

# Acknowledgement of Country



I acknowledge and pay respect to the ancestors and descendants of the Lands upon which we work, meet and study.

I am mindful that within and without the buildings, the Land always was and always will be Aboriginal Land.

# Co-designing an engaging learning environment

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# FOOD5003 Food Systems



**Inquiry-based learning is more than asking a student what he or she wants to know. It's about triggering curiosity. And activating a student's curiosity is, I would argue, a far more important and complex goal than mere information delivery.**

# Inquiry approach

There are many benefits to adopting an inquiry based teaching approach.

## Creates Ownership

- Students curiously explore questions on their own, reinforcing learning autonomy.

## Improve student engagement

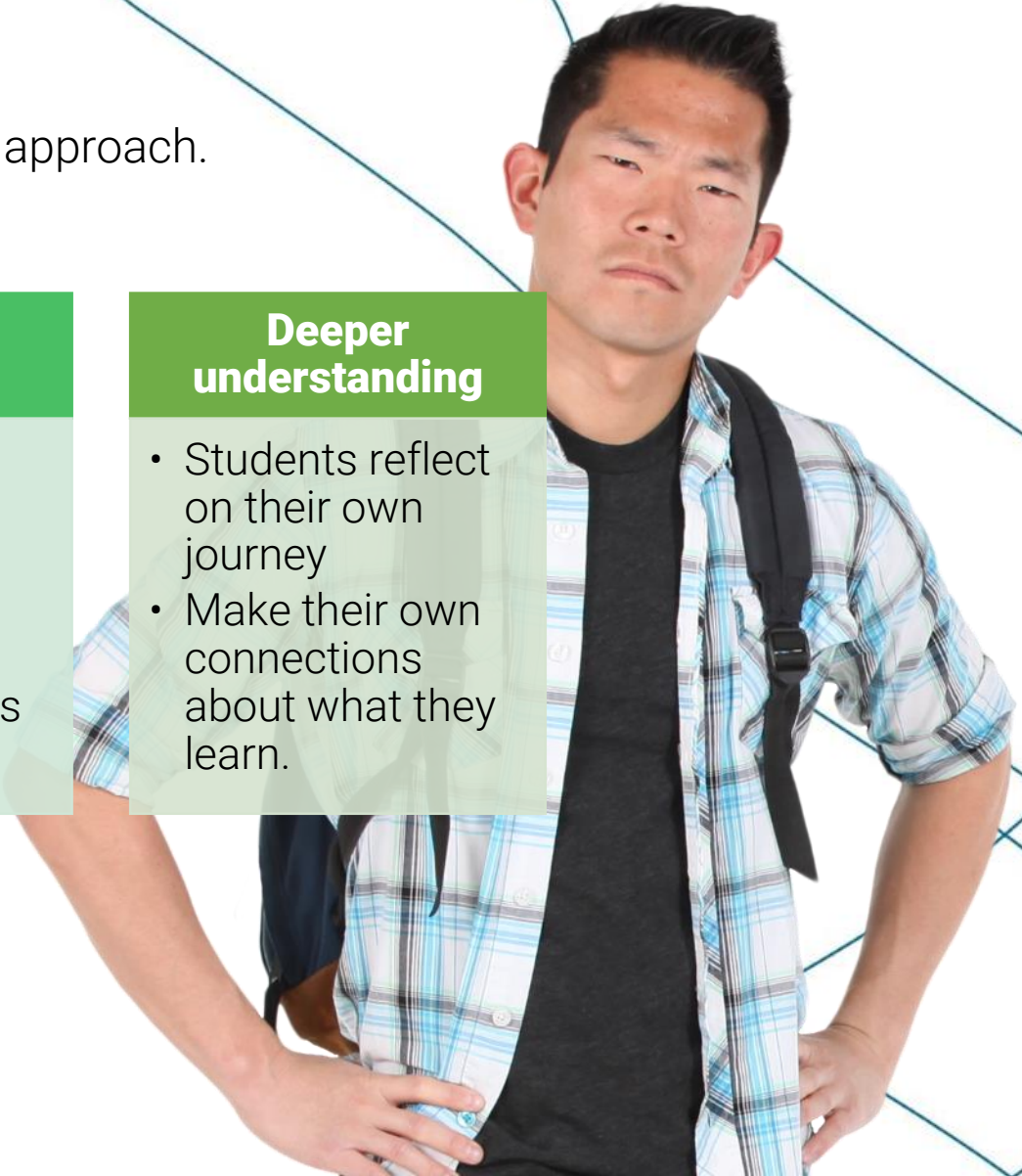
- Encourages students to immerse themselves into the learning process

