

PRIMED

Teacher resource

Year

9



Technologies



Teaching guide: Agritourism – What does Western Australia have to offer?

Resources overview

PRIMED mission

To increase student understanding of agriculture, fisheries, fibre, forestry and food (primary industries) careers to enable Year 7–10 students to make informed career-pathway choices.

About the resource set

These resources provide rich tasks focused on the *Western Australian Curriculum* within a primary industries context.

This activity challenges student perceptions of primary industry and production. Using an input, process and output framework, students explore the process of making a product in the context of food and fibre production in Western Australia (WA).

They engage with innovative examples of primary production, identify the impact of production, the roles of people involved, and explore interesting food or fibre processes that provide an authentic agritourist experience.

Teachers will have access to a range of current industry resources with a focus on innovation in the context of Western Australian businesses. Students complete the learning activity by designing a solution to promote a food or fibre agritourist destination.



Curriculum links

This resource is designed to be a learning pathway for Year 9 Technologies students to develop their understanding of the *Western Australian Curriculum Design and Technologies* content descriptions:

Context:

- Food and fibre production ([ACTDEK044](#))

Knowledge and understandings:

- Technologies and society ([ACTDEK040](#)) and ([ACTDEK041](#))

Processes and production skills:

- Investigating and defining (WATPPS54) and (WATPPS55)
- Producing and implementing (WATPPS58)
- Collaborating and managing (WATPPS60)
- Designing (WATPPS56) and (WATPPS57)
- Evaluating (WATPPS59)

Resource set structure

The resource set is structured around constructivist learning principles using a 5E instructional model: engage, explore, explain, elaborate and evaluate. It is designed to be flexible so that teachers can use all or parts of the resource that they consider appropriate for their students.

With this combined approach:

1. Students' interest and minds are **engaged** in thinking about the series of activities that occur when a product is made.
2. Students **explore** what they know about food and fibre products produced in WA. They explore different examples of food and fibre production in WA.
3. Students **explain** the growing industry of agritourism and identify what makes an agritourism experience engaging for visitors.
4. Students undertake a design challenge to **elaborate** on a range of concepts, such as:
 - identifying types of agritourism
 - understanding what is produced in WA and why
 - understanding the on-farm process of making a commodity, using the Input-Process-Output (IPO) model
 - understanding how the model can be used to engage visitors in an agritourism experience
 - exploring design solutions to promote the agritourism experiences available in Western Australian regional zones.
5. Students **evaluate** their learning and application of the design process.

Educational process	Teaching and learning focus	Resources
<p>Engage</p>	<p>Module 1: The process of making This module is designed to engage students by exploring the series of activities that occur when a product is made. Students look at common features that characterise production and consider how their own experiences of making something relate to these. They are introduced to a framework for viewing and understanding production that will be applied in their investigation in the coming activities.</p>	<p>PowerPoint presentation:</p> <ul style="list-style-type: none"> 1.0 The process of making: input, process and output. <p>Student worksheet:</p> <ul style="list-style-type: none"> 1.1 The process of making
<p>Explore</p>	<p>Module 2: Know your food and fibre In this module, students narrow their investigation of production to focus on food and fibre. Students learn about the importance of food and fibre production and how understanding what takes place during production can enable them to make informed decisions about products. They are also introduced to primary industry examples in WA and use the common framework from the previous lesson to engage with these processes.</p>	<p>Student worksheets:</p> <ul style="list-style-type: none"> 2.1 Know your food and fibre 2.2 Kimberly Wild Gubinge <p>Online resources:</p> <ul style="list-style-type: none"> Focus on Kakadu Plum RIRDC Pub. No. 14-115 PDF Available on Australian Native Food & Botanicals website
<p>Explain</p>	<p>Module 3: The primary attraction In this module, students continue to focus on WA and explore food and fibre production processes in the state. They learn how these processes are a part of the growing agritourism sector. Students develop a sense of the interesting nature of primary industry production processes as a business, area of innovation, attractive place to visit and interesting place to work.</p>	<p>PowerPoint presentation:</p> <ul style="list-style-type: none"> 3.0 The primary attraction <p>Video:</p> <ul style="list-style-type: none"> Western Australian Agritourism <p>Student worksheets:</p> <ul style="list-style-type: none"> 3.1 The primary attraction 3.2 Exploring the primary attraction 3.3 Western Australian Agribusiness Case Study <p>Online resources:</p> <ul style="list-style-type: none"> Destination WA: Willie Creek Pearls Great Southern Food and Beverage Capability Guide Midwest Food and Beverage Capability Guide

