VCE FOOD STUDIES

UNIT 4

Outcome 1: Explain a range of food systems issues, respond to a selected debate with analysis of problems and proposals for future solutions, apply questions of sustainability and ethics to the selected food issue and develop and create a food repertoire that reflects personal food values and goals.

Summary of the task: A Written Report

Length: 4 Weeks (research) + One double period (Write up under SAC conditions; 1 x A4 notes sheet)

Description: Content includes a selected food-related topic, explanation of concerns related to environment, ethics and/or equity, analysis of work being done to solve problems and support solutions, and a conclusion outlining major findings and suggested set of practical guidelines for food consumers.

ENVIRONMENTAL SUSTAINABILITY

FOOD ETHICS

SOCIAL EQUITY

"When it comes to owning the seed for collecting royalties, the GMO companies say, 'It's mine.' But when it comes to contamination, cross-pollination, health problems, the response is 'we're not liable.'"

—Vandana Shiva

"We are the guardians of creation."

— Pope Francis

"The wonderful thing about food is you get three votes a day. Every one of them has the potential to change the world."

— Michael Pollan

1 in 7 PEOPLE are HUNGRY

1/3 of FOOD is WASTED

Were the walls of our meat industry to become transparent, literally or even figuratively, we would not long continue to raise, kill, and eat animals the way we do.

— Michael Pollan

AZ QUOTES
You have 4 weeks to complete the task.

- Week 3: Selection of the topic and development of the research question
- Week 4: Wide research
- Week 5: More narrow and specific research and preparation of one A4 page of summary notes
- Week 6: Identify missing gaps and completing summary notes page. **Summary Notes DUE.**
- Week 7: Assessment: Writing the analysis of the research and conclusion (under test conditions) in approximately 90 minutes.

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<tr>
<th>Week</th>
<th>Monday</th>
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<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Weekend</th>
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<td>Wk4</td>
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<td>Summary Notes Due</td>
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<td>Wk6</td>
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<td>SAC Due</td>
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<td>Wk7</td>
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**TASK CHECKLIST**

- I understand the task and I know the due date.
- I have looked at the example provided.
- I have completed a **brainstorm** and browsed for topics – listing my top 3 topics.
- **Background research** completed and chosen one topic.
- **Final research question** written.
- I have recorded advice from the Library and my teacher on where to find information on my topic.
- I understand how to take effectively notes.

I have completed the ‘**Finding credible information task**’ and I understand what a **credible source** is.
I have completed **notes and source analysis** and authenticated for:
- Part 1
- Part 2
- Part 3
- Part 4
- **Points of view** have been identified and recorded
- **Summary notes** are ready for the SAC
- **Reference list** is completed
OVERVIEW OF THE TASK

Choosing the topic: select a food related topic linked to environmental sustainability, food ethics and/or social equity

An explanation of why the topic is of interest

Development of a research or focus question

Identification of credible sources

Research into a range of areas relating to your research or focus question

Writing up the report: Analysis of causes, concerns or consequences and/or what is to be done

Conclusion: Outline the major findings in relation to environmental sustainability OR food ethics and/or social equity

Develop a set of practical guidelines for food consumers
WHAT YOUR REPORT WILL INCLUDE
You will be researching and collecting notes on these FOUR parts:

| Part 1: An explanation of concerns related to the food issue in connection to the environment, ethics or social equity. |
| What is the background information relating to your topic: |
| • What is the food issue? |
| • How does the issue connect with environmental sustainability, ethics or food equity? |
| • Where is the issue occurring in the world? |
| • When did this issue begin? |
| • What are the key causes of the issue? |
| • Generally speaking, what are the different perspectives or points of view on the issue? |
| • What impact is it having? |

CASE STUDY: Identify one specific example that involves your food issue. The remaining questions will apply to your case study.

| Part 2: Overview of the case study |
| • Where is the case study located? |
| • Who is involved? |
| • When did this specific issue begin? |
| • What are the key causes of the issue? |
| • Outline the different perspectives or points of view on the issue. |
| • What is the specific impact for the stakeholders and / or environment involved in your case study? |
| • Why is the issue occurring in this example? |

| Part 3: An analysis of the work being completed to solve the problem and support solutions. |
| • Who is working to find or provide a solution to the problem? |
| • What strategies or work has been done so far to address the problem? |
| • What impact has the work had so far? |
| • Work could be completed by: |
|   • Government regulations and departments |
|   • The food industry (Associations, Federations, etc.) |
|   • Organisations (Non-Government; Not-For-Profit; Businesses) |
|   • Farmers / individuals |

| Part 4: Conclusion of your major findings and your suggested set of practical guidelines for food consumers. |
| • What needs to be done to solve the problem and support a solution? |
| • Include a set of practical and achievable guidelines for food consumers. |
| • Are there any solutions that are better than others? Explain why. |
| • Who is the best group to be involved and what part should they play? |
| • Why is this a good solution? |
| • What needs further research? Make some recommendations for further research. |
CHOOSING A TOPIC

You chose the topic to investigate and design a research question to guide your research, however, there are two areas your topic must relate to.