## Personalised

- Content uses different forms (text, video, audio, etc.)
- Adapts to individual needs

## Deeper understanding

- Students reflect on their own journey
- Make their own connections about what they learn.





# Starting Point

Inquiry template was used to design the overall unit.



We started by answering the following questions:

- What are the **Learning Outcomes**?
- What are the **Essential Questions** about the unit to focus instruction
- What **evidence** will there be? (assessment?)

MNG82002 Organic Food Systems Unit Plan Template	
Unit Development Team	Adele, Jo, Chris and Matthew
Level of Learning	Intermediate
Unit Learning Outcomes	<ol style="list-style-type: none"> <li>1. Explain key concepts in food systems and systems thinking</li> <li>2. Explain the interconnections between social, economic and environmental elements in a food system</li> <li>3. Describe the debate about the economics of sustainable food systems</li> <li>4. Apply the principles of Hazard Analysis; Critical Control Points (HACCP) to organic food supply chains pre- and post-farm gate</li> <li>5. Work collaboratively to analyse and synthesise a range of complementary approaches related to food systems, harnessing systems thinking</li> </ol>
 <b>Questions to focus instruction</b>	
Essential Question (s)	<p><i>What is your relationship to food?</i>  <i>What are the different components of a food system and how do they relate?</i>  <i>What are the desired outcomes for a healthy community?</i>  <i>Who will feed the world?</i>  <i>How can we feed the world in ways that are fair, sustainable and healthy?</i></p>
 <b>Evidence of understanding</b>	
Summative Assessment Tasks	<p><i>Critical reflection on a food story (Discussion post assignment 1)</i>  <i>Presentation on a case study of a food systems problem (individual), collaboration on a policy intervention and reflection on the processes of collaboration.</i></p>
Formative Assessment tasks	<p><i>Discussion Board post provides grounds for group work – collegial feedback, understanding of disciplinary strengths and arguments. Teacher will also model contributing to the DB and engagement with others.</i></p> <p><i>The first presentation is incorporated into the second presentation and return to critical reflection on group processes and what has been learned.</i></p> <p><i>Activities in the modules will include:</i></p> <ul style="list-style-type: none"> <li>• <i>Building Food Diagrams (see Presentation 1 and 2, LO 1-3) and Organic Food Supply Chains (LO4)</i></li> <li>• <i>Videos (examine the story behind (their) food, evaluate the effect of food choices, consider ways food can nourish individuals, communities, critique actions to address food-related issues at home, in the community, globally) (LO 1-3, 5)</i></li> <li>• <i>Discussion questions for blackboard (LO 1-5) to build connections (how is our food linked to people and places around the globe) understand relationship between human and planet health (since 1950 about 90% of big fish in oceans have been lost what does this mean for people/ocean health?) debate economic issues of sustainable food systems (what does food security mean? How is this different from food sovereignty? What are the advantages/disadvantages of eating local foods, for</i></li> </ul>

# Module Design

- What are the main ideas, key concepts, issues or dilemmas that each module will cover?
- What will students **understand** in this module? (worth knowing, important, essential?)
- What **guiding question** will engage students with this module?

