

GCE Nutrition and Food Science

A2 2 Research Project - Subject Guidance for Summer 2021-22

Teacher and Student Guidance for 2021/22 only

Teacher / Student Guidance – Summer 2022 only

FOREWORD

On 17 May 2021 the Education Minister, Peter Weir MLA, announced a return to public examinations for the 2021/22 academic year, along with significant reductions in the assessment requirements across a range of CCEA qualifications.

In several subjects at both AS and A Level, he announced that internal assessment tasks would be reduced rather than a unit being omitted. This guidance document sets out these changes to GCE Nutrition and Food Science – A22 Research Project for 2021/22 emanating from this decision.

The total marks available for this task will be 48. The unit will continue to carry a weighting of 30% of A Level.

In order to facilitate a reduction in the scale of the **A22 Research Project** without compromising the skills to be assessed changes have become necessary.

- Due to the current public health situation it is no longer feasible to plan and carry out a primary investigation.
- The overall word count has been reduced to 1,650 words and the focus of the research will be much narrower.
- Skills such as analysis and evaluation, usually assessed in the Discussion of Results are now incorporated into the critical literature review.
- Candidates are required to write an analysis of the selected literature, evaluating in their own words the authors' views, providing arguments both in support of and against the opinions of the authors.

Task Requirements for Summer 2022 - Unit A2 2: Research Project

Students complete a **1,650-word research-based project**, without a primary research, but critically reviewing secondary sources.

Content	Marks
Introduction (350 words) Stating a rationale and aim for the chosen research	12
Literature Review (1000 words) Critically reviewing and clearly referencing the information gained from secondary sources	24
Conclusions and Recommendations (300 words) Reviewing the original aim Drawing together the key findings from secondary sources Making recommendations for future research/developments on the topic	8
Presentation of the Research Project	4
Total marks	48

The detailed Assessment Criteria for A2 2: Research Project can be found in Appendix 1.

Planning the research project

Planning and time management

It takes time to complete a good piece of research. It is a common mistake to underestimate how long it will take to carry out secondary research to produce a report of 1650 words.

Developing the working title

Begin by identifying an area of study which appeals to you. It could be an area that interests you, drawn from the full range of topics available in both AS and A2. Check the proposed area of study matches the course specification. It needs to be very focused. If you have several ideas, look at current research available and talk to your teacher to help you decide. Read around the subject area as this will give you an overview of what research has been carried out in this area.

Avoid vague titles such as *'Food Waste'*. You need to have a more clearly defined focus, for example, *'A Review of Potential Factors causing Consumer Food Waste'*. You may find it easier to formulate the title by writing it as a question. This can help to ensure you adopt an inquisitive approach to your review. For example, *'Veterinary medicines – a cause for consumer concern?'*

Developing the aim

Writing the aim helps to focus the direction of your work. An aim is a statement which identifies what the study hopes to achieve.

For example:

- 'To determine the potential factors influencing consumer food waste in the home'
- 'Concerns regarding veterinary medicine' is too broad while 'Concerns regarding antibiotic use in animals and their possible effects on human health' is more focussed

An **aim** generally begins with a verb, for example:

- To review ...
- To study ...
- To assess ...
- To ascertain ...
- To establish ...
- To determine ...

Drafting the introduction

The introduction is a brief explanation of the rationale for the chosen research area. It should:

- provide a background to the study, e.g., statistical evidence, current trends or changes to government legislation, to place the study in its context;
- provide direction for the research; and
- include well-argued reasons for your study.

Literature Review

Research involves reading what other people e.g., researchers, government reports, and agencies have written about your chosen research area. You will need to provide evidence that you have read a wide range of relevant literature and that you have a sound understanding of the current state of knowledge on the subject.

Produce a critical review:

- Challenge what you are reading, for example, the sample size of a study, the methodology employed, the validity and reliability of the findings;
- Consider the date of the material you are reading as sources of information should be current;
- Examine the sources critically before deciding to use them; be aware of any bias, or possible slant which affects the way material is presented and ask yourself are you able to trust the author's judgements;
- Compare and contrast the literature reviewed, comment on the level of similarity or difference in findings; and
- Apply your own thinking and express your own opinion, do not be afraid to agree or disagree with the literature reviewed.