Firstly, your topic must be related to a food system: A food system refers to the production, processing, transport and consumption of food.

Secondly, your topic must fall into one or more of the following areas:

- **Environmental Sustainability** – Ensuring that parts of the food system maintain a healthy environment for future generations.
- **Food Ethics** – Issues around what is considered ‘right’ and ‘wrong’ in a food system.
- **Social Equity** – Concerns the fair distribution and access of resources concerned with food related topics and people.

**Brainstorming for a topic ... think about ...**

- Controversial topics in the food industry
- What you are interested in

The following are a few examples of broad appropriate topics: (note some topics fit into more than one area)

<table>
<thead>
<tr>
<th>ENVIRONMENTAL SUSTAINABILITY</th>
<th>FOOD ETHICS</th>
<th>SOCIAL EQUITY</th>
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</thead>
<tbody>
<tr>
<td>• Food packaging</td>
<td>• Fair trade</td>
<td>• Table Banks</td>
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<tr>
<td>• Food transport</td>
<td>• Treatment of animals</td>
<td>• Energy Supply</td>
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<td>• Food wastage</td>
<td>• Harmful foods – junk food</td>
<td>• Working Conditions</td>
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<tr>
<td>• Use of chemicals such as</td>
<td></td>
<td>• Equity in food access and</td>
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<td>fertilisers and pesticides</td>
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<td>distribution</td>
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<td>• Biosecurity</td>
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<td>• Genetic Modification Crops</td>
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<tr>
<td>• Water usage</td>
<td></td>
<td>and Animals</td>
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<td>• Low Impact Farming</td>
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<td>• Organic Farming</td>
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<td>• Biodiversity</td>
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**Example: Improved equity in food access and distribution**

- How can small farmers in developing countries work to feed their own families and communities (instead of working to feed livestock being bred for meat)?
- How can we assist Australians in remote communities to get better access to fresh food?

**Example: Food transport**

- Do food miles matter?
- Food: the less it travels, the more likely it is fresh, tasty and diverse?

**Example: Technological Solutions**

- Is lab-grown (or 3D printed) food a solution to food insecurity?
- Can genetic modification of food crops ensure global food security?

BRAINSTORM YOUR TOPIC BELOW

- Spend 2 mins adding what you already know and would like to investigate.
- Next 20 mins browsing for ideas. Add ideas as you go. Include case studies or specific examples of the food issue in parts of the world that you come across.

Brainstorm Rules:
- Don’t judge your ideas
- Anything goes
- Set a goal – E.g. 10 ideas in 2 mins.

Next: Rank and sort you ideas

SELECT AND RANK THREE TOPICS THAT INTEREST YOU TO BEGIN WITH:

1. Bees + Pollination
2. Bees + Colony Collapse Disorder
3. Unsustainable Fishing Practices

You must have your topic area checked and signed off as part of the authentication process by your teacher.

TEACHER AUTHENTICATION: Begin to develop a focus area

TEACHER INITIALS: ___________________________    DATE: ___________________________
BACKGROUND RESEARCH

Aim:

- Identify ONE topic that interests you and how this relates to a food system. Your topic should be specific and enable the development of a research question and have a case study available.
- There is enough information available on the topic
- You are genuinely interested in the topic

Select the topic that interests you the most after 10 mins of searching if you are happy with the topic.

If you come across information you would like to use, include this on the next page.

Places to check if information is available:


1. Our School Databases

CCB Libguides > Online Resources > (Select the databases below)
- Basic background facts: Encyclopedia Britannica "food issues"
- Background Facts AND For and Against Arguments: Australia / New Zealand Points of View Reference Centre.
- News articles and Opinion Pieces: Australia / New Zealand Reference Centre.
- All types of Information: Global Issues in Context

2. General Google Searching

- "______" 
- .edu
- .gov
- .org
- .au
- .pdf
- “action plan” OR strategy OR guidelines OR recommendations

3. Library books

4. More Specific Searching

- Government documents (Parliamentary Inquiry, report)
- Associations websites, (look for these sections: news, education, publications, etc).
- Non-government, Not-For-Profit Organisations
- Youtube – documentaries.
- “research paper”
# BACKGROUND RESEARCH

**Overview of key ideas or questions to be answered** (What, Where, Who, When, Why) KEY DATES, NAMES, IDEAS, EVENTS WHICH YOU WOULD NEED TO INVESTIGATE FURTHER. Also include observations that you are curious about. General questions that you think of.