MODULE 1: Food Systems: Local to global			
Learning Outcome(s):			
Main Ideas	This module will introduce students to Food Systems and systems theory and application of this to the individual, community, region and world to demonstrate how local and global food systems are interconnected. It will also provide a range of sources that students will be able to use for independent research (peer reviewed articles, youtube, linkedin learning, podcasts, popular media).		
Key Concepts	Systems thinking, food systems, interdisciplinarity, sustainability		
Issues or Dilemmas	The industrial food chain is cheap but comes at a cost to the environment, farmers, eaters. A local area may not produce all the food required for a healthy diet, food security, issues of access and equity, food sovereignty (accessing food that is also culturally appropriate) can all be used to complicate the food system, taking into account human and environmental interactions and the economic impact. Simple market driven models may result in consumption of low quality foods.		
 <b>What will students understand?</b>			
Worth Knowing	<i>What is our role in the food system?</i>		
Important	<i>The first assignment requires a food story. In order for students to identify the broader context in which their food sits and why that is important, they will need to be able to identify different elements in the food system and understand scale (geography, time). The key skills from this module would allow them to employ in the future:</i> Food mapping Narrative (food stories) Systems thinking Critical reflection Critical thinking		
Essential	<i>How interconnected the food system is and the importance of interdisciplinary thinking.</i>		
 <b>Inquiry Design</b>			
Guiding Question	<i>How are local and global food systems interconnected?</i>		
	<b>Supporting Question 1</b>	<b>Supporting Question 2</b>	<b>Supporting Question 3</b>
	Why study food systems?	<i>How is your food linked to people and places around the globe?</i>	What creates a regional food culture?
	<b>Formative Task/ Learning activity</b>	<b>FormativeTask/ Learning activity</b>	<b>Formative Task/ Learning activity</b>
	Short narrative that explore changes – productivity, human health, disease,	What's the right word for someone who eats? Are you an eater or consumer? What did you have for dinner?	Expanding on dinner – what historical, geographical etc. shaped your dinner?

# Module Structure



## Unit Overview

Welcome to FOOD5003 Organic Food Systems. This section offers a brief overview of the unit and what you can look forward to in the coming weeks!

[View](#)



## Module 1 Food Systems: Local to Global

How are local and global food systems interconnected?

[View](#)



## Module 2 Systems Thinking: Case Study

What scale and perspective can you bring to your food story?

[View](#)



## Module 3 Supply Chains and Value Chains: Tracking and Transparency

Along food supply and value chains: is your food safe or fair?

[View](#)



## Module 4 Quality Assurance Systems

Quality Assurance: Who drives expectations and control?

[View](#)



## Module 5 Policy and Advocacy

What can enable a more sustainable, fair and healthy food system?

[View](#)



## Module 6 Futures of Sustainable Food Systems

What is the future of the food system? Who will feed the world?

[View](#)



# Unit Overview



## Welcome to Organic Food System

This unit introduces you to food systems and systems theory to understand institutional forces that organize and interconnect, both from within and between. You will have the opportunity to put methods of analysis and problem-solving into a world case study and work together, an experience crucial to making change. Knowledge, experience and disciplinary background will be the starting point for creative problem solving. The focus will be on:

- making connections within the food system and understanding the system
- collaborative and multidisciplinary approaches to system issues;
- being able to examine these in terms of sustainability, ethics, fairness and justice
- working through policy interventions and advocacy to address challenges

### Meet your Unit Assessor - Adele Wessell

I am a historian who got interested in food about 20 years ago from a background in environmental history. Now I couldn't think of a subject that is as interesting or rich as food for what it tells us about the past and the present. I am the convenor of the Australasian Food Studies Network and the editor of *Locale: Pacific Journal of Regional Food Studies*, which keeps me connected with food scholars from a range of different backgrounds. I was very happy to work on this unit with a great team of my colleagues in the other units in the Graduate Certificate. Tammi Jonas (from Farm Gate) just have recently published an article together on 'Decolonising Agriculture', if you want to read more about our work.



### Approach to learning

Throughout this unit, we will be using guided online learning activities and have a weekly, live online tutorial that will run in Blackboard Collaborate Ultra. The activities will help you understand the content and are also intended to support your own work on assessment tasks.

