

CCEA GCSE Agriculture and Land Use
Summer Series 2018

Chief Examiner's Report

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culture
and
land use

Foreword

This booklet outlines the performance of candidates in all aspects of CCEA's General Certificate of Secondary Education (GCSE) in Agriculture and Land Use for this series.

CCEA hopes that the Chief Examiner's and/or Principal Moderator's report(s) will be viewed as a helpful and constructive medium to further support teachers and the learning process.

This booklet forms part of the suite of support materials for the specification. Further materials are available from the specification's microsite on our website at www.ccea.org.uk.

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GCSE AGRICULTURE AND LAND USE

Chief Examiner's Report

The number of pupils completing this course has increased from 2017; there are now 23 centres involved in the qualification and the numbers are steadily increasing in both grammar and non-grammar schools.

It is pleasing to report that the papers in the Summer 2018 series provided further evidence of good quality learning and teaching of the CCEA GCSE Agriculture and Land Use course. The level of knowledge and thinking skills shown in answers, particularly the extended writing questions, was commendable throughout and highlights the enthusiasm for the specification.

The A*-C achievement levels are up slightly overall from 2017.

Exam Papers

Both papers were generally well answered, with the average marks slightly lower in both Units 1 and 2 compared to 2017. In both units there was a more demanding extended writing question which proved less accessible to some. As in previous years with the extended writing questions the candidates who did well highlighted the key words in the question and planned their extended writing question in the space before attempting an answer. Candidates should be encouraged to write down more than the required number of answers (in extended writing questions only) as many candidates gave similar answers which were not deemed different enough to be awarded separate marks. However in other list type questions several candidates listed many answers and candidates should be reminded that the first answer given in a question will be the only one which can receive credit (except in extended writing questions) even if subsequent answers are correct. Candidates cannot 'list' answers in the hope that they get a correct answer. The language used in the questions was deemed to be appropriate as most candidates attempted all questions and all candidates appeared to have enough time to complete the papers.

Assessment Unit 1: Soils, Crops and Habitats

Overall the average mark was down slightly compared to 2017.

- Q1** This question was answered well by candidates apart from a few who confused the curlew and the lapwing. Part (b) also was answered well. Part (c) wasn't answered as well as many candidates gave the incorrect answer of 'forest' or 'woodland' which was close but not an acceptable answer.
- Q2** Part (a) of the question wasn't answered well although most candidates did achieve at least 1 mark. All of Part (b) was answered very well and most candidates were able to process the data as requested. Candidates were also able to make a good attempt at describing the organic matter experiment in Part (c).
- Q3** This question was answered very well by the majority of candidates. In Part (a) candidates were able to demonstrate their knowledge of germination. In Part (b) some candidates talked about 'milk' or 'beef' as a crop and so were not given credit.
- Q4** This question was answered very well by the majority of students. In Part (a) candidates showed their extensive knowledge of pollination. In Part (d) students who mentioned 'sower' or 'seed drill' were not given credit.
- Q5** Part (a) was based on minerals and their symptoms when there was a deficiency. However many candidates failed to achieve any marks but the content was clear and

the question was unambiguous, Part b(ii) was answered well with many candidates knowing the disadvantages. Part (iii) was only answered correctly by a few candidates as many chose the correct fertiliser but could not explain their answer correctly. Part (c) was answered well.

- Q6** In Part (a)(i) 'wheat' or other cereal and vegetable crops were not given credit as they are only used for energy if they are spoiled. Part (a)(ii) was a challenging question but many candidates did well and many showed great knowledge about their chosen energy crop. Willow was the most common crop mentioned along with oil-seed rape, and silage was given credit as they can be used in a bio-digester. Some candidates went off topic and described how to grow a cereal crop which was not relevant and not an energy crop. Candidates should be reminded to focus on the points being asked for in any given question. A range of answers outside the mark scheme were accepted if they were explained well and directly related to the question topic.
- Q7** The whole question was answered well except for some candidates in Part (a) who described how to measure % species cover rather than specifically grass content. Some candidates mentioned using a 'drone' which was given credit.
- Q8** This question was the most differentiating on the paper question. However the question was answered very well by most candidates with only some misunderstanding the question.

Assessment Unit 2: Animals on the Land

The paper was well answered, although overall the average mark was down very slightly to 2017.

- Q1** It was apparent in Part (a) of this question that many candidates did not have a detailed knowledge of the female reproductive system of a sheep which is very similar to cattle and pigs. Part (b) was answered well. However Part (c) was not answered well with many candidates struggling to put the steps of embryo transfer into the correct order.
- Q2** All parts of this question were answered well except for several candidates who incorrectly thought that 'light' was required for incubation.
- Q3** Part (a) was answered well by most candidates. In Part (b) students should be encouraged to ensure their answers are sufficiently different in order to achieve all marks available.
- Q4** This question was generally well answered throughout. The majority of candidates were able to complete the calculation successfully.
- Q5** The whole question was answered well, especially Part (a)(iii), where candidates were able to demonstrate their detailed knowledge of eutrophication.
- Q6** This question was the least well answered question in the paper, probably due to the fact it was very detail specific. However some candidates were able to perform well in it.
- Q7** This 9 mark question was answered well by the majority of students; however certain candidates limited themselves to certain marking bands as they did not answer each of the separate bullet points or included incorrect material. Candidates should be reminded to always focus on the question being asked.
- Q8** Part (a) was answered well, however Parts (b) and (c) proved to be more challenging where candidates struggled to calculate the mass of silage required.
- Q9** This question proved to be the more challenging extended writing question. Several candidates gave similar symptoms of liver fluke which could not be credited as

separate marks. Candidates could not give 'impacts on the farm business' other than loss in profit.

