Nature of Technology



Whaowhia te kete mātauranga. Fill your basket of knowledge.

Whakataukī — Māori Proverb

This activity allows students to create in a way that supports the Technology Curriculum through the traditional ideas of Māori around stewardship of nature and Mātauranga Māori.

1 Making instruments from found objects in nature

Investigate the simple instruments that we could make from found natural objects. Have a talk to the students about wood flutes, simple marimbas, drums and striking sticks.

2 Technological Planning

Undertake planning to identify the key stages and resources required to develop an outcome.

Students decide what type of instrument they would like to make.

What resources will they need?

How will they assemble their instrument?

What types of sounds would they like to produce?

Methoc

3 Produce instrument diagrammes

Revisit planning to include reviews of progress and identify implications for subsequent decision making.

Students at the end of the activity reflect on the process from planning to sound production.

Was the outcome what they expected?

Why?

What would they do differently if they went through the process again?

(4) EOTC Trip

If possible, take the students for an EOTC trip to the Waikato Awa.

Talk to them about the ways in which we produce sound with musical instruments:

- Blowing
- Plucking
- Bowing
- Striking

5 Demonstrate a grass-blade reed

- Select a blade of grass that will be long enough to fit between your thumbs.
- Blow through the aperture to produce sound.
- 6 Students select objects that they believe will create the desired sounds

Ensure that they only select plant material that is lying on the ground and don't harm any plants! Breaking plants for this activity should be strongly discouraged.

Stones and rocks should only be taken if any animals living under them are not injured or killed.

7 Materials are taken back to school and prepared/made into instruments.

A musical piece can then be created and performed to an invited audience.

Extra Resources

Visit the Haumanu Collective to gain insight into the idea of Mātauranga Māori as regards Taonga Puoro.



www.haumanucollective.com

Learn how to Whistle with a Blade of Grass



www.youtube.com/ watch?v=qc9Zc2g9D94

Curriculum links

Characteristics of Technology

Understand how society and environments impact on and are influenced by technology in historical and contemporary contexts and that technological knowledge is validated by successful function.

Science — Living world

Life processes

Understand the processes of life and appreciate the diversity of living things.

Ecology

Understand how living things interact with each other and with the non-living environment.

The Arts — Music

Developing ideas

Express and shape musical ideas, using musical elements, instruments, and technologies in response to sources of motivation.

Represent sound and musical ideas in a variety of ways.

Communicating and interpreting

Prepare and present brief performances of music, using performance skills and techniques.