<p>Elaborate</p>	<p>Module 4: Food and fibre market</p> <p>In this activity, students apply their knowledge of production to promote a WA region and the food and fibre primary industries in the region as an agritourist attraction.</p> <p>Students apply the methodology learnt in previous lessons to write a description of the production process of their chosen product and what attracts tourists in this process. The design a hand-on experience to promote the food and fibre product. Using this hands-on experience, they create an exhibition stand to attract tourists to the region</p>	<p>Design challenge</p> <ul style="list-style-type: none"> 4.1 Pitch and promote
<p>Evaluate</p>	<p>Module 5: Evaluation</p> <p>Students complete a self-reflection using the given criteria to evaluate their design process and solution undertaken in Module 4.</p>	<p>Design challenge</p> <ul style="list-style-type: none"> In 4.1 Pitch and promote - Step 5 Pitch and promote

Learning resources and sequence

Module 1: The process of making

(approximately 1-2 hours)



Learning intentions

Students will be able to:

- Make the link between their own experience of making something and the production of consumer products.
- Describe what is meant by production.
- Identify that there are attributes that are common to production processes and understand a simple framework to undertake analysis of a production process.

Background information

Technology is the application of knowledge for practical purposes. It is about taking action to provide solutions.

In this activity, students investigate technology by engaging with the process of making products:

- what inputs are required
- what activities take place during production,
- what outputs, both intended and unintended, are the result of production.

What is production?

Everybody has at some time experienced making something or being involved in making something. It could be a cake; it could be a toy model or a gardening project.

When we make something, we put into action a sequence of activities.

This will involve:

- undertaking a series of steps requiring skills and knowledge.

It could involve:

- the use of materials, tools (technology)
- the assistance of other people.

Hopefully a useful product results, but there may have been other things produced such as by-products and waste.

Another word for the process taking place when something is made is **production**.

- The Oxford University Press dictionary ([Lexico.com](https://www.lexico.com)) (2021) defines **production** as the action of making or manufacturing from components or raw materials, or the process of being so manufactured.

To help understand what happens when something is made, we can organise the range of activities that may occur during production as: **input**, **process** and **output**. This is a systems model and is often referred to as an IPO model or pattern.

IPO Explained

<p>Input</p>	<p>The inputs are everything that is needed to make something, including:</p> <p>Materials – the ingredients that are transformed during the production process into the final product.</p> <p>Equipment – the machines, hardware, software and tools used to carry out the process. It includes the technology to make the production possible.</p> <p>Facilities – a place to work and implement the production process. The location and proximity to goods and services are important factors in determining other inputs that are available.</p> <p>Knowledge and skills – necessary to apply the technology to transform materials into products.</p> <p>Labour – the people who will carry out the tasks in various occupations that contribute to the process. It includes those who develop, manage and implement the production process.</p> <p>Energy – what is needed to power all the stages of production, such as sunlight, electricity and fuel?</p>
<p>Process</p>	<p>The production process is the series of steps taking place to create the final product.</p> <p>These steps convert the materials into the final product. The conversion process uses all the inputs identified above to generate something new.</p> <p>The process involves the application of known scientific and technical strategies and operations. It includes all activities – from the initial transport of materials to begin production, to the packaging and distribution of the final product.</p>
<p>Output</p>	<p>The output is the result of the production process, including not only the finished products but also other by-products, waste and impacts (intentional and unintentional). These may include detrimental side effects, such as negative impacts on the environment. No system is isolated, and every process has an impact.</p> <p>The goal of production is to output products of value to consumers and contribute to the economy.</p>

Resources and equipment

PowerPoint presentation:

- 1.0 The process of making: input, process and output.

