If Trees Could Talk

Focus: Working as a Scientist and Biodiversity

Program Overview: Information for Teachers

This program developed by Amaroo Environmental Education Centre implements elements of the three interrelated strands of the Australian Curriculum for Science as well as Cross Curriculum Priorities: Aboriginal and Torres Strait Islander histories and cultures and Sustainability.

This programme is delivered at Amaroo and is a full school day in length. The sequence of lessons on the following pages outlines both the activities undertaken by the Amaroo teacher and suggested activities to be conducted by the teacher in the school.

Synopsis of Program:

After reading a big book, 'If Trees Could Talk', the students are invited to attend an activities day at Amaroo EEC so that they may become more aware of the importance of trees to our environment, the need to protect the creatures that rely on trees and other bush plants for their existence and the local history that they could tell us if they could actually talk. (Indigenous Perspectives)

Activities include:

- Up close and personal investigation of trees - Blindfold Activity
- "Whose Home" game to reconsider ways of developing areas
- Basic mapping
- Bush walk to investigate a local habitat
- Observing seed and seed pod specimens and ways of seed dispersal
- Making a commitment to look after the bush and preserve it for future generations
### Pedagogical Key: Based on Amaroo EECs Pedagogical Framework

<table>
<thead>
<tr>
<th>Pedagogy and Place – Learning Beyond the Classroom</th>
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<tbody>
<tr>
<td><strong>Being in the Natural Environment [NE]</strong></td>
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<tr>
<td><strong>Full Sensory, Mind Body Engagement [Sense]</strong></td>
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<td><strong>Intellectual Quality</strong></td>
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<td><strong>Substantive Conversation [SC]</strong></td>
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<td><strong>Supportive Classroom Environment</strong></td>
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Lessons for this Science unit have been developed by Amaroo Environmental Education Centre to incorporate additional support and resources that are available through the Centre to assist with the implementation of the Australian Curriculum Content Descriptors.

The lessons in the teaching sequence have been colour coded as follows:

- **Green** Lessons in these boxes should be taught/facilitated by the class teacher in the school setting.
- **Yellow** Lessons in these boxes will be taught by the Amaroo teacher as part of your program.
- **Orange** It is suggested that pre/post work may be conducted on these objectives.

### Teaching Sequence

<table>
<thead>
<tr>
<th>Topic</th>
<th>Lesson Objectives</th>
<th>If Trees Could Talk Lesson - outline</th>
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</table>
| **Pre-engagement or “Hook”** | Students will:  
- Engage in a story about animals and plants holding a meeting because they are concerned about the future of their continuing survival.  
- Accept invitation to Amaroo EEC | Teachers receive a copy of the big book “If Trees Could Talk” to be read with the students. This is followed up with an invitation to Amaroo to attend an activities day to discover more about the elements of our natural habitats. The students can reply to this via email/writer. |

**[EILC; AE; CtW]**

**Observing Living Things:**

- **Blindfold Activity**
  - **[Sense; HoT; SR]**
  - Students will:  
    - Understand that observing in science provides useful information to answer questions

**Working like a scientist:**

- **Basic Mapping**
  - **[EILC; LLRP; HoT; DU; SC; BK; LbD]**
  - Students will:  
    - Engage in a habitat game, “Whose home?”  
    - Pose questions to help plan for the future  
    - Predict outcomes  
    - Problem solve

- **Whose Home:** The children are engaged in a game where they role play animals dependent on a piece of land as their habitat. A ruthless developer comes in and without any careful planning develops the land. About 2/3 of the creatures are now homeless. The students are then asked to consider ways that the block may be developed more sustainably.

- **With the teacher’s guidance, basic maps of the before and after possible solutions are constructed.**
# Teaching Sequence

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<tr>
<th>Topic</th>
<th>Lesson objectives</th>
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<tr>
<td><strong>The Bush Walk:</strong></td>
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<tr>
<td>[LLRP, HoT, BNE, CIV, AE, LbD]</td>
<td>Students will:</td>
<td>Students will:</td>
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<tr>
<td></td>
<td>• demonstrate their scientific observation skills</td>
<td>• Use eyepicopes to closely examine particular features of plants (within the school grounds) and note the indigenous uses of these plants.</td>
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<td>• discover and appreciate the Aboriginal and Torres Strait Islander people’s knowledge of the local environment</td>
<td>• Participate in a bushwalk noting the range of different living things, examining differences between living, once living and products of living things.</td>
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<td></td>
<td>• Devise and record a commitment to respect the bush and the creatures that live there</td>
<td>• Discover a message on written on paperbark left in the bush and be challenged to think about their own commitment to respect the bush. They will discuss possible ways of looking after the environment and these will be recorded later in the afternoon on leaf shapes.</td>
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<tr>
<td><strong>Seeds and Seed Dispersal:</strong></td>
<td>Students will:</td>
<td>Students will (in small groups using kits):</td>
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<tr>
<td>[HoT, AE, SC]</td>
<td>• Work in groups to pose and answer questions and make predictions based on their observations</td>
<td>• Compare different seed pods and seeds and try to match them up.</td>
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<td></td>
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<td>• Discuss seed dispersal methods</td>
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<tr>
<td><strong>Reflection</strong></td>
<td></td>
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<tr>
<td><strong>My Commitment</strong></td>
<td>Students will:</td>
<td>Students will:</td>
</tr>
<tr>
<td>[DU]</td>
<td>• understand that all creatures and plants are important to maintain biodiversity in the environment</td>
<td>• Write their &quot;Commitment to the Bush&quot; (what they can commit to doing, to help the trees).</td>
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<td></td>
<td>• Communicate their ideas to other students and teachers</td>
<td>• This magnetic leaf shape is placed on the 'Tree of Life'.</td>
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**Suggested Assessment Tasks:**
- Design a poster to make people aware of the importance of respecting our natural environments and creatures.
- Categorise living/non-living and products of living things.
- List ways Indigenous people used plants in their daily lives.

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Cross Curriculum Priority Link: Sustainability addresses the ongoing capacity of Earth to maintain life. Sustainability education is futures orientated, focused on protecting environments and creating a more ecologically and socially just world through informed action.

Organising Idea: Systems OL.2 - All life forms, including human life, are connected through ecosystems on which they depend for their well-being and survival.

Futures OL.7 - Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments

Cross Curriculum Priority Link: Aboriginal and Torres Strait Islander histories and cultures: Aboriginal and Torres Strait Islander identity is central to this priority and is intrinsically linked to living and learning Aboriginal and Torres Strait Islander communities deep knowledge and traditions and holistic world view

Organising idea: Culture OL.5 - Aboriginal and Torres Strait Islander People’s way of life are uniquely expressed through ways of being, thinking knowing and doing.

Australian Curriculum References for this program:
Year 3 & 4 Science - Content Descriptions
Science Understandings
Biological Science
- Living things can be grouped on the basis of observable features and can be distinguished from non-living things (Yr 3 - ACSU044)
- Living things, including plants and animals, depend on each other and the environment to survive (Yr 4 - ACSU073)

Science as a Human Endeavour
Nature and Development of Science
- Science involves making predictions and describing patterns and relationships (Yr 3 - ACSHE050) (Yr 4 - ACSHE064)

Use and influence of science
- Science knowledge helps people to understand the effect of their actions (Yr 3 - ACSHE051) (Yr 4 - ACSHE062)

Science Inquiry Skills
Questioning and Predicting
- With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge (Yr 3 - ACSIS053) (Yr 4 - ACSIS064)