Level 2 Award

Thinking and Reasoning Skills

OCR Level 2 Award in Thinking and Reasoning Skills **J930**

OCR Report to Centres

June 2013

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OCR REPORT TO CENTRES

Overview

After a small entry in January it was pleasing to see another large summer entry for the qualification, with centres entering candidates across a wide age range. It is worth mentioning that the January exams are still be on offer for this Level 2 Award and will continue to be so despite the removal of this series for GCSE and A levels. The papers this summer both worked well and candidates engaged fully with the topics covered.

The quality of performance was strong on both papers and candidates were able to access the questions effectively with very little evidence of confusion about what was being asked of them. Both papers discriminated well and candidates were able to gain marks which matched their abilities, with stronger candidates able to display some well developed thinking and reasoning skills on the more challenging questions. The rubric for both papers is straightforward and candidates showed no signs of misunderstanding. There was little evidence that candidates had time difficulties and no questions elicited a significant number of no responses.

The majority of candidates were clearly well prepared for both papers. On B902 they showed good familiarity with the topic of near death experiences, demonstrating that they had spent time studying the pre-release materials. On both papers, there was good use of the language of reasoning and of specialist terms. In some cases, however, this terminology was not always applied effectively and the occasional random use of the names of common flaws in questions that did not invite them was seen, especially B901.

There was little change this year in the sorts of skills which candidates have most difficulty in applying. For AO1, skills involving argument structures and intermediate conclusions can pose problems, especially when argument maps are asked for. Assumptions questions can also prove problematic. In AO2 candidates sometimes experience problems when manipulating data to solve a problem. Question 9 on B901 this year is a good case in point where some thought was required and many candidates seemed unable to face the challenge. Centres might like to reassure their students that in cases where more time is needed to work out an answer to a skill 9 question, this will always be reflected in the number of marks available, so time spent will bring its rewards. Candidates are still finding it challenging to reach the higher mark bands on AO3 questions asking for developed answers and advice given in previous reports continues to be relevant.

B901 Thinking and Reasoning Skills

General Comments

The paper was accessible and of an appropriate level of challenge. There were no common misinterpretations of the rubric and most candidates were able to complete the paper in the allotted time.

In Section A, the argument map (question 1b) and the Venn diagram (question 5) proved to be challenging questions.

In Section B, there were fewer 'wrong direction' arguments than in previous series. Nearly all candidates understood what they were supposed to be arguing about, with the quality of the reasoning being the most important factor in determining the level of response.

Several questions in Section B required candidates to write a developed response for two marks, with an undeveloped response being worth one mark. A developed response is one that is likely to include an indicator word. An undeveloped response is likely to be one that invites the response, 'and so..'.

In both Section A and Section B, many candidates used the names of flaws inappropriately, often in response to questions that did not ask for a flaw to be named.

Comments on Individual Questions

Section A

Question 1 (a):

This question was a relatively straightforward example of its type. To candidates familiar with the structure of simple arguments, it was clear that 'therefore' and 'so' should be circled and it was not too difficult to distinguish between the conclusion and the intermediate conclusion. There are still some candidates who are apparently unfamiliar with key terminology such as 'indicator word' and 'intermediate conclusion'.

Question 1 (b):

This was a relatively challenging argument map because the second reason had to be joined to the intermediate conclusion and it was pleasing to see that a number of the more successful candidates achieved the maximum of three marks. Less successful candidates were able to achieve one or two marks for identifying that there were two reasons and for recognising that one and only one reason supported the intermediate conclusion.

In argument maps, it is important to note that joint reasons should be indicated by a plus sign between the reasons and also by a single line or arrow leading from the reasons to the conclusion or intermediate conclusion.

Question 2 (a):

This question was answered correctly by the overwhelming majority of candidates.

Question 2 (b):

Although almost all candidates managed to identify the claim that 'Paris is a beautiful city' as an opinion, it proved more challenging to supply an appropriate explanation. Examiners accepted a wide range of responses, but some answers could not be credited because they were either vague or circular. For example, responses such as 'it's his view' or 'it's what he thinks' were not sufficiently precise to be worth a mark.

Question 3:

Candidates named a wide range of incorrect flaws, such as 'ad hominem', 'slippery slope' and 'straw man'. Candidates who successfully recognised an appeal to emotion were awarded two marks for doing so, but many failed to achieve the third mark for the explanation. To achieve this third mark, candidates were expected to explain that the appeal to emotion was irrelevant to the conclusion.

As with all the appeals, the appeal to emotion is not always a weakness in an argument. The weakness occurs where the appeal is irrelevant.