Student worksheets:

- 1.1 The process of making

Instructions for suggested activities

Teachers may consider adding practical food and fibre experiences to complement the theory in this module. For example, prepare a simple recipe and textile project to complete parts 3 and 4 of Student worksheet 1.1.

PowerPoint - 1.0 The process of making:

- Students are introduced to input, process and output as a way they can think about what happens when something is made.

Initial class discussion:

- Use PowerPoint 1.0 to begin a class discussion about the process of making.

Student activity:

- Students complete the worksheet 1.1 The process of making. In this activity, students apply the IPO model to practical examples of making a product.

Conclusion:

When concluding the module, the teacher introduces students to the investigation component of the design task that will be completed in this module. Students begin the first stage of developing a visual diary of the knowledge and skills developed in the first three modules. This will form the investigation component of the design process in preparation for the task in module 4.

Module 2: Know your food and fibre

(approximately 2-3 hours)



Learning intentions

Students will be able to:

- Describe the meaning of food and fibre production.
- Explain what primary industry is and how it relates to food and fibre production.
- Understand the importance of knowing how consumer products are produced.
- Apply a simple IPO model to examine a production process in WA.
- Apply a simple framework to analyse a business to determine different aspects of their production process.

Background information

An extensive range of products are produced worldwide. In this module, we focus on one type of product: food and fibre.

One of the distinguishing features of food and fibre production compared to other forms of production is that the final product is a **raw material**.

Raw materials are

- basic, unrefined materials such as cotton, wheat, wool, fruit and timber
- the output from production that takes place in **primary industry** including agriculture, forestry, fibre, fishing, food and mining.

Why is it important for us to understand the production process?

- We are all consumers of food and fibre products. We use these products either directly, for example, eating fruit and vegetables or as part of our own production process, for example, cooking.
- Food and fibre also provide the raw materials for the wide range of manufactured products we purchase, for example, clothing and processed food.
- Having a knowledge of what takes place when products are produced allows us to develop a broader picture of production occurring in WA, Australia and the world, and to understand our connection to these activities. It allows us to make informed judgements about the products we choose to purchase. We can choose products, for example, that support local industry, that are environmentally sustainable or that have a provenance that confirms quality.
- We can also gain an understanding of the interesting processes taking place during production, the location of these activities and the people who work in these industries. This knowledge expands our world view and opens new possibilities we may not otherwise have considered. This can include the ability to understand the broad range of career prospects associated with the production process.

Useful definitions:

- The Australian Curriculum defines **food and fibre** as human-produced or harvested resources used to directly sustain life. They are produced in managed environments such as farms and plantations or harvested from wild stocks.
- The Oxford University Press dictionary ([Lexico.com](https://www.lexico.com)) (2021) defines **commodity** as a raw material or primary agricultural product that can be bought and sold, such as copper or coffee.
- The US Department of Agriculture defines **value-added** agriculture as a change in the physical state or form of the product (such as milling wheat into flour or making strawberries into jam).
- The Oxford University Press dictionary ([Lexico.com](https://www.lexico.com)) (2021) defines **production** as the action of making or manufacturing from components or raw materials, or the process of being so manufactured.

- The Oxford University Press dictionary ([Lexico.com](https://www.lexico.com)) (2021) defines **primary production** as the production of raw materials for industry.
- The Oxford University Press dictionary ([Lexico.com](https://www.lexico.com)) (2021) defines **primary industry** as industry, such as mining, agriculture, or forestry that is concerned with obtaining or providing natural raw materials for conversion into commodities and products for the consumer.

Food and fibre production examples:

To help understand food and fibre production, two examples of products from primary industry in WA are provided below.

1. Kakadu Plum

The Kakadu plum, also known as gubinge, is an Australian native plant, which grows in the northern regions of Australia.