Some of the activities link to the Discussion Board so that we can share our understandings and talk through some of the challenges of the food system. You can also use the Discussion Board to ask questions at any stage and this is my preference so that everyone gets the benefit of the conversation. Other activities are linked to your own Learning Journal, available through OneNote, which you do not have to share, but which will help make sense of the relationship between the content and your assessment.

I respect the knowledge and experience you bring to the unit and encourage you to share this, and to choose topics for your own work that you are passionate about. The Learning Journal and reflections so that you can start to understand and communicate your strengths and interests, where this knowledge comes from, what the gaps are in terms of how we understand the food system and how we can work together to address some of the problems in the food system when we see the complexity and connections to bigger issues.

### Where to start?

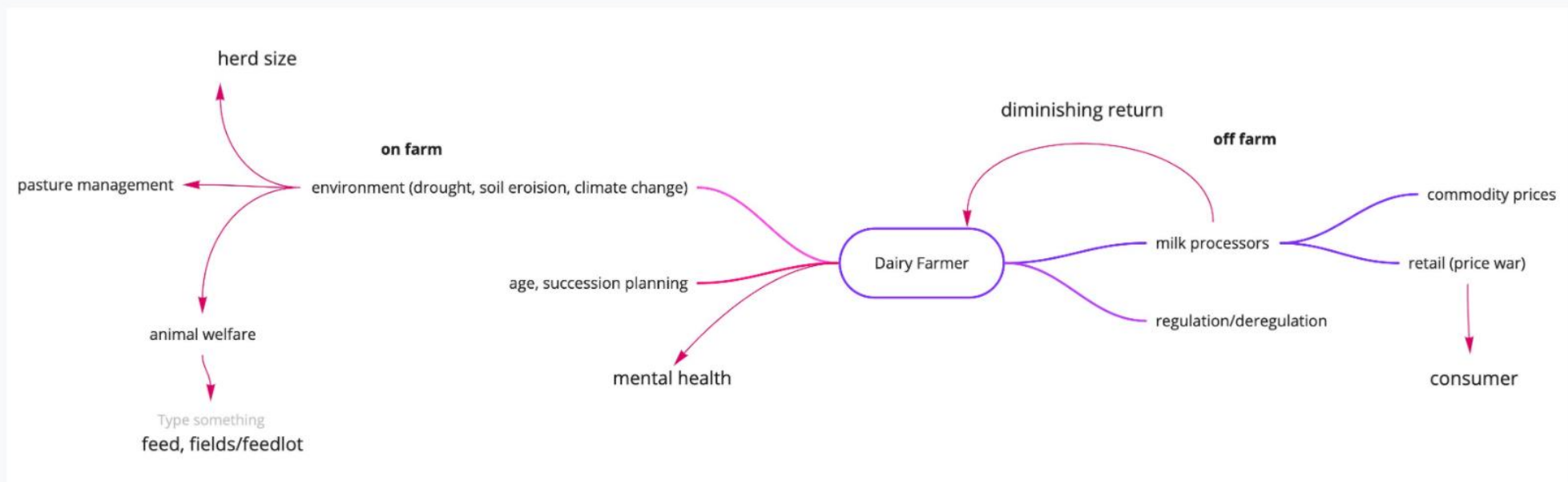
Before the study period actually begins is a good time to familiarise yourself with the unit:

- The content and activities are included in the six Modules in 'Unit Content' which can be undertaken weekly through each of the 6-weeks;
- Check the assessment details in 'Assessment Tasks', what is required, when and the criteria for each task;
- On average you need about 20 hours per week for the unit; think about when you work best, what time would suit you for the tutorial (which we set after a poll of all students) and factor time in for the preparation you will need for the assessment tasks;
- Introduce yourself on the Discussion Board. Module 1 suggests that you introduce yourself with a description of what you had for dinner. It is a shortcut to get to know each other better and start to approach topics as a systems thinker.