Question 4 (a):

Candidates managed to identify a wide range of options for reducing the overall spending on schools. Larger class sizes and fewer teachers were options not allowed by examiners because it was felt that these options would seriously damage education, but the benefit of the doubt was given for a range of other options such as abolishing free school meals, only teaching core subjects, cutting spending on computer equipment and having fewer school trips. Some options, such as 'fewer resources', were ruled out for being too vague. Other options were not credited because they related to cutting spending in particular schools rather than cutting the overall education budget.

Question 4 (b):

Candidates achieved both marks if they explained both how the option would save money and how it would not damage education, with the latter proving more challenging than the former. Where answers to part (a) had not been allowed, candidates were able to gain some credit for their explanations in part (b).

Question 5:

This question proved challenging and it may be helpful to centres to refer to the free online support materials for further examples of this type.

The most popular wrong answer seemed to be 22, suggesting that candidates were not recognising that the cows in the overlaps should not be counted twice.

Most candidates used the Venn diagram to work out the solution but doing so was not strictly necessary. There were 22 cows in the three circles minus the four in overlaps, so 22 minus 4 equals 18.

Question 6:

Most candidates answered this question successfully with some using more working out than others.

Question 7 (a), (b) and (c):

Distinguishing between necessary and sufficient conditions has always been a challenging aspect of this specification. In this question, most candidates were successful in part (a) but found (b) and (c) more difficult.

In part (a), Jimmy does need to stand as a candidate if he is to have any chance of winning the election (it is necessary). However, this is not sufficient because simply standing as a candidate does not mean that he will certainly win.

In part (b), it is not necessary to talk to every voter, nor is doing so guaranteed to result in Jimmy winning the election (neither necessary nor sufficient).

In part (c), getting 100% of the vote would certainly be enough to win the election (it is sufficient). However, it is not necessary because a winning candidate simply needs more votes than anyone else and this may be much less than 100%.

Question 8:

This was a very simple matrix question, which was answered successfully by the overwhelming majority of candidates.

Question 9:

Those candidates who spent the time thinking about this question were generally rewarded for their efforts, although Ahmed's time of 3 hours and 45 minutes proved challenging for some. Working out the times seemed to be more difficult than correctly placing the runners.

Section B

Question 10 (a) and (b):

Candidates were asked to 'identify and explain' a weakness in the reasoning and so a developed answer was necessary to achieve 2 marks for each part of the question. A common mistake occurred where candidates speculated about who may have stolen the money or how the money was spent, rather than thinking about whether or not the money was collected in the first place.

Question 11:

This question did require candidates to discuss where the money may have gone. Some candidates failed to read the question properly and suggested who may have stolen the money. Other candidates repeated answers to Question 10, even though the question asked them to suppose that £250,000 was collected.

Question 12:

This question asked candidates to suggest what evidence might be looked for to support a given hypothesis. Successful candidates suggested looking for evidence such as receipts for church expenditure, because this evidence would support the hypothesis that no money had been stolen. Less successful candidates discussed who may have stolen the money.

Question 13 (a) and (b):

The analogy was about taking from those who do not need the money and giving to those in greater need. In particular, Rev Spoon was being compared to the government, parishioners

were being compared to wealthier taxpayers and famine relief was compared to spending on schools and hospitals. Less successful candidates often failed to understand all aspects of the analogy with quite a few candidates simply discussing the comparison between Rev Spoon and Robin Hood.

Generally, the difference was found to be easier to explain than the similarity. In part (b) candidates usually achieved a full explanation by addressing both sides of the analogy. In part (a) expansion or examples were useful.

Question 14:

This question asked candidates to identify a credibility criterion and to explain how it might apply to Mr Mansfield. Most candidates addressed his relationship with Mr Clifford and explained the bias, but many candidates incorrectly referred to this as 'vested interest'. The difference between bias and vested interest clearly requires clarification for many candidates.

Where candidates failed to identify a credibility criterion, they were able to access a mark for an appropriate explanation.

Less successful candidates named flaws.

Question 15:

There were far fewer 'wrong direction' arguments in this series, with most candidates understanding what was expected of them.

It was also notable that fewer seemed to use the additional pages at the back of the answer booklet. In order to achieve a mark in the top band, candidates should aim to write two relevant and developed reasons to support the stated conclusion and the space provided should be adequate for this task.

As always in this qualification, the quality of the reasoning is the most important factor. Examiners make a distinction between developed and undeveloped reasons. A developed reason is likely to include indicator words and it is likely to make references to the documents for the purpose of evidence and explanation. Less developed reasons are likely to invite the response, 'and so...'.

In addition to having developed reasons, more successful candidates tended to plan and structure their answers, using paragraphs for each reason.

Some candidates used counter-arguments, although this is not required by the question. Counter-arguments are only helpful if the counter-reasoning is rebutted.