For more details, visit:

- [Australian Native Food & Botanicals](#)
- [Kimberley Wild Gubinge](#)
- [Meet the Kakadu plum: An international superfood thousands of years in the making](#)

Input	<ul style="list-style-type: none"> • Location and facilities – the natural environment, tropical savannahs region (Kimberley and the Northern Territory). • Knowledge and skills – ecological knowledge and practices: landscape management, knowledge of plants, locations of plants and when to pick fruit. • Knowledge and skills relating to freeze drying, grinding and packaging. Knowledge of customers and marketing. • People – teams of collectors, business managers and personnel from corporations and communities. • Equipment – vehicles, collection containers, freeze drying unit, packaging equipment. • Energy – fuel and electricity.
Process	<ul style="list-style-type: none"> • Travel to locations for harvest. • Collect seeds by hand from trees (traditional harvesting) – on foot to protect the environment. • Transport the product to the community. • Process – freeze dry and grind powder. • Package the product for distribution.
Output	<ul style="list-style-type: none"> • Kakadu plum powder in packaged form ready for consumption. • Waste – obsolete production equipment, waste packaging, possibly pollution from burning fuel or from electricity generation.

2. Honey production

Input	<ul style="list-style-type: none"> • Equipment – hive, smoker, protective clothing, extractor, strainer, glass jars packaging, advertising materials. • Materials - bee colony, flowering plants. • People – beekeeper, business manager, people involved in production and marketing. • Knowledge and skills – knowledge of the process, knowledge of the requirements of bees, skills working with bees, scientific knowledge of bee health, predators and pest control. Knowledge of customers and marketing. • Facilities – land to situate hives and carry out processing, location suitable for bee colony. • Energy – electricity.
--------------	---

Process	<ul style="list-style-type: none"> • Prepare hives and bee colony. • Check and maintain hives, protect hives. • Collection of nectar and storage of honey by bees. • Harvest honey – remove frames from hives. • Extract honey – separate wax from honey and filter. • Bottle honey and package. Promotion of product.
Output	<ul style="list-style-type: none"> • Extracted pure honey in packaged form ready for consumption. • By-products – beeswax (can be sold to commercial manufacturers, to be used, for example, in furniture polish and candles. Pollen (can be used as a dietary supplement). Royal jelly used to feed the queen bee (can be used as a skin product). Propolis used by bees to maintain the hive (can be used as a disinfectant and for medical purposes). • Pollinated plants. • Waste – obsolete production equipment, used jars and packaging, possibly pollution from electricity generation.

Resources and equipment

Facilities for online research

Online resources:

- [Focus on Kakadu Plum RIRDC Pub. No. 14-115 PDF](#) Available on [Australian Native Food & Botanicals](#) website

Student worksheet:

- 2.1 Know your food and fibre
- 2.2 Kimberly Wild Gubinge

Instructions for suggested activities

Initial class discussion:

- If you listed the names of all the different products made in the world, how many would there be?
- Teacher: Introduce the concept of a food and fibre production as a sub-set of the production of this global range of products.

Student worksheet 2.1– Know your food and fibre:

- Students complete parts 1 and 2, identifying products that belong in the food and fibre category.
- Teacher defines raw materials and primary industry.

Class discussion:

- Why is it important to have an understanding of production processes?

Student worksheet 2.1 – Know your food and fibre:

- Students complete parts 3 – 7.

Student worksheet 2.2 - Kimberly Wild Gubinge.

- Introduce the example of Western Australian production: Kakadu plum.
- Students work in groups to explore this example and learn more about the process, using the [Focus on Kakadu Plum RIRDC Pub. No. 14-115 PDF](#) available on the [Australian Native Food & Botanicals](#) website.

Students update their visual diary with new information for the investigation component of the design process.

Module 3: The primary attraction

(approximately 2-3 hours)



Learning intentions

Students will be able to:

- Understand the link between primary industry, food and fibre production, and tourism.
- Apply a simple framework to analyse a business to determine different aspects of their production process and how these are of interest to tourists.
- Understand the diverse range of primary industry experiences that exist both for the tourist and for workers involved in the industry.

Background information

The primary industry sector in WA includes:

- agriculture, forestry, fibre, fisheries and food.

Businesses engaging in primary industry are located in all regions across the state. Food and fibre production in WA are a major contributor to the state and national economy.

[Regional Development Zones Interactive Map](#)

In the previous modules, we have seen the importance of knowing what is happening in the production process; this can open new possibilities for us and allow us to make more informed decisions about products we purchase. Engaging directly with primary industry businesses is one way we can further develop our knowledge and experience of local food and fibre production.