<table>
<thead>
<tr>
<th>Research Conducted</th>
<th>2 large/recent research papers (Science Journal)</th>
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<tr>
<td></td>
<td>- NNI has a -ve effect</td>
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<tr>
<td></td>
<td>- BUT results are mixed + inconclusive</td>
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<td></td>
<td>the EU imposes a temp. moratorium (2013)</td>
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<td></td>
<td>- 3 NNI's</td>
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<td>Aust + NZ - no bans</td>
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Research (York Uni, Canada)  
- chronic exposure affects health.  
- small doses - foraging less effect  
- immune syst. affected  
- reduced hygienic behavior.

Research must be conducted in each country  
- USA big -ve effect  
- Germany - limited effect (more foraging variety).

Need to understand impact if NNI was removed.

NNI replaced toxic organophosphorus + carbamate pesticides

Key Ideas:  
- International problem.
- Results unclear.
Map the stakeholders:

- Farmers
  - Want to use the pesticide
  - Crop productivity
- Associations
- Bee keepers
  - Costs of bee deaths + Associations?
- Scientists + Environmentalists
  - Mostly there is a problem but diff in diff locations.
  - Research papers?
- Gov.
  - What are they doing?
  - Reports?

Final topic focus: Dropping/declining bee numbers
Food system: Food production
Food related area: Sustainability
Possible case studies: First, but more info in USA.
  - NZ a possibility.

Why I have chosen this topic:
I have an interest in ecosystems & how everything is connected; bees are unpaid & crucial to our survival.

TEACHER AUTHENTICATION:

TEACHER INITIALS:   DATE:
RESEARCH QUESTION

Aim: To craft a workable research question that will guide the investigation.

Read the following worksheet: http://bit.ly/2vpWG5q

For this task good research questions need to have the following qualities:

- 
- 

For this task, your research question can be simple or complex. However, it must contain a topic focus. *For example:*

Does genetic modification of plants ensure a stable food supply for the future?

*Underline the topic focus*

Food System: **primary food production**

Food Related Area: **environmental sustainability**

**RESEARCH QUESTION TIPS**

- Try formulating a research question by completing the following in one sentence: *"I want information on..."*

- Also try to incorporate your food system and food related area into your question if you can.

- **OPEN & CLOSED QUESTIONS:** Test whether your question is an open or closed question.
  
  - Open Questions: Require a detailed response.
  
  - Closed Questions: Can be answered by a ‘yes’ or ‘no’ response.

  - If you find your question is a closed one, modify it to be open, or see if you can add a command term to the end that requires further information and detail.

  *E.g. Do food miles matter? (closed) Would become: Do food miles matter? Discuss. (open)*

- **ASSUMPTIONS:** Ensure your question doesn’t contain an assumption or bias that can stop you from being neutral or objective in the investigation. Which of the following research questions have an assumption?

  - How does genetic modification of plants ensure a stable food supply for the future?
  
  - Does genetic modification of plants ensure a stable food supply for the future?

*The difference is very subtle but important.*
Here are some examples from before:

Example: Improved equity in food access and distribution

- How can small farmers in developing countries work to feed their own families and communities (instead of working to feed livestock being bred for meat)?
- How can we assist Australians in remote communities to get better access to fresh food?

Example: Technological Solutions

- Is lab-grown (or 3D printed) food a solution to food insecurity?
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Draft research questions:

1. Are pesticides a sustainability threat for honey bees and bee pollination generally? Why? Why not? (closed question)

2. Are our bees under threat from pesticides? Is colony collapse disorder a prob. for Aust.?

3. What effects do pesticides have on bees & subsequently their role in food production?

My final research question:

What's all the buzz about? Are some pesticides a threat to sustainable food production concerning bee pollination?

Food System: Food Production
Food Related Area: Sustainability

TEACHER AUTHENTICATION: Final Research Question

TEACHER INITIALS: __________________________ DATE: __________________________

Summarise what teacher advice have you been given for this research question:

What effects do pesticides have on bees and subsequently their role in sustainable food production?