



General Certificate of Education

Critical Thinking 1771

CRIT2

Unit 2 Information, Inference, Explanation

Report on the Examination

2010 examination - January series

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CRIT2

Unit 2 Information, Inference, Explanation

Chief Examiner's general comment on CRIT 1 and CRIT2

Taking both AS Level papers into account there was a modest but measurable improvement over the June 2009 performance, although it has to be said that evidence of strong teaching, adequate preparation time, and coverage of the syllabus varied between centres. It is very clear that even for students with natural reasoning ability, good general knowledge and comprehension skills, all of which are necessary conditions for success, the best grades are accessible only if the syllabus has been thoroughly covered.

Although the knowledge content required for Critical Thinking is light in comparison with many other AS level subjects, the concepts are liable to be unfamiliar and many students are coming to them for the first time. There is also a certain amount of technical and quasi-technical terminology which needs to be learned. However, the skills the examiners are looking for concern the use and application of these concepts, not simply knowledge of them.

There is no doubt that Critical Thinking is a demanding subject, and needs to remain so if it is to stretch and stimulate students, and to earn the respect of the academic community and future employers. It is encouraging that the intended challenge in the two AS-Level units has clearly allowed able, confident and well-prepared candidates to demonstrate their excellence; and to do so in increased numbers and by higher margins

These general remarks are supported by thorough and detailed reports on the two component units, CRIT 1 and CRIT 2.

CRIT 2

General Comment

Unit 2 of AS Critical Thinking builds on the Foundation Unit, requiring application of the basic skills of Unit 1 to the understanding, processing and evaluation of information. The two additional concepts to be applied are **explanation** and **inference**: in other words candidates are required to:

- Critically assess various claims in the light of the available information in the source documents – including statistical / numerical / graphical data; and themselves draw reliable inferences from the data.
- Critically evaluate *explanations* for facts, observations, outcomes etc. in the source documents; and offer plausible explanations.
- Analyse and evaluate short arguments in, or related to, the source material.

Candidates performed well in both parts of the paper, applying the skills and concepts set out in the Specification with considerable confidence and assurance. In addition to logical concepts and reasoning skills, many candidates were noting rhetorical features of texts and other subtleties, such as irony, exaggeration, persuasive language appeals to emotion, etc. On the negative side, the single most noticeable weakness was in Q5, a four-part question requiring elementary mathematical calculation and data analysis. It would seem that some students, who

give excellent discursive responses, find purely quantitative or numerical responses challenging. Q5a for example was poorly answered by the majority of candidates, despite requiring no more than a simple arithmetical calculation / approximation.

The standard of written communication was very encouraging, even in scripts where there were weaknesses in CT itself, suggesting (perhaps) that studying CT has some benefits in encouraging clear expression, or that literacy standards are on the rise generally. Hence the performance in the essay-question, Q10, varied mostly in respect of its content and the quality of argument. In many cases this showed considerable maturity of thought, but with room for improvement in heeding the different components of the rubric – esp. applying principles, anticipating objections. Intelligent use was made of the source documents, with evaluation as well as mere reference to the sources.

Time management, as in the summer paper, was generally good, with most candidates answering the bulk of section A and having sufficient time to write between 1 and 4 (av. 2) sides on Q 10. However, there is still a need to remind students that where answers are worth less than 4 marks, there is no real gain in expanding, clarifying, etc. If one or two sentences provide the straight answer, the full mark is awarded, and adding provisos etc. will not add any more. (More on this in the specific comments below)

Question by Question (to be read with reference to mark scheme)

Question 1(a)

Many repeated / paraphrased the claim rather than drawing the more general inference that was required.

Question 1(b)

No significant problems

Question 2

Generally well answered.

Question 3

A more discriminating question. Good answers pointed out that if the cameras moved crime, it couldn't be said they were not effective. Others added that it was not therefore a waste of money to the community in question; others still added if the whole community did the same, there would be nowhere for crime to go.

Question 4

Many candidates just jumped on the Bulger and rape cases as appeals to fear whereas these were not central examples to the author's argument *against* cameras. There were several answers which did support the argument, for example the fear of hidden cameras, too small to see; allusions to foreign countries, alleged police states, etc. Credit was also given to answers which referred to the 'sinister' image and caption.

Question 5

As stated above, this was the least well-answered question. Worth 11 of the 70 marks, it dented the performance of candidates who omitted it – as a number did.

Question 5(a)

A minority of candidates gave the correct response, which depended primarily on selecting the figure of 193,467 (total clear-up) from Fig. 1, 3% of which is less than 6000. With or without a calculator this answer required no special mathematical ability to calculate or approximate, but the question proved to be a strong discriminator. (A discretionary mark was given to candidates who observed instead that the London statistics may not extend to the whole country.)