Agritourism:

“Traditionally thought of as being simply farm stays and winery visits, the term agritourism now encompasses a wide variety of activities where agriculture and tourism intersect. Essentially, ‘agritourism’ is the act of going to a region to visit a farm or food-related business (including restaurants, markets/events, produce outlets and natural attractions) for enjoyment, education, or to participate in activities and events.”

Source: [Australian Regional Tourism LTD](#)

Many primary industry businesses offer the opportunity for people to visit onsite and engage with production firsthand. This growing sector in WA and Australia is referred to as agritourism.

How do tourists benefit from agritourism?

Tourists can:

- purchase food and fibre products direct from producers
- be participants in the process of producing raw materials
- use raw materials in preparing and sharing food in the home, for example, honey, cheese, fruit, eggs, meat and olive oil
- learn about the raw materials used in the manufacture of consumer products such as home furniture, clothing and homewares
- connect with the process of making these products and understand the steps and skills involved
- learn about the region and the people involved in producing our food and fibre

In the table below, input, process and output of the production process are used to focus on how primary industry is attractive as a holiday destination to tourists. This can be a useful way to not only think about agritourism but also help develop our understanding of food and fibre production.

Additional Reading

Holliday, R., Martinus, K.* and Boruff, B. (2020) [Agritourism in Southwest Western Australia](#). Cooperative Research Centre for Honey Bee Products, Perth, Western Australia

Department of Primary Industries and Regional Development (15 March 2018) [Direct selling channels for small producers.](#)

Why are tourists interested in agritourism experiences?

Input	<ul style="list-style-type: none"> To meet the people who are involved. To learn about regional lifestyles. To hear about the roles of people, their skills and the interesting range of occupations associated with primary production. To find out about innovation and the use of state-of-the-art technology. A chance to visit rural locations, get away and experience something different. To experience the range of materials used as an input to production.
Process	<ul style="list-style-type: none"> To experience the operations that take place to transform materials during the production process. To hear about the challenges faced during production. To participate in some of the steps during the production process. To have an authentic experience (not a documentary, or news item but hands-on).
Output	<ul style="list-style-type: none"> To realise where food and fibre products come from. To make connections between the production process and the final consumer product. To experience operations for packaging and distribution. To engage with environmental management and consider the side effects of production. To make comparisons and explore ideas such as pure products, natural products and sustainable production. To purchase and use the products.

Honey production as a tourist destination

Using our previous example, honey production, we will explore each part of the production process and identify what it is that makes these processes interesting to tourists.

	Production	The tourist experience
Input	<ul style="list-style-type: none"> Equipment – hive, smoker, protective clothing, extractor, strainer, glass jars. Materials – bee colony, flowering plants. People – beekeeper, other people involved in production. Knowledge and skills – knowledge of the process, knowledge of the requirements of bees, skills working with bees, scientific knowledge of bee health, predators and pest control. Facilities – land to situate hives and carry out processing, location suitable for bee colony. Energy – electricity. 	<ul style="list-style-type: none"> Meet the beekeeper. What is their background and how did they start the business? What is it like living in a regional area? Who are the other people involved in the business, for example, accountant, marketing and web developer? Find out about the interesting technology used: the hives, the extractor and filter. This can also be any new technology and scientific processes. Find out about the location of the business and what is of interest in surrounding areas. Stay on location and experience the lifestyle. Learn about what materials are used and where bees come from. What types of bees are there?

<p>Process</p>	<ul style="list-style-type: none"> • Prepare hives and bee colony. • Check and maintain hives, protect hives. • Bees collect nectar and store honey. • Harvest honey – remove frames from hives. • Extract honey – separate wax from honey and filter. • Bottle honey and package. 	<ul style="list-style-type: none"> • Get involved with the process – perhaps collect honey, participate in maintaining the hives, operate the extractor, pour the honey from the filtering machine into jars. Participate in labelling and the final packaging of the product. • Improve general knowledge by learning the steps of honey production. • Find out about and discuss the challenges of the operation of the production process, what is difficult, the impact of different factors at each stage.
<p>Output</p>	<ul style="list-style-type: none"> • Extracted pure honey in packaged form ready for consumption. • By-products – beeswax (can be sold to commercial manufacturers, to be used for example in furniture polish and candles. Pollen (can be used as a dietary supplement). Royal jelly used to feed the queen bee (can be used as a skin product). Propolis used by bees to maintain the hive (can be used as a disinfectant and for medical purposes). • Pollinated plants. • Waste – obsolete equipment, used jars and packaging, possibly pollution from electricity generation. 	<ul style="list-style-type: none"> • Sample different honey and learn about the characteristics. • Engage with samples of the by-products of honey production. • Explore the environmental impact of honey making and the sustainability of the process. • Learn about the issues facing the business and the honey industry. • Share in the successes.