Question 16:

Most candidates understood what was required by the question, although some saw this as a re-run of question 15, arguing that Rev Spoon was innocent without addressing the ethical issue.

A minority of less successful candidates only wrote about the virtues of giving money to charity, without discussing the issue of whether it could be right to steal for this purpose.

Quite a few less successful candidates repeated the analogy from Question 13, without adding any reasoning of their own. Simply repeating material from the documents is unlikely to be enough to develop a good reason.

As with Question 15, more successful candidates achieved marks in the top band because they included at least two good developed reasons and their arguments were structured carefully.

B902 Thinking and Reasoning Skills Case Study

General Comments

The paper proved assessable to all, differentiating effectively between candidates of varying ability.

It was clear that a significant majority of candidates were very familiar with the topic area from the pre-release materials and that the issue, mentioned in some reports for previous series, of lack of preparation using the documents is no longer a major problem.

Most candidates also showed good awareness of the skills contained within the specification and stronger answers made effective use of subject specific terminology. There are still some common weaknesses apparent in the application of skills (as mentioned in last summer's report) such as identification of flaws and evaluation of evidence from polls. The on-going difficulty of identifying assumptions, the missing part of the reasoning, in arguments was also clear in question 6. It is less clear why so many candidates find the application of skill 4 quite so challenging when evaluating the credibility of sources.

Once again it was apparent that further practice of the AO3 skills assessed in Section B would be useful for candidates in advance of the exam. It is encouraging to see greater clarity in the structure of candidates' arguments, but there is often a lack of development in the reasoning which means the higher mark range cannot be reached. It is important to note that many longer answers, which candidates probably see as developed arguments, cannot be credited at level 3 because they lose focus and drift into tangential reasoning which is only vaguely related to the conclusion. Clear and succinct reasoning is almost invariably more effective.

There was very little evidence of candidates running out of time on this paper and there were no rubric infringements.

Comments on Individual Questions

Section A

Question 1:

It is common for B902 to begin with a question which tests skill 1, often requiring candidates to analyse the structure of an argument from the pre-release materials and to mark up its component parts. This paper was no different, although candidates had more difficulty with the opening question than has usually been the case. Two-thirds of candidates correctly identified the first sentence as the reason. Many of the incorrect answers left out part of this sentence, usually the beginning, so the answer could not be credited as the reasoning loses its sense without the whole sentence. The conclusion indicator words asked for in part (b) proved far more straightforward, but it was the identification of the intermediate conclusion in part (c) which caused the biggest problem, with only 20% of candidates correctly underlining the whole of the second sentence. The placing of the word 'therefore' mid-way through the sentence led to a majority of candidates only marking up the second part, thus failing to look at the sentence holistically. It could be helpful for centres to use sentence and argument constructions which vary the placing of indicator words in sentences to help candidates to see that the structure of the reasoning is not dependent on the position of indicator words. As this is a much tested skill, it is important for candidates to feel confident in the marking up of different arguments.

Question 2:

The majority of candidates were able correctly to identify a rant here and distinguish it from the other alternatives offered.

Question 3:

In another test of skill 1 part (a) proved straightforward for the majority of candidates although a significant minority failed to attempt this question at all. This is the second June paper in succession where this has been the case with a question requiring some marking up. Candidates should be reminded to check they have answered every question before finishing the exam. Part (b) confirmed that candidates still find it difficult to identify some of the common flaws which are covered under skill 2 in the specification. In past papers, examples of ad hominem and slippery slope flaws have proved to be slightly easier for candidates to identify than some of the other flaws, so it was disappointing that so many chose one or other of these answers when they were given a straw man flaw. The most common incorrect answer given in part (i) was ad hominem, presumably because of the criticism of the doctors, but the best answers went on in part (ii) to justify the correct choice of straw man by explaining that this criticism distorted the original argument, thus making it easier to knock down. In any question where candidates are required to justify why they have made a choice of a particular argument component, they are advised to go back to a generic definition of that component and to place this in the context of the argument they are analysing.

Question 4:

This question differentiated well between candidates of differing abilities. The most commonly seen successful answers tended to select expertise and explain that Dr Blanke's credibility is strengthened because he is a neurologist. Many answers, however, were limited to one mark as they ignored his specialism and simply observed that his title of doctor gave him expertise or a good reputation. Worryingly, a third of the answers to this fairly straightforward credibility question were unable to gain any credit because the evidence indicated little concept of what the key credibility criteria are. All candidates should enter the exam room with full awareness of these and the 'RAVEN' mnemonic is often seen jotted as an aide memoire on the scripts of more successful candidates.