In the extended writing questions candidates should be encouraged to include all of their 'correct' knowledge and not just 8 or 9 points as they will not be given credit for similar or overlapping answers.

Principal Moderator's Report

Assessment Unit 3: Contemporary Issues in Agriculture and Land Use (Controlled Assessment)

This year saw another submission of the controlled assessment element of the GCSE Agriculture and Land Use specification from centres. Again, as in previous years it is evident that many centres had prepared their students very well prior to submitting the controlled assessment tasks and this accounted for the majority of the task submissions being well within tolerance.

However, there is still a tendency for candidates to ignore the word limit suggested for each task, and while candidates are not penalised for being in excess of the word guidelines they should be encouraged to adhere closely to it, with an excess of 10% suggested. Nevertheless, while word counts still tend to be on the high side it was encouraging to see that many candidates made appropriate use of an appendices section to include additional material they wished to submit and this material is not included in the word count.

Teachers are again to be commended for their accuracy and consistency in their marking with the vast majority of centres accurately applying the marking criteria.

Task 1

While all topics were attempted for the Practical Investigation (Task 1), the most popular were the 'Analysis of silage with recommendations to improve silage quality' and the 'Investigation of factors affecting germination of seeds'. These were well approached and methodical with a good range of data being obtained that allowed candidates to compile tables, complete calculations and produce a range of graphs.

The silage analysis task was well approached by most candidates. However, some candidates' introductions to this topic in the planning section were protracted, lacked a clear focus, definition of silage quality and a clear establishment of a hypothesis. This reduced the marks that could be awarded for this section. Most candidates conducted an appropriate range of analyses.

Many of the candidates undertaking the seed germination task displayed an excellent understanding of experimental design and experimental protocols with some outstanding/exemplary submissions made in this task.

Again, there was generally very good agreement with the mark bands awarded to the various sections of Task 1. However there was some evidence of awarding marks on the generous side in some centres when information was clearly lacking. Discrepancies in teacher mark and moderator mark occurred in Task 1 occurred mainly in both the planning section and the analysis and conclusion section by being generously marked by the teacher. Some planning areas were weak in that candidates did not make a prediction as to what they would expect to happen and their reasoning behind this. The choice of research methods and their reasoning was often not described by candidates. In some instances, some candidates did not write in the future tense. Generally, however, centre marking was appropriate for all of the assessment criteria bands.

Task 2

For the Research Project (Task 2), the majority of centres/candidates chose the disease prevention task. A small number of candidates chose the animal welfare or the crop technology task.

It was encouraging to see that compared to the previous two years more candidates identified a particular focus as part of the larger project task title. This helped students obtain only relevant primary and secondary information which made it easier to analyse and draw conclusions from and improve performance in the task.

In some instances there tended to be 'cut and paste' in the planning sections and while sources were generally listed, candidates need to focus on the specific topic and present the information succinctly in their own words. Candidates should be encouraged to do independent and relevant research, with secondary sources referenced and correctly used. This would allow for greater individuality of work.

While appropriate Primary Data sources were well used in most cases, students must appreciate that some data supplied by a Primary Source may be of a secondary nature and therefore not appropriate for graphical presentation as students must present their own primary data in more than one graphical form. The absence of graphs from primary data limits the marks that can be awarded.

Unfortunately, some candidates only used one graphical form to present data and this limits the marks that can be awarded in the "Presentation of Findings" section.

As on previous occasions, many candidates failed to provide any justification for their research methods or an explanation of the procedures used and this reduced the marks that could be awarded.

It was obvious that the students generally engaged well with questionnaire compilation and had made an effort to produce a questionnaire to gather primary data from local farmers. It was again encouraging to see the effort that many students went to in order to obtain primary data. The quality of some of the questionnaires produced is highly commendable with excellent quality and quantity of data gathered.

The majority of centres applied the assessment criteria well to the content of the research projects with a full range of marks being awarded. The conclusion and evaluation sections are generally still the sections that cause issues for the candidates. There was a tendency for the conclusion and evaluation sections to be generously marked in some centres.

General Administration

It is encouraging to see, as requested last year, that more candidates included a contents page of their Task submissions and submitted their controlled assessment tasks in the suggested formats outlined in the specification. This greatly improves the structure of the submissions and assists with the marking and moderation of each section.

It is also encouraging to see an improvement in the labelling of tables and graphs as identified last year. This significantly improves the marks that can be awarded in this section of the tasks.

Some candidates continue to present their submissions in a power point format. These candidates, while not penalised in their marks, should be instructed to present their submissions in an appropriate written report format following the suggested structure.

In some instances it was difficult to ascertain the mark that had been awarded to a particular section of the Task and in some submissions two marks were allocated to the same section and it was difficult to know what the agreed mark was. In a few instances the comments

made by teachers on some sections did not reflect the content and the mark applied.

Many teachers provided excellent succinct annotation through the student submissions with clear justification of the mark awarded or rationale for not awarding a higher mark for each section. This is to be applauded and greatly helps in the internal standardisation and moderation process and all centres are encouraged to adopt this process. Some teachers provided a Summary Sheet of marks for each Task with a breakdown for each section of each Task provided along with the combined Tasks total and evidence of internal standardisation. This is to be commended and all centres are encouraged to adopt this approach.

Unfortunately, some centres still do not provide clear evidence of internal standardisation. This is a CCEA requirement and should be promptly addressed.

In general, the assessment criteria have been applied appropriately by most centres and the candidates have engaged well with the Tasks.

Contact details

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