Additional Western Australian Agritourism information:

[Western Australian Indigenous Tourism Operators Council](#) provides examples of Aboriginal Tours and Experience.

[Agritourism in Western Australia: Better than Going Abroad Post COVID](#)

[Australian Regional Tourism](#) provides a summary of agritourism.

[Communities in Transition for Queensland Communities](#)

[Human Dimension Research](#)

[Drivers of Regional Agritourism and Food Tourism in Australia](#)

Resources and equipment

Access to computers for research

PowerPoint:

- 3.0 The primary attraction

Student worksheets:

- 3.1 The primary attraction
- 3.2 Exploring the primary attraction
- 3.3 Western Australian Agribusiness Case Study

Video:

- Western Australian Agritourism

Instructions for suggested activities

Initial class discussion:

- Has anyone heard of agritourism? What is it?
- Would you do this on your holiday?

Video:

Western Australian Agritourism

Watch the video and ask students to define agritourism, then discuss to content delivered in the video.

PowerPoint: 3.0 The primary attraction

- Step through the PowerPoint, which guides students through the introduction to agritourism and highlights the experiences agritourism provide tourists.
- Discuss input, process and output in production and how each of these can potentially be attractive to tourists. Use the honey production example.

Student worksheet 3.1: The primary attraction:

- Students complete this worksheet individually. They consider the production process and think about input, process and output from a different perspective: that of a tourist looking for an authentic experience.

Student worksheet 3.2: Exploring the primary attraction

- Watch the video [Destination WA: Willie Creek Pearls](#) and students complete the activity.

Student worksheet 3.3: Western Australian Agribusiness Case Study

As a group they investigate the production process of a primary industry product from WA using the framework developed in previous lessons. The choices are provided by the teacher and involve a primary industry that has an established link to agritourism. Students consider a range of ideas. What part of the process do people experience? How are people attracted to the process? Who is involved and what are the careers? Where do they stay and how do they see the process? Is it hands-on? What do people learn about sustainability and environmental impact?

Example: [Southern Forests Genuinely Western Australia](#)

Students update their visual diary with new information for the investigation component of the design process.

Module 4: Pitch and promote

(approximately 7-8 hours)



Learning intentions

Students will be able to:

- Apply knowledge gained during the investigation of food and fibre production and agritourism to develop a design for a promotional product.
- Link design decisions to the aspects identified in the input, process and output during production in Western Australian primary industry.
- Apply a design process plan to develop a solution.
- Apply criteria to evaluate their product.

Background information

We have seen how examining production using input, process and output can help us understand the production process. We have applied this framework to look at primary industry examples in WA and the food and fibre production process taking place. We have also seen how each of these parts of the production process in primary industry can be attractive to tourists.

We will now apply this knowledge to develop a promotional product for marketing food and fibre production in WA. Our marketing will directly target the production process: input, process and output and will explain and engage tourists in the process.

The development of the promotional product will involve the implementation of the **design process**.

The Design Process

The design process specifies a series of steps that guide the development of a solution to a problem. The steps in the design process are:

Investigate and define	<ul style="list-style-type: none"> • Define and break down a given task, identifying the purpose. • Consider components/resources to develop solutions, identifying constraints.
Designing	<ul style="list-style-type: none"> • Design, develop, review and communicate design ideas, plans and processes within a given context, using a range of techniques, appropriate technical terms and technology. • Follow a plan designed to solve a problem using a sequence of steps.
Producing and implementing	<ul style="list-style-type: none"> • Safely make solutions using a range of components, equipment and techniques.
Evaluating	<ul style="list-style-type: none"> • Independently apply given contextual criteria to evaluate design processes and solutions.

