On a personal note it was nice to see how many candidates were aware of the workload and other issues and were purporting to be on teachers' sides!

25 This was generally answered well by candidates and nearly all were able to come up with problems. Some talked about absence from school without making it clear that this was made more troublesome by the shortness of the holiday-time, so did not get full credit.

A lot of good candidates did give answers relating to a reduced time-frame as opposed to just shorter holidays. The most common answer not in the scheme was the idea of employees not all being able to get time off during this reduced window; this scored well.

- 26 This was answered well. Some lack of detail with people not making clear that relatives or friends were in "different areas" resulted in loss of credit. A small but significant number of answers got confused with different countries, discussing issues such as moving across Europe.
- **27/28** About a third of the candidates used additional answer sheets, for questions 27 and 28. It was generally not the case that those who had used the additional answer sheets to continue to write their FA achieved higher marks. This could indicate that being verbose does not necessarily produce a well developed or structured argument.

There were many level 4 answers that were within the dotted lines, and candidates that did stay on the one page seemed to write clear, concise and well structured arguments that scored well. I would encourage candidates to spend a moment considering what their argument will be, before writing. There is evidence that there is generally time for a short amount of planning before answering these questions.

The vast majority of candidates used intermediate conclusions well within their argument, both developing from individual reasons or pulling together from a few reasons before moving on to a different strand.

Candidates found a good range of reasons, particularly in Q27. There were many examples of invented evidence and when these are used in the place of reasoning, the answers did not score well.

A number of candidates did not state a main conclusion, which resulted in credit being lost. I would recommend candidates starting and ending with a stated main conclusion to ensure they both have it and that it frames their argument.

Candidates found Q28 more challenging to find reasons for, and many candidates focused on arguing for the existence of summer holidays in their reasoning, rather than arguing for the length despite the main conclusion they stated.

Some candidates spent time counter-arguing points from the passage in place of adding further arguments of their own which did not score well.

A small number of candidates argued to support the reduction in summer holidays or argued to challenge classroom numbers from Q27.

## **Grade Thresholds**

### Advanced GCE Critical Thinking (H052 H452) June 2009 Examination Series

### Unit Threshold Marks

| Unit |     | Maximum<br>Mark | Α  | В  | С  | D  | E  | U |
|------|-----|-----------------|----|----|----|----|----|---|
| F501 | Raw | 75              | 58 | 52 | 46 | 40 | 35 | 0 |
|      | UMS | 100             | 80 | 70 | 60 | 50 | 40 | 0 |
| F502 | Raw | 75              | 56 | 51 | 46 | 41 | 37 | 0 |
|      | UMS | 100             | 80 | 70 | 60 | 50 | 40 | 0 |

### **Specification Aggregation Results**

Overall threshold marks in UMS (ie after conversion of raw marks to uniform marks)

|      | Maximum<br>Mark | A   | В   | С   | D   | E  | U |
|------|-----------------|-----|-----|-----|-----|----|---|
| H052 | 200             | 160 | 140 | 120 | 100 | 80 | 0 |

The cumulative percentage of candidates awarded each grade was as follows:

|      | A   | В    | С    | D    | E    | U     | Total Number of<br>Candidates |
|------|-----|------|------|------|------|-------|-------------------------------|
| H052 | 9.1 | 25.1 | 46.9 | 66.2 | 81.3 | 100.0 | 15315                         |

### 15315 candidates aggregated this series

For a description of how UMS marks are calculated see: <u>http://www.ocr.org.uk/learners/ums\_results.html</u>

Statistics are correct at the time of publication

OCR (Oxford Cambridge and RSA Examinations) 1 Hills Road Cambridge CB1 2EU

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Telephone: 01223 553998 Facsimile: 01223 552627 Email: general.qualifications@ocr.org.uk

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