Bush to Bowl

www.bushtobowl.com **Teaching** resource



Science and Technology: Stage 1

This resource serves as an example of a teaching and learning sequence focused on engaging students in traditional Aboriginal knowledge of native plants and bushfoods. The content and activities can be adapted to differentiate to students of varying needs and abilities who are accessing the curriculum at different stages. This resource describes a sequence of five lessons which follows the 5-Es learning model for guided science inquiry.

Knowledge and Understanding	Working Scientifically Design and Production
ST1-4LW-S describes observable features of living things and their environments ST1-5LW-T identifies how plants	ST1-1WS-S ST2-2DP-T observes, questions and uses materials, tools and equipment collects data to communicate to develop solutions for a need or and compare ideas
and animals are used for food and fibre products	opportunity

Content: Living World

Plants and animals used for food and fibre

Focus question: How do humans use plants and animals?

Students:

- > identify some plants and animals that are grown and used for food production
- > explore the plants and animals used in customary practices of Aboriginal and Torres Strait Islander Peoples

Cross curriculum priorities

- > Aboriginal and Torres Strait Islander histories and cultures
- > Sustainability

General Capabilities

Intercultural understanding - Literacy - Numeracy - Personal and social capability - Ethical understanding

Links to other Key Learning Areas

English Mathematics Creative Arts HASS: Geography EN2-1A, EN2-4A, EN2-10C. MA2-2WM, MA2-1WM, MA2-3WM. VAS2.2. GE2-1, GE2-3.

See appendix 1

Lesson Sequence

Learning intention: To engage with and understand the value of native bushfoods and traditional Aboriginal knowledge and culture.

Success criteria: To understand the properties and traditional uses of native plants as bushfoods and identify these in the playground or surrounding area.

Lesson 1 - Engage

Key vocabulary: *native, local, habitat, bushfoods, ecosystem, environment, sustainable, connected* - Engage students in the topic through a class discussion about their own prior knowledge of native bushfoods. - Discuss whether students know of or have tried any native bushfoods before and notate their ideas of what they know and want to know on a KWL chart. This chart will be updated throughout the learning experience to document students' questions and observations.

- Elicit students' ideas of the meaning of native or non-native plants and discuss the reasons why it is important to encourage native plant growth in our environment.
- Discuss how the particular group of Aboriginal people of the school's area have used native plants for over thousands of years for food, medicine and cultural practices.

Check out this video for inspiration for your students:

https://www.abc.net.au/btn/classroom/bush-tucker-garden/11724674

Ask the students to note down what they learnt from the video about some bushfoods presented on this video - names and uses?

Lesson 2 - Explore

Key vocabulary: senses, look, feel, observe, hear, texture, leaves, stems, flowers, animals, birds, insects, awareness - Inform students that they will be undertaking a sensory walk throughout the playground or with their parent in a local area using their senses to see if they can identify native plants. Students are encouraged to smell, feel and inspect plants in their local environment and listen out for sounds of animals or insects. N.B: For safety concerns, ensure that the plants that students engage with are safe to touch or smell. Only allow students to taste plants if they have been identified as safe for consumption. Prior to this lesson, consult with the schools' allergy and anaphylactic student register.

- Allow students to take photographs or notate diagrams of plants and create a tally of each time they see that plant in their science journals. They may also decide to take small samples of plants to take back to the classroom and to compare and investigate findings.
- Find a place in the playground for students to sit undisturbed. Encourage students to take a moment to sit in silence and be mindful of their environment. Some guiding questions to encourage awareness may be "what bush sounds can you hear? Can you hear any different bird calls or animal noises? What different smells do you notice? What coolness or warmth do you feel on your skin? Where is the wind coming from? What part of your body can you feel the sun's heat?"
- -Students are encouraged to draw a sensory map of the different environmental aspects they became aware off

Lesson 3 - Explain

Key vocabulary: kangaroo grass, native mint, saltbush, grevilia, nectar, bread, seeds, flour, flower, sodium - Engage students in a class discussion and encourage them to compare and contrast the different plants that were observed or collected during the sensory bushwalk

- Allocate students to groups and have them create a column graph using the tallied plants that they observed. Encourage each group to share their table with the class.
- Conduct a think-pair-share for students to discuss whether they think these plants were native or non-native and the reasons for this. For example, did they notice any native birds eating the nectar from flowers? Did they notice any native bees on the sensory walk?
- Using a Jigsaw teaching method, students will use iPads to watch an informative video of Clarence and Adam from

Bush to Bowl talk about a range of native Bush foods within collaborative 'expert' groups.

Videos link - CLICK HERE

Saltbush

Kangaroo Grass

Mint Bush

Grevillia

*find the videos on Bushtobowl.com website

Lesson 4 - Elaborate

- Discuss how the plants that were studied last lesson could be used in our everyday lives. For example; Can you think of any everyday foods that are made from plants? (eg, bread, cakes, herbs, sweets)? Can we replace any of these foods using native plants?
- Discuss the connection to animals and insects any why is it important that native plants exist and in our environment for native birds to survive.
- Students will use iPads, laptops or library resources to research other native bush foods and create a meal plan or recipe which uses as many different native foods as possible. For example, a dessert of Kangaroo grass *dumbar* (damper) flavoured with grevilia nectar syrup, lemon myrtle oil and wattle pollen.
- -Update the KWL chart with students' ideas, observations and questions.

Lesson 5 - Evaluate

- In collaborative groups, students will draft, edit, finalise and present their meal plan or recipe to the class and describe the benefits of using native bushfoods in every day eating. They are also encouraged to identify and explain the positive impact that growing native bushfoods has on our environment.
- Meal plans and recipes can be collated and created into a class Bush Cuisine magazine and shared with parents, carers and the wider school community.
- Students are assessed on their understanding of native bush foods and Aboriginal knowledge in this summative assessment task.

Appendix 1

English

EN2-1A: communicates in a range of informal and formal contexts by adopting a range of roles in group, classroom and school and community contexts

EN2-4A: uses an increasing range of skills, strategies and knowledge to fluently read, view and comprehend a range of texts on increasingly challenging topics in different media and technologies

EN2-10C: thinks imaginatively, creatively and interpretively about information, ideas and texts when responding to and composing texts.

Mathematics

MA2-2WM: selects and uses appropriate mental or written strategies, or technology, to solve problems MA2-1WM: uses appropriate terminology to describe, and symbols to represent, mathematical ideas MA2-3WM: checks the accuracy of a statement and explains the reasoning used

Creative Arts (Visual Arts)

VAS2.2: Uses the forms to suggest the qualities of subject matter.

HASS: Geography

GE2-1: Examines features and characteristics of places and environments

GE2-3: Examines differing perceptions about the management of places and environments