WA Regional Development Zones

WA is divided into 8 regional development zones

- Kimberley
- Pilbara
- Gascoyne
- Mid West
- Goldfields – Esperance
- Wheatbelt
- Peel
- South West
- Great Southern

Discover the features of each region using the links below:

[Discover Regional Western Australia](#)

[Buy West Eat Best WA Regions](#)

[Department of Primary Industries and Regional Development](#)

Resources and equipment

Access to computers for research

Design challenge - 4.1 Pitch and promote

Materials to produce information products and hands-on experience for the exhibition display

Instructions for suggested activities

Initial class discussion: revise the work completed in the previous three sessions.

Task – Pitch and promote

Explain the requirements for completing the task. Students have already undertaken part of the investigation of the design process.

Students now complete:

- the definition for their solution
- develop their design solution plan
- implement their plan and create the design solution.

It is important that the design and solution is linked to the production input, process and output framework.

The teacher introduces the design challenge. This design challenge supports the development process and provides a structure to assist students in linking their design decisions back to the production process.

Students submit their completed solution, including the visual diary, activities, evaluation and final product.

Explain to students the aim is for each group is to produce an exhibition display, including a hands-on experience, which showcases the agritourism possibilities within WA regional zones.

You can plan to have the final exhibition presented in the classroom or involve the whole school by planning an exhibition in a common space within the school, for example, the library.

You could engage local industry members to be involved and judge the exhibition stands and provide a 'Best in Show' award.

Exhibition Stand Criteria

Once a decision is made as to where the exhibition is to be held, you will need to create a set of criteria for the set-up of the stands.

For example:

- Size of each stand – How much room does each group have to set up?
- What facilities are available to use to set up the stand? For example, tables, pinup boards, AV equipment

Communicate the criteria with students to assist them in their design.

Additional Options

If completing this as a single class in a school, encourage students to select one Western Australian regional zone to base their research on.

This will then provide a good summary of what WA has to offer across all regions.

Alternatively, link in with other schools across your region or other regions in WA and set up an interschool challenge.

Students could compete to win the 'Best in Show' for their school, then move on to have a regional exhibition and then a state exhibition.

The state exhibition would then have a group of student representatives from each of the Western Australian regional zones. Local government and industry representatives could be involved in judging the showcase.

Example School Agritourism Showcase Competition



Module 5: Evaluation

(approximately 1-2 hours)



Learning intentions

Students will be able reflect on:

- their learning
- the application of the design process for their design solution.

Background information

The guided self-reflection in Student worksheet 4.1 can be used or students can develop their own evaluation criteria to evaluate their individual and group work.

Resources and equipment

Student worksheet:

- 4.1 Design challenge – Pitch and promote - Step 5

Instructions for suggested activities

Students are to individually complete Step 5 Evaluating.

While an individual evaluation is included in this task, teachers may like to ask students to develop their own peer review evaluation as an alternative.