# Mind mapping

## Activity: Mind mapping the milk narrative

A **mind map** is a useful tool to visualise connections between different elements of the food system. You can see from the following simple map below the range of different factors involved in the production of a glass of milk.



I have used **Miro** to create the above mind map. Miro is a visual collaboration platform that will enable us to work together on a virtual whiteboard.

- Check out the **basic support guide** to mind mapping in Miro.
- If you go to the **Dairy Mind Map** you can explore the map, and make your own additions to the diagram.

You should have received an invitation to join the Miro **Organic Food Systems Team** before Week 1. If you haven't received this by Week 1, please contact the unit assessor.

# Mind mapping activity

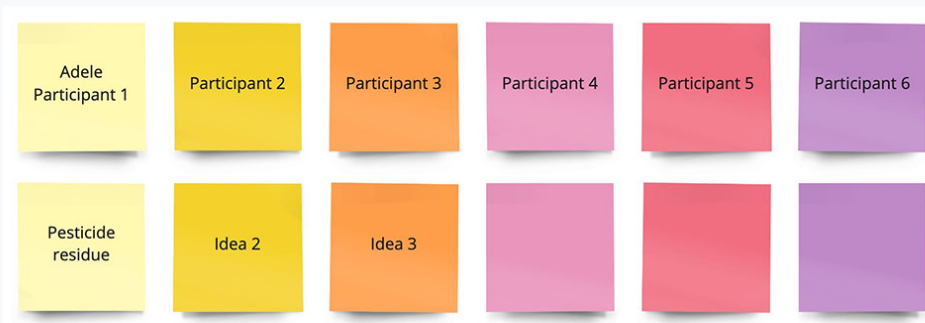
## Activity: Creating a decision matrix

There are different formats that can be used for a **decision matrix** but, for this activity, we will start something fairly simple based on our knowledge of the case study. What factors you include is up to you, so it would be helpful to mind map issues that you would prioritise when making purchasing choices.

We are going to brainstorm the criteria for apple purchases together online using **Miro**, and then prioritise those issues you consider important before we role-play and debate the best apple purchasing choice.

### STEP 1: What is our criteria?

The Miro board for this activity looks similar to the screenshot below. Each participant uses their coloured paper to add **criteria** they would consider when making a purchasing choice (for example Adele has added pesticide residue below). You are encouraged to complete this step as soon as possible this week, so that other students can benefit from your ideas in step 2.



[Open Miro Board](#)

**STEP 2:** How do these criteria compare? Use the Miro board to create your own table, listing the criteria in order of priority to you. Use criteria that other participants have already posted along with your own criteria (you may need to come back to this activity if others haven't posted yet). This table will be available in your **Learning Journal**. Alternatively, a **Tree Diagram** is another useful tool for decision making that you could use instead. No matter which strategy you use for decision making, ensure that you capture your thoughts in your learning journal.

Criteria	Macro Organics	Farmer Charlies	Lismore Farmers Market	Outcome
1. Pesticide residue				

Table 2.2: Decision Matrix table

### STEP 3: What apples are you going to eat?

Now that you have considered the criteria that are most important to you, weigh them up and make a decision.

# Study lounge

## The Study lounge



The Importance of  
evidence

[View](#)



Types research

[View](#)



Referencing and  
resources

[View](#)



Using Turnitin for  
academic integrity and  
submitting  
assignments

[View](#)



Discussion boards

[View](#)



Student Study Support

[View](#)

# Chunking content and embedding

**Chunking** is the breaking up content into smaller, distinct units of information (chunks).

- Chunking helps to **visualize** the content's flow and organization.
- Chunked content doesn't look like a wall of text, which makes content **look difficult**.
- Chunking lets people easily **skim the content**.
- Chunking **reduces cognitive load**.
- Usability studies show skim reading is adults' **preferred method of reading, especially online**.