You must select, organise and produce a review of your findings in a succinct, relevant, and coherent manner. It is important to keep your original aim in mind. Remember to record all the reference details as you will need these for a bibliography.

Source material or literature you may wish to use at this stage include: on-line resources, books, journal articles, key documents such as government reports and publicity materials from organisations.

Some issues that you should bear in mind include:

- avoid becoming over dependent on one form of source material / literature; use a range of sources to demonstrate a good understanding of existing research in your chosen field of study; and
- reference is required in the text whenever you refer to the work of another author; further guidance on referencing can be found in Appendix 2.

Writing up the report

Presenting the report

- The word processed report should be written in the third person and passive voice. For example, statements such as 'In the opinion of the author ...', 'It cannot be assured that ...', 'Taking account of the findings from the review' should be used.
- The text should be on one side A4 paper only.
- The text should be in font size 12 and the pages numbered.
- The word count must be stated for each section.
- The report should be submitted in a securely bound A4 folder.
- Ring binders or poly-pockets, because of their bulk are not an acceptable form of binding.
- The word limit for the report is **1650 words**, not including in text references and bibliography. A tolerance of + or – 10% will be accepted.
- 4 marks will be accredited for the quality of written communication, appropriate style of writing, appropriate vocabulary, adherence to word limit, accurate referencing and the inclusion of an accurate Harvard style bibliography.

The following guidance is provided to help structure the report and achieve the **1650-word limit**.

The headings to be used for structuring the report are:

- title;
- introduction (approx. **350 words**);
- literature review (approx. **1000 words**);
- conclusions and recommendations (approx. **300 words**); and
- bibliography.

Title

The title should be focused and clearly identify the precise nature of the research undertaken. It should be similar to the overall aim.

Introduction

This is where you provide a rationale for the chosen study. The aim should be clearly stated at the end of this section.

Literature Review

This should be a clearly referenced critical review of the information gained from source materials / literature.

Conclusions and Recommendations

This section should summarise the main conclusions of the research and refer back to the original aim. These should be accurate and clearly expressed. Only conclusions that can justifiably be drawn from the review should be made.

You should recommend possible future research and development on the topic. Any suggestions you make for further research should be relevant to the study carried out so far and be realistic.

Bibliography

This is a list of all the sources used for information. This should include any text which you have looked at - the extent to which they have been used is not important. Even if you have only looked at a text for ideas it should be listed. The bibliography should be written using Harvard style which is explained in Appendix 3. Alternatively, a bibliography can be generated automatically by using the Microsoft 'Reference' tab.

Appendix 1 - Unit A2 2: Research Project Assessment Criteria for Summer 2022

Unit A2 2: Research Project Assessment Criteria for Summer 2022

Assessment Objectives	Mark Band 1	Mark Range	Mark Band 2	Mark Range	Mark Band 3	Mark Range	Mark Band 4	Mark Range
	<p>Very basic and limited</p> <p>The candidate:</p> <ul style="list-style-type: none"> • makes only a limited attempt to select and use an appropriate form and style of writing; • organises the material in a way that lacks clarity and coherence; • makes little use of specialist vocabulary; and • uses presentation, spelling, punctuation and grammar that may not make the intended meaning clear. 		<p>Minimally competent to adequate</p> <p>The candidate:</p> <ul style="list-style-type: none"> • makes a reasonable attempt to select and use an appropriate form and style of writing; • organises relevant material with some clarity and coherence; • makes some use of specialist vocabulary; and • uses presentation, spelling, punctuation and grammar sufficiently competently to make meaning evident. 		<p>Competent</p> <p>The candidate:</p> <ul style="list-style-type: none"> • successfully selects and uses an appropriate form and style of writing; • organises relevant material with a high degree of clarity and coherence; • uses appropriate specialist vocabulary; and • uses presentation, spelling, punctuation and grammar of a sufficiently high standard to make meaning clear. 		<p>Highly competent</p> <p>The candidate:</p> <ul style="list-style-type: none"> • successfully selects and uses the most appropriate form and style of writing; • organises relevant material succinctly and displays the highest degree of clarity and coherence; • uses appropriate specialist vocabulary extensively and accurately; and • uses presentation, spelling, punctuation and grammar of the highest standard and ensures that meaning is absolutely clear. 	

