



**General Certificate of Education (A-level)
June 2011**

Critical Thinking

CRIT2

(Specification 2770)

Unit 2: Information, Inference and Explanation.

Report on the Examination

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CRIT2 Information, Inference, Explanation

General Comments from the Principal Examiner

The summer 2011 exam was a challenging paper and the distribution of results indicates that it was successful in reflecting the full ability range of candidates. There were a significant number of scripts which demonstrated a very high level of critical thinking and even the least successful candidates were clearly attempting to employ critical thinking skills and terminology.

The Source Material was more extensive than last summer's, but that did not increase the number of candidates failing to finish the exam. The topic seemed to engage candidates and the essay provided scope for a range of answers both for and against the question statement.

Question 1

Question 1 required candidates to quote or paraphrase the second half of the sentence quoted in the question from Document A, following the argument indicator 'so'. It proved a surprisingly difficult question, even for otherwise successful candidates. The most common errors were answers that gave an inference drawn by the candidate or a very general summary of an issue in the text.

Question 2(a)

This question was answered successfully by most candidates. A small proportion of candidates did not give an explanation but took a very descriptive approach, frequently assuming that the postgraduate population affected must be British.

Question 2(b)

Questions on assumptions are usually challenging for a significant proportion of candidates and this one was no exception. One common error was that an *explicit* assumption was given, despite the question asking for one implicit assumption. No one was penalised for giving more than one assumption and in that case the mark awarded was for the best assumption, with further assumptions ignored. There was a tendency for candidates to state assumptions that were too strong or which contained additional information that was irrelevant or made the statement too narrow.

Question 3(a)

There were a lot of very good answers to this question. Candidates sometimes dropped a mark or two when identifying the fact that the investment figures were percentages but not explaining why that made inferring how much money was spent in total was unsafe.

Question 3(b)

This question was largely answered well. The most frequent erroneous answers were when candidates identified that Sweden's knowledge investment was higher than that of Greece.

Question 3(c)

Those candidates who showed the results of calculations usually answered this question well, while it was difficult to credit those who did not (unless they mentioned the lack of clear criteria for being a Low Investment economy). A minority of candidates speculated about changes to the rate of growth in knowledge investment, despite the question specifying that it would remain the same.

Question 4

One way to get full marks on this question was to note the limited relationship between GNI per capita and Knowledge Investment and that correlation does not imply causation in any case (not to mention that there was no data about jobs at all). Many answers did not give a clear judgement about what could be concluded and were very selective in the details that they concentrated on. It is challenging to assess both the details of individual sources of data and the overall relationship between them simultaneously, but it is also a vital skill for this paper.

Question 5(a)

This question was answered well by most candidates. The most common error was to state an inference drawn from the comparison rather than the comparison itself.

Question 5(b)

A challenging question. The best answers focused on whether the comparison identified could give sufficient support the inference drawn from it (for example, by commenting on the sample size of Steinberg's study). An assertion that comparing Asian and non-Asian groups is racist was not credited.

Question 6(a)

Successful answers showed calculations and took into account the different population sizes of the groups. The small number of candidates who included pupils of mixed Asian ethnicity in their calculations could receive full marks.

Question 6(b)

Answers that included statistics to justify their judgement usually did well. High scoring answers were distinguished by a clear focus on whether or not the difference in performance was stark, rather than merely whether or not there is a difference. Candidates who treated the All Chinese and All Asian categories separately were not penalised.

Question 6(c)

Question 6(c) was one of the most challenging questions and required careful reading of the Document. Since candidates were guided to evaluate the reasoning, it was impossible to give credit for claims that there was no evidence given. Successful answers were careful explanations of a flaw or questionable assumption in the context of the reasoning in the paragraph.

Question 7

The vast majority of answers gained one mark and a small proportion of candidates went on to gain the second mark by identifying the limitations of the data in Figure 2 of Document C.

Question 8(a)

A very straightforward question for nearly all candidates. There was a lot of persuasive language to choose from. However not every statement fell into that category.

Question 8(b)

Nearly all candidates were able to provide at least a basic assessment of the argument of Document D by identifying one or more ways in which Figure 3 was not consistent with the view that we are enslaved by machines. The very best answers identified reasons why Figure 3 is not necessarily relevant to the argument (e.g. that it shows per capita work hours rather than work hours per employee and could thus be affected by population change) or explained flaws in context. Generally, it proved more difficult for candidates to give well developed positive assessments of the argument. Less successful answers also often relied upon claims that no evidence was provided. A few answers failed to identify any argument in the passage or to take it seriously, exaggerating the extent to which it was merely the assertion of opinions and rhetoric. While humour was certainly used in Document D, the argument itself needed to be engaged with rather than dismissed out of hand.

Question 9

The majority of candidates rejected the question statement and argued that we should not aim to lose the global competition for jobs. The best answers often challenged underlying assumptions on which the passage was based. Frequently, candidates concentrated on presenting a series of potential consequences of losing (or winning) the competition. How well these were explained and their likelihood justified determined the mark.

Of all the assessment criteria, candidates scored least well on Reference to principle. Sometimes reference to a principle was entirely absent and, if one was mentioned, it played a minor role in the argument. As with any social issue, it should have been relatively easy for candidates to show what values their argument is based on.

Conclusions were usually very clear and supported by the case made to at least some degree.

In addition to exploring potential consequences, having conditional statements (if...,then...) in the question passage did encourage candidates to use hypothetical reasoning, usually raising the number of marks earned for Reasoning. It was rare for answers to explicitly discuss how likely the condition (i.e. the antecedent) was to occur, even briefly.

A number of otherwise capable and articulate candidates presented their answers in a rhetorical style. This sometimes resulted in unjustified assertions and exaggeration replacing argument and could not be credited.

Most answers included a counter-argument. In a very few cases this was left entirely unanswered, substantially weakening the case being made. Some very good responses structured their reasoning around a series of counter-arguments, showing how they failed.

Those arguing that we should win the global competition for jobs often successfully challenged assumptions underlying the question statement when replying to counter-arguments.

Use of information varied considerably. A small proportion of excellent answers not only used information to support their case, but also interpreted it carefully and evaluated the inferences being drawn (i.e. assessed the safety of the inference). More frequently, candidates used a wide variety of data in the Source Material to support their claims, largely taking it at face value.

It was rare for candidates to assess the credibility of sources or to discuss how representative data was, although it would improve their marks if they did so.

Use of other relevant information or experience was common and the quality of its use varied greatly. The best examples showed a clear awareness of the limits of anecdotal evidence. Where candidates have relevant subject knowledge, they should remember that it is their skill in using what they know (and explaining how it is applicable) to support their case that is being assessed, not their possession of the knowledge itself.

Mark Ranges and Award of Grades

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