<https://elearningindustry.com/chunking-content-what-research-tells-us>

## Wall of text

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# Multimedia content

Embedded content and interactives were used throughout the learning site to promote engagement.

## Reduces Cognitive Load

- Less clicks, less browser tabs, less complexity
- Unify and contextualize the learning

## Improve student engagement

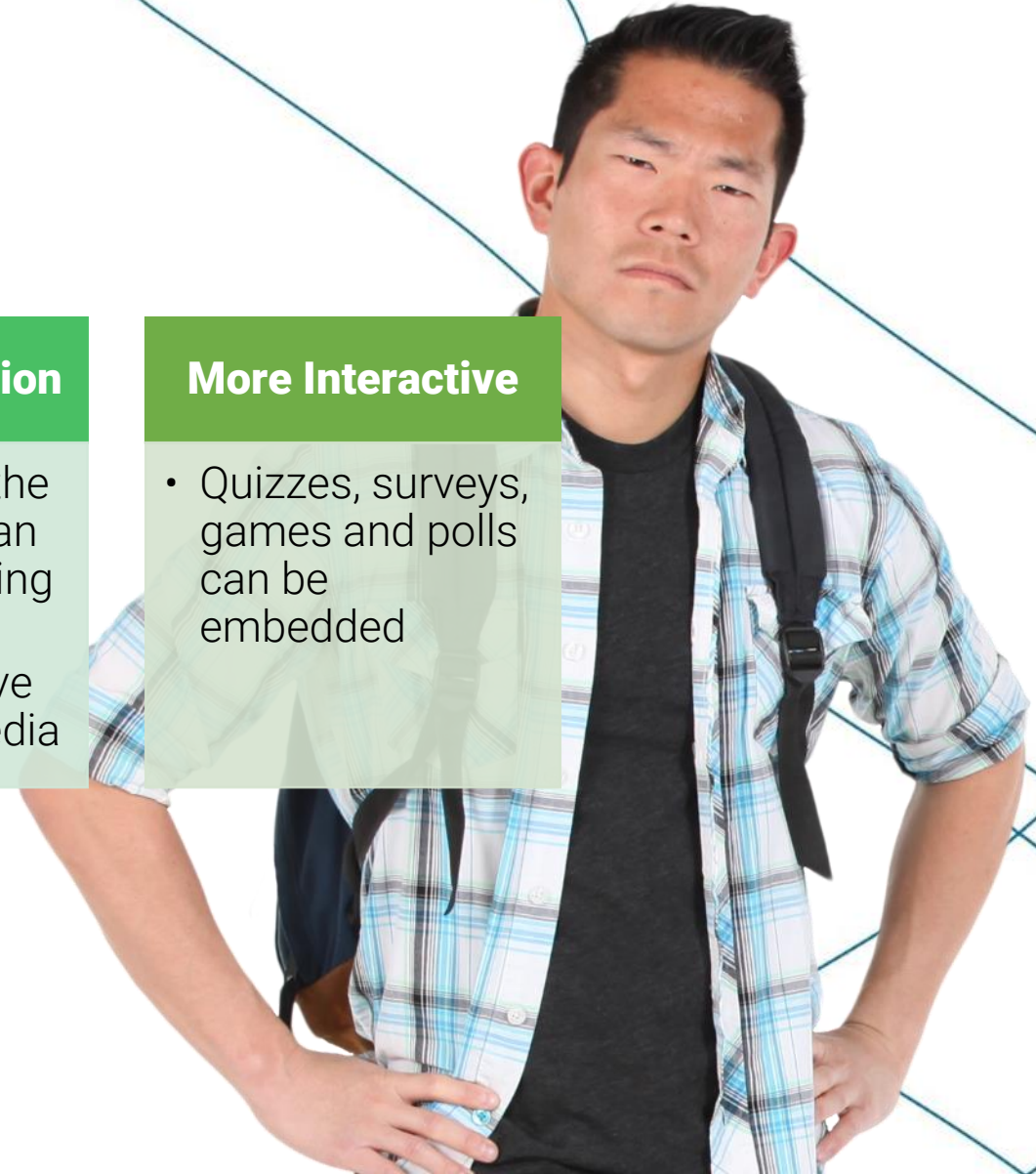
- Increase visual appeal with diagrams, videos and infographics.