Appendix 1 - Unit A2 2: Research Project Assessment Criteria for Summer 2022

Assessment Objectives	Mark Band 1	Mark Range	Mark Band 2	Mark Range	Mark Band 3	Mark Range	Mark Band 4	Mark Range
	Candidates may require support and guidance to produce:		Candidates may require guidance to produce:		Candidates may only require little guidance to produce:		Candidates work independently to produce:	
Introduction AO1 AO2 AO3	<ul style="list-style-type: none"> a basic introduction, including a limited rationale for the research area with limited engagement and aim 	1–3	<ul style="list-style-type: none"> an adequate introduction, including a rationale for the research area with adequate engagement and aim 	4–6	<ul style="list-style-type: none"> a competent introduction, including a very well-argued rationale for the chosen research area with competent engagement and aim 	7–9	<ul style="list-style-type: none"> a sound introduction, including a very well-argued rationale for the research area with highly competent engagement and aim 	10–12
Literature Review AO1 AO2 AO3	<ul style="list-style-type: none"> a literature review, with limited relevance to the research aim, using limited or no referencing 	1–6	<ul style="list-style-type: none"> an adequate literature review, with some relevance to the research aim, using mostly relevant sources with some referencing 	7–12	<ul style="list-style-type: none"> a competent literature review, with a clear focus on the research aim, using relevant sources that are accurately referenced 	13–18	<ul style="list-style-type: none"> a sound, well-researched, clearly referenced literary review, with a consistent focus on the research aim, using relevant sources that are accurately referenced 	19–24
Conclusions and recommendations AO1 AO2 AO3	<ul style="list-style-type: none"> basic conclusions based on a limited review of the research aim and basic recommendations for future research on the topic 	1-2	<ul style="list-style-type: none"> adequate conclusions based on an adequate review of the research aim and adequate recommendations for future research on the topic 	3-4	<ul style="list-style-type: none"> sound conclusions based on a competent review of the research aim and clear recommendations for future research on the topic 	5-6	<ul style="list-style-type: none"> detailed conclusions based on a comprehensive review of the research aim and sound recommendations for future research on the topic 	7-8

Appendix 1 - Unit A2 2: Research Project Assessment Criteria for Summer 2022

Assessment Objectives	Mark Band 1	Mark Range	Mark Band 2	Mark Range	Mark Band 3	Mark Range	Mark Band 4	Mark Range
	Candidates may require support and guidance to produce:		Candidates may require guidance to produce:		Candidates may only require little guidance to produce:		Candidates work independently to produce:	
Presentation of the Research Project AO1 AO2 AO3	basic quality of written communication, including limited use of an appropriate form and style of writing, makes limited use of appropriate vocabulary, little or no adherence to the word limit, some references acknowledged and the bibliography is basic or missing	1	adequate quality of written communication, including reasonable use of an appropriate form and style of writing, some use of appropriate vocabulary, adherence to the word limit for at least one section, some references correctly acknowledged and the inclusion of a reasonably accurate bibliography	2	competent quality of written communication, including the competent use of an appropriate form and style of writing, wide use of appropriate vocabulary, adherence to the word limit for at least two sections, most references correctly acknowledged and the inclusion of a mostly accurate bibliography	3	highly competent quality of written communication, including the highly competent use of an appropriate form and style of writing, extensive use of appropriate vocabulary, adherence to the word limit for all sections, all references correctly acknowledged and the inclusion of an accurate bibliography	4
Total marks available								48

Appendix 2 - The use of references in written work

A reference is required in the text whenever you refer to the work of another author. There are three major reasons for using references.