Question 5:

This was another good differentiator with most candidates able to identify the insulting use of the word 'idiot' as an example of loaded language. The best answers saw the sentence given as a rhetorical question leading Francesca to answer in a certain way. Some less successful answers came from candidates who had clearly studied loaded language as part of skill 2 but then incorrectly identified the use of 'NDE' as an example of jargon.

Question 6:

As has often been the case in the past, a question requiring candidates to identify assumptions in arguments proved to be quite challenging. It has to be accepted that level 2 students are always likely to find this the most difficult aspect of skill 1 because they are being asked to apply their reasoning skills to identify something that is not stated. It cannot be stressed too often that the correct answer to an assumptions question can never be a phrase lifted or paraphrased from the given text (as was seen in a significant number of incorrect answers).

Question 7:

This was another question which differentiated well and gave candidates the opportunity to demonstrate their familiarity with a central topic from the pre-release material whilst also giving some free rein to their imaginations. Many were able to provide two relevant points of challenge to the given claim.

Question 8:

The first two parts of the question were generally well answered. A high proportion of candidates correctly identified the structure of the argument and a large majority recognised 'because' as the reason indicator, although a small minority incorrectly circled 'so'. Part (c) proved a good discriminator and the majority of candidates were able to provide at least one reason to support the claim, with many able to develop their reasons relevantly.

Question 9:

This was another question which gave candidates the opportunity to display their knowledge of the pre-release material in conjunction with some creative thinking. It was generally well answered and most candidates provided two alternative explanations.

Question 10:

Nearly all candidates were able to identify one or two weaknesses in the evidence provided by the poll, but few gained maximum marks for this question by naming three. Many successful and unsuccessful answers focused on the sample being unrepresentative. It was good to see candidates recognising that the sample was self-selecting, but answers which suggested that it was unrepresentative because it was conducted in the USA could not be credited. As this was a fairly standard skill 5 question, it would be helpful for centres to support candidates in practising a range of approaches to evaluating evidence.

Question 11:

A full range of marks was seen in this question and often it was the difficulty of finding three patterns which prevented maximum marks from being awarded. The best answers to parts (a) to (c) found a range of patterns in the table which showed good understanding of this aspect of skill 9. Some candidates did not appear to use the table to produce their answers and a significant minority seemed not to know what a pattern was, giving answers such as 'most females felt peace' or 'only Pam saw a tunnel'. It was pleasing to see candidates demonstrating a better grasp of the difference between necessary and sufficient conditions than has sometimes been the case in the past. A majority successfully identified the necessary condition and also explained their answer. Part (e) was nearly always correctly answered and part (f) was also tackled well.

Question 12:

A significant proportion of candidates gained full marks across question 12. The most common successful approach was to provide quotations from each of the students in document 7 which clearly linked to the comment in the question stem. Some candidates were equally successful with an explanation of each student's general standpoint within the document. The most common error was to transpose the comments associated with Adil and Francesca.

Question 13:

This question was generally well answered with over a third of candidates receiving maximum marks and very few failing to gain any credit across the three parts. The best answers picked up some of the themes covered in the pre-release materials with negative effects related to loss of religious faith, reversal of positive life changes and mental health issues. It was pleasing that many candidates understood the request for more developed reasoning in part (b) and many were credited with both marks here.

Question 14:

The request for candidates to develop an argument in response to a more general claim, beyond the specific case of NDEs, was taken up with enthusiasm by many candidates. A very wide range of scenarios was given ranging from small children's belief in Father Christmas to lack of fidelity in relationships. Unfortunately, many candidates were restricted to level 2 marks because their answers were entirely driven by examples. The best answers gave explicit reasons related to these examples, but which could be applied more generally, and were able to pick up 5 or 6 marks. In a greater proportion of cases however, the reasoning remained unstated and only implicit. A significant minority of weaker responses did not move outside the theme of the documentation and focused on the example of NDEs or of finding out that religion is not true.

Question 15:

The majority of responses to this highest tariff question on the paper were bunched in the level 2 mark range, as in previous series. It was good to see some candidates using advice given in previous reports by making the structure of the reasoning more explicit. This was done in some cases by introducing each reason separately: 'firstly', 'secondly', 'finally' and by stating the conclusion very clearly. Others dealt with the three aspects of time money and resources separately in building their reasoning. Such arguments were only able to move up into the level 3 mark range however if they gave reasons which were developed and many candidates did not do this. A number of less successful answers provided lengthy expositions derived from previous questions, for instance, the inadequacies of previous experiments from question 7 or the weaknesses of evidence findings from question 10. Such answers rarely gained more than half marks because they lacked a sharp enough link to the conclusion.

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

OCR Customer Contact Centre

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

www.ocr.org.uk

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