## Supports Curation

- Why reinvent the wheel if you can reuse an existing resource.
- Embed Creative Commons Media

## More Interactive

- Quizzes, surveys, games and polls can be embedded



# Inquiry Questions

## What is the future of the food system? Who will feed the world?

Food systems will continue to be impacted by climate change and energy and resource depletion which has already generated a significant amount of work on how to develop a sustainable future. In 2020 the COVID-19 pandemic laid bare the failures of our food system. Systems thinking is a way of understanding how independent structures and domains intersect and to redesign how we produce, process, distribute, regulate, legislate, research, buy, prepare, cook and eat food. According to many experts, as diverse as the World Economic Forum and the food sovereignty movement, a fundamental transformation is required to re-design the food system using a systems thinking approach. This year world leaders and experts will convene for the Food Systems Summit of 2021.

According to Agnes Kalibata, Special Envoy for the 2021 Food Systems Summit the way we produce food is a paradox: over the last 50 years our ability to produce food has increased by nearly 300% but the number of hungry people has increased by 820 million over the last 3 years. We are not eating well. About 2 billion people are obese and we waste 35% of the food we produce. Climate change will continue impact on our ability to produce food globally and our current food system is part of the problem, contributing nearly 30% of greenhouse gases. If we are to achieve the sustainable development goals our food system must change.

As you work through this module, reflect on this key question;

“ Is a global consensus possible to achieve the radical transformation demanded?



# Interactive Design

Students explore interactive content including videos, diagrams, quizzes and case studies.

## Section 1: Using systems thinking tools to understand apple food systems

**Systems thinking** is a language, a set of tools and an underlying philosophy or approach. It is used across a range of different settings to illuminate the interconnectedness of different components of a system, moving beyond linear relationships to consider how different elements relate and act in a complex system. Taking an integrated approach can then be used to design interventions or policies that will change the system in the most effective way. Watch the video below which briefly summarises the purpose of applying systems thinking to modern production systems.



**64 Rules for Eating Quiz**

In the following activity, you will read through several of the 64 rules and decide if you already follow that rule. There are no right or wrong answers; the purpose of this activity is to reflect on these rules and to establish how difficult and practical you may find them in your life.

### 64 Rules for Eating

In this activity you will read 10 rules and decide whether you currently follow that rule (TRUE) or you don't follow that rule (FALSE).

[View the Rules!](#)

Macro Organic 1/3

**Background**

Woolworths stock apples (Galas, Fuji and Pink Lady varieties) grown by **R&R Smith** in every state and territory under the Macro Organic brand. Supply is coordinated through a contract farming arrangement rather than a wholesaler and delivered through a Distribution Centre. R&R Smith have grown apples in the Huon Valley, Tasmania, since 1888, and the orchards now cover 151 acres. They went to the United States to learn about the culture Australia (NASAA), which requires 6 months of organic production for and regenerating soil, reducing waste, trying to





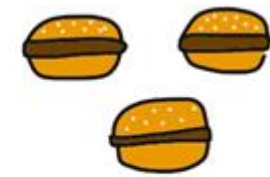
# Unit Content Design Tips

- Create and embed an **introduction video** that sets a good first impression and welcomes students
- What **guiding questions** will engage students with the topic?
- Make sure your information design is **solid and logical**. Do all the elements work together?
- **Chunk content** for clarity and ease of skimming. Carefully curate, and remove extraneous elements.
- **Contextualise** multimedia with instructions and provide linking statements to the surrounding content.
- Create **links that are significant** without their surrounding content. Avoid links with vague text, such as "click here." Better yet, **EMBED linked content**.



BIG COURSE

VS



COURSELS

# Thanks for listening!



Co-designing an engaging learning environment

# Questions