Acknowledgements

References

- Australian Curriculum (n.d.) <<https://www.australiancurriculum.edu.au/>> website, accessed:25 May 2021
- Australian Native Food & Botanicals (n.d) 'Focus on Kakadu Plum' PDF <https://anfab.org.au/edit/research_publications/14-115_KakaduPlum.pdf> Rural Industries Research & Development Corporation, accessed on 22 June 2021
- Australian Native Food & Botanicals (n.d), https://anfab.org.au/main.asp?_Kakadu%20Plum, accessed on 22 June 2021
- Oxford University Press Lexico Dictionary (2021) 'Production' <<https://www.lexico.com/definition/production>> accessed on 22 June 2021
- Oxford University Press Lexico Dictionary (2021) 'Commodity' <<https://www.lexico.com/definition/Commodity>> accessed on 21 June 2021
- Oxford University Press Lexico Dictionary (2021) 'Primary production' <https://www.lexico.com/definition/primary_production> accessed on 22 June 2021
- Oxford University Press Lexico Dictionary (2021) 'Primary industry' <https://www.lexico.com/definition/primary_industry> accessed on 22 June 2021
- Australian Native Food & Botanicals (n.d) 'Kakadu Plum' < https://anfab.org.au/main.asp?_Kakadu%20Plum> accessed on 21 June 2021
- Kimberley Wild Gubinge (2020) 'Welcome' <<https://www.kimberleywildgubinge.com.au>> accessed on 22 June 2021
- The Conversation (31 May 2019) 'Meet the Kakadu plum: An international superfood thousands of years in the making' < <https://theconversation.com/meet-the-kakadu-plum-an-international-superfood-thousands-of-years-in-the-making-116362> > G.Leach, accessed on 22 June 2021
- The Department of Primary Industries and Regional Development (n.d) 'Regional Western Australia' < <http://www.waopenforbusiness.wa.gov.au/Why-Western-Australia/Discover-Western-Australia>> accessed on 21 July 2021
- Holliday, R., Martinus, K.* and Boruff, B. (2020) Agritourism in Southwest Western Australia. Cooperative Research Centre for Honey Bee Products, Perth, Western Australia. http://www.crchoneybeeproducts.com/wp-content/uploads/2020/06/Agritourism-Report_FINAL-with-CRCHBP-cover.pdf
- The Department of Primary Industries and Regional Development (15 March 2018) 'Direct selling channels for small producers' <https://www.agric.wa.gov.au/small-landholders-western-australia/direct-selling-channels-small-producers?page=0%2C>, accessed on 17 August 2021
- Welcome Australian Indigenous Tourism Operators Council (n.d) 'Home' < <https://www.waitoc.com>> accessed on 21 June 2021
- Fulker, M (6 August 2020) 'Agritourism in Western Australia: Better than Going Abroad Post COVID' *BusinessNews* <<https://www.businessnews.com.au/article/Agritourism-in-Western-Australia-Better-than-Going-Abroad-Post-COVID>> accessed on 27 July 2021
- The Department of Primary Industries and Regional Development (n,d) 'Southern Forests Genuinely Western Australia' < <https://www.southernforestsfood.com/foodandfarmtours>> accessed on 27 July 2021

Walley, P. (2017) 'Introduction to operations management', in The Open University (2017) B207 Readings Block 1: Big ideas in Organisations, Milton Keynes, The Open University, accessed on 21 June 2021

Agricultural Marketing Resource Centre (n.d.) USDA value-added ag definition, AGMRC website, <<https://www.agmrc.org/business-development/valueadded-agriculture/articles/usda-value-added-ag-definition>>, accessed 25 May 2021

Australian Regional Tourism LTD (n.d) <<https://regionaltourism.com.au/projects/agritourism/>>, accessed on 22 June 2021

Communities in Transition for Queensland Communities (2018) 'Agritourism' *Clean Growth Choices* <<https://www.cleangrowthchoices.org/diverse-farm-agritourism>> accessed on 27 August 2021

Department of Agriculture, Water and the Environment (2020) 'Human Dimensions Research' *Australian Government* <<https://www.agriculture.gov.au/abares/research-topics/social-sciences/human-dimensions>> accessed on 27 August 2021

Ecker, S, Clarke, R, Cartwright, S, Kancans, R, Please, P, and Binks, B (2010) 'Drivers of Regional Agritourism and Food Tourism in Australia' *Australian Government Australian Bureau of Agricultural and Resource Economics – Bureau of Rural Sciences* <<https://www.agriculture.gov.au/sites/default/files/abares/documents/agritourism-2010-report-11a.pdf>> [PDF] 1411 KB accessed on 27 August 2021

Department of Primary Industries and Regional Development (n.d) 'Agribusiness and Food Investment' <<http://www.waopenforbusiness.wa.gov.au/>> accessed on 27 August 2021

Department of Primary Industries and Regional Development (2021) 'WA Regions' *Buy West Eat Best* <<https://www.buywesteatbest.org.au/eat-local/wa-regions/>> accessed on 27 August 2021

Department of Primary Industries and Regional Development (2017) 'Kimberley' *Government of Western Australia* <<http://www.drd.wa.gov.au/regions/Pages/Kimberley.aspx>> accessed on 27 August 2021