Program Overview

Sensational Science

Year 6
2 Full days

Day 1 – 9.00 am - 2.30pm
Day 2 – 9.15 am - 2.30pm

"All [students] said they think differently about the human and animal impact on the forest and which impacts are positive and which are negative"

Year 6 Teacher

"Today I had learned a lot of things about habitats, animals and plants but the things that really interested me was that the reason we did not find the whole range of macroinvertebrates in the dam - it does not mean that the environment is not healthy it just means that this is not the right habitat for certain bugs"

Angel, Year 6 Student

Big Idea
Developing science inquiry skills through a real-life field investigation and caring for self, others and place.

Curriculum Links
Science

Overview
The Sensational Science program has been designed for Year 6 students and specifically focuses on the development of science inquiry skills. Held over two days, Day 1 at your school sees students exploring the scientific method, with an emphasis on developing testable questions, predictions and hypotheses for a field investigation. Day 2 takes place at Bunyaville Conservation Park,
Program Overview

with students conducting field studies to investigate the Bunyaville pond and open forest ecosystems and the effects that abiotic factors such as soil, light and water and human activities have on a local natural place.

**Day 1: At your school**

Students participate in a Science Inquiry Workshop, where they are explicitly taught about the Scientific Method and each of the ‘steps’ involved in the science inquiry process. Students are given the opportunity to explore the science inquiry skill of questioning and predicting in depth and they develop testable questions, predictions and hypotheses for field studies to be conducted at the Bunyaville Conservation Park. Students are also introduced to the concept of ecosystems and the abiotic factors and human activities that impact upon them, and they participate in a group activity to practise the use of a dichotomous key for identifying aquatic macroinvertebrates (water bugs) out in the field.

**Day 2: At Bunyaville Conservation Park**

At Bunyaville, students participate in three activities, designed to allow them to collect data related to their testable questions, predictions and hypotheses.

**Leaf Shake:** Students visit two sites within the forest to explore different habitats, the insects and plants that live there and the abiotic factors (water, light and soil) that influence the animal and plant populations. After participating in this activity students will understand that:

- Microclimates develop due to the amount of moisture, slope, light intensity and aspect of a place
- The types of animals and plants found at a location are influenced by abiotic factors such as water and light; and
- People impact on habitats and ecosystems

**Ponding:** Students net for macroinvertebrates in one of the Bunyaville Conservation Park’s ponds/dams recording information using a variety of techniques and identifying the animals collected using a dichotomous key. Following this activity, students will understand that:

- The types of aquatic macroinvertebrates found in a pond/dam is influenced by the physical environment in which they live
Program Overview

and the abiotic conditions they are experiencing

- Dichotomous keys can be used to aid in the identification and classification of animal species
- The health of a pond/dam ecosystem can be a reflection of the animals that live there

Earthwalk: Bunyaville teachers take students on an earthwalk where they use their observation skills to explore the interactions occurring between plants, animals and the environment and investigate the various ways that human activities impact on ecosystems within the park. Following this activity, students will understand that:

- Plants and animals depend on each other, abiotic factors and physical features of the environment to survive
- People impact on habitats and ecosystems
- Human activities within a natural place can be managed to have less impact on animals, plants and other things that live there

Curriculum Links

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General Capabilities

- [ ] Literacy
- [ ] Numeracy
- [ ] ICT
- [ ] C&CT
- [ ] P&SC
- [ ] EU
- [ ] IA
- [ ] HASS
- [ ] ASSE
- [ ] PSSE

Cross-Curriculum Priorities

- [ ] Health and Wellbeing

- [ ] Arts
- [ ] English
- [ ] History
- [ ] Mathematics
- [ ] PE
- [ ] Science
- [ ] Technology
- [ ] Sustainability
- [ ] Visual Arts