- 1 It is a mark of intellectual honesty. You must not claim other research as your own.
- 2 It is a means of defence; any errors in what is being said revert to the original author and not to yourself.
- 3 It provides the reader with the means of consulting the original work from which the thoughts or findings emanate.

There are a variety of methods of referencing literature for assignments. You should use the Harvard referencing system for all coursework. This is also known as the 'Author Date' system and is used in many journals. The one big advantage of this system is convenience for the author because as references are unnumbered they can easily be deleted or added.

The details of all references used in your report should appear in the bibliography. Examples of how to use the Harvard referencing system can be found in many textbooks. You will save yourself much time and effort if you keep a record of the details of all the references you have used at the time when you read and make notes etc.

Writing references in the body of your text

In the body of the text, at the point where you wish to make the reference, put the author name(s) and the date of publication in brackets, e.g. (Duffy, 2006). If there are two authors, give the surnames of each, e.g. (Hetherington and Maguire, 2008). If there are three or more authors, give the first author's surname and use the "et al" for the others, e.g. (Henderson et al, 2009). Where the name of the author appears as part of the sentence, give only the date of the publication in brackets, e.g. Berry (2014) reports that

If there is more than one reference by the same author in a particular year then use a letter, e.g. Kelly (2012b). Where a number of authors are referred to in relation to one point, list them chronologically, e.g. Elliot (2008), Wilson (2013), Middleton (2013) agreed that the mental health of adolescents in Northern Ireland has been influenced by exposure to violence.

When referring to an online source use the following format:

- identify the author of the website (person, organisation or company)
- include the date of publication

Never insert the URL (web address) in the body of the text.

e.g. Tesco reported that they were continuing to focus their efforts on serving their customers a little better every day (Tesco, 2015).

Quotations

If you present a direct quote, that is, the use of exactly the same words as the author in your text then you must:

- use double quotation marks; and
- give the author, year and page number(s) in brackets at the end of the quote, e.g. “consumption of breakfast cereal has been positively related to calcium intakes in girls” (Crawley, 2013 p.205).

Appendix 3 - Presenting a bibliography

The bibliography must be at the end of your work, but before any appendices. Always give it a clear heading and make sure you present a list of all the references which have appeared in your text. The publications should be listed in alphabetical order according to the authors' surnames. Books and reference journals should not be subdivided in your list.

Listing a reference to a book

Use the following format:

Author(s) Surname(s), INITIALS. (year of publication) *Title of book*. Edition. Place of publication: Publisher.

e.g. Garthwaite, K (2016) *Hunger Pains. Life inside fordbank Britain*

Academic and Professional Reference

When listing an article from a journal use the following format:

Author(s) Surname(s), Initials. (year) Title of article. *Title of Journal*, volume number, page number(s).

e.g. Calder, P.C. (2017) *Omega-3; The good oil* *Nutrition Bulletin*, 42, 132-140

Web Links

When referencing a web page with an author use the following format:

Author's Surname, INITIALS, Year. *Title*. Edition (if not the first) Place of publication: Publisher. Available from: URL [Accessed Date].

e.g. Black, S. (2012) *Book title*. London: Pan. Available from: www.websiteaddresshere.org.uk/information [Accessed 2 February 2016]

When referencing a web page with an organisation as author use the following format:

Name of organisation (Year of publication) Title of web page. Place of publication: Publisher. Available from: URL [Accessed Date].

e.g. British Nutrition Foundation (2014) *8 Healthy eating tips*. London: British Nutrition Foundation. Available from: www.nutrition.org.uk/healthyliving/healthyeating/8tips.html [Accessed 2 February 2016].

Listing articles from newspapers and magazines

These articles can be referenced using the following format:

Author's Surname, INITIALS. (or Newspaper Title) (Year of publication) Title of article. *Title of Newspaper*, day and month, page number(s).

e.g. Highfield, R. (2012) Great brains fight for your mind. *Daily Telegraph*, 16 June, 3.