Question 5(b)

Required candidates *not* to infer that because boroughs with fewer cameras often had better figures than those with many that vigilant policing was *the* explanation. Being a plausible explanation is not the same as a reliable inference. This observation was required for the full mark.

Question 5(c)

required candidates to observe that the scatter graph suggested there was no significant correlation; but there was also credit available for balancing this by noting (e.g.) that 'no link' is too strong.

Question 5(d)

Gave opportunities for a numerical or discursive / impressionistic response, but the full mark was available only to those who observed (with supporting reasons) that, straightforwardly, the assertion is supported. (See mark scheme)

Question 6

Another statistical question, and quite a strong discriminator. The best responses noted that that as well as a slight positive correlation, there was no justification for inferring a causal connection; and / or / but for noting that there is insufficient ground for saying that cameras play *no* part. (See mark scheme.)

Question 7

This turned out to be a testing question, but many candidates gave well-argued and perceptive answers. Weaker answers merely pointed out the apparent, superficial contradiction between photo and caption and did not give the caption the more charitable reading that does support the argument against cameras.

Question 8(a)

No significant problems; many excellent answers. Encouragingly a high proportion of the candidates noted the irony in the article, which was the main rhetorical feature. Many other perceptive responses were made, such as the author's manipulation of scale, to exaggerate the

concentration of cameras. (NB. The award of marks was not restricted to answers suggested in the mark-scheme.)

Question 8(b)

Most answers in the right area, but only a minority gave a precise formulation of the conclusion.

Question 9(a)

The main conclusion eluded a large number of candidates. Many went for: surveillance cameras are not a menace, which on careful analysis is an intermediate step on the way to the conclusion the BB nightmare is (assuredly) *not* around the corner. This is supported by two sub arguments: (1) pointing out the fallacy / absurdity of claiming that every citizen's very movement watched; and (2) that surveillance cameras are valuable against crime, and not a cause for fear unless you have something criminal to hide, i.e. (implicitly) something criminal.

Question 9(b)

Many candidates – including many who did not identify the main conclusion with precision – made useful evaluative points about the reasoning. But this was a highly discriminating question. In many ways it is addressing the most central CT skill: assessing how well the author has reasoned in favour of his or her position. To succeed in questions like this candidate's need to ask the right critical questions, for instance:

- Is the target argument, i.e. the argument attributed to 'doom-mongers', fairly represented (or a straw man)?
- Is it fair to describe it (negatively / derisively) as a slippery slope – or is it perfectly reasonable to fear the proliferation of cameras?
- Does it follow that for the state to watch every citizen would mean half the world watching the other half – or is this an unwarranted assumption?
- Does the sub argument that cameras are useful mean they are not also a potential danger to liberty etc.?
- Is it true that if you have nothing to hide you have nothing to fear? Alternatively, have you not a perfect right to hide certain things / insist on personal privacy?

It is these questions and questions like them which identify what the author is trying to do in the argument and which permit the critical reader to decide whether or not the reasoning is sound / effective / flawed etc. For example, such questions could prompt the following type of response:

'The author dismisses / belittles the opponents' argument by calling it doom mongering about a few cameras on lamp posts, but also exaggerates what they claim will happen – i.e. a Big Brother nightmare. It is then easy to knock down this argument as a slippery slope, or to point out that it is absurd / has absurd consequences like half the people watching the other half...'

This is the level of specific reference to the reasoning that is required for the top range of marks. Too many candidates instead make general remarks like: 'The author makes a good point by saying there is a slippery slope...' or: 'The author is wrong to say that it is an impossible scenario...' Or, less engaged still: 'The author says cameras are useful but doesn't give any evidence for this...'

It should be emphasised that making several cursory points is of less value than one or two developed points as in the example above. Note too that there are always evaluation questions of this kind in the exam, often carrying quite a high tariff, as this one does. It is essential students practise giving focused, penetrating answers if they are to obtain the top-band scores – here 5-6.

Question 10

This question generally drew well written and in many case well argued responses. The most important advice for candidates to take is the following:

- Give a clear statement of the conclusion you are making and be sure that the reasoning you give really does support it. This requires knowing in advance of starting to write which side you are on and what your main argument for that side is going to be.
- In referring to the source material, try to develop it into the point you are making, rather than just mentioning it.
- Make a point of covering all the requirements in the exam rubric, including reference to one or more points of **principle** and explaining their relevance for the argument. (Just saying, ‘We have a right to privacy’ may earn a single mark; but to collect all four marks that are available in this category, the relevance of privacy and the extent to which it is important / unimportant in the debate would need to be explored.) Likewise in anticipating counter arguments, the full award of marks requires more than just saying: ‘Some people think that X, *but* I disagree...’ At least one potential counter-argument should be fairly presented, and a well-reasoned response attempted. As in the previous question, quality and development earn more credit than a lot of undeveloped points.

Mark Ranges and Award of Grades

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