

LESSON IDEA - YR 7

Big idea

- First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing (Culture A_TSIC2)

Application

exploring and observing First Nations Australian children's instructive games; for example, Koara from the Jawi and Bardi Peoples of Sunday Island in Western Australia, to investigate probability, predicting outcomes for an event and comparing with increasingly larger numbers of trials, and between observed and expected results



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conduct repeated chance experiments and run simulations with a large number of trials using digital tools; compare predictions about outcomes with observed results, explaining the differences

Connection

First Nations Australians have long used instructional games, devices and models as play-based learning objects. They are mostly designed for children to stimulate learning by promoting the development of a specific skill or providing play experiences to learn about a particular subject.

Koara means 'play' in the language of the people who once inhabited Iwanyi (Sunday Island) in Western Australia. Koara is an activity where students use propeller-type toys.

Lesson ideas

- Students should make their propeller <https://www.youtube.com/watch?v=X-SUTxt6RW0>
- When the propeller is spun rapidly in a clockwise direction between the palms it will travel up in the air to a distance of 10 metres or higher:
 1. Hold between the heel of the left hand and fingertips of the right hand.
 2. Keep the left hand still and move the right hand forward.
 3. Release as the propeller reaches the fingertips.
- Use the game as a context for exploring probability and data collection (see page 2)

BACKGROUND

Maths activities

1. Accuracy tests

The object of the game is to land the propeller within a designated target area, such as a hoop about 5 metres away, which provides contextualised ways to introduce the metalanguage of probability and data:

- discuss the **sample space** for the task and decide how to treat propellers that are half in / half out
- identify whether the **outcomes** are **equally likely**
- ask students to predict how many times they think they can land the propeller in the target zones using 10 **trials**, and write this as a **frequency** and probability using **fractional**, **decimal** and **percentage** notation
- conduct an experiment and record the observed frequency and **experimental probability (relative probability)** and compare with their original estimates
- ask students to predict how many times they would expect to hit the target for 20, 50 or 100 trials (**expected frequency**)

The data collected from the accuracy tests could be displayed as an example of **categorical data** (hit / miss) using displays such as a **pie chart** or **divided bar graph**.

2. Propeller golf

In propeller golf, students spin the propeller towards an agreed-on goal such as a tree, making progress towards the target before spinning again. They should count the number of turns necessary to hit the target. A course of 9-holes could be created and this time the sample space would be reaching the target in {1,2,3... spins}.

A student's individual data could be displayed using a **dotplot** or **bar graph**, or groups could play in a team adding their scores.

The results for the round of golf could be added and collated for the whole class using a **stem and leaf** plot to display the data. This could lead to discussions around **measures of spread** and **location**. If the activity was repeated, this could be turned into a **back-to-back** stem and leaf plot and used to compare the two data sets to see if results change as students became better practised in spinning their propellers.

3. Partners

In the partners game, two students face each other 3–5 metres apart. They should use one propeller between the two, and try to spin for their partner to catch. After a successful 'spin-and-catch' sequence, each player moves back one step, continuing until a player misses catching. The measured distance between the two players at maximum is their paired personal best.

This activity introduces a measurement component and **numerical continuous data**, which could be used to introduce the concept of **grouped data**. For older students, whole class data could be collated, displayed and analysed using a **boxplot**.

BACKGROUND

Cultural significance

For millennia, Aboriginal and Torres Strait Islander Peoples have used instructive toys and games as educational devices and models to stimulate and achieve learning in young people. Children's games and activities have long provided a context for acquiring knowledge, understanding, and the development of skills required in later life. Australia's First Nations Peoples played many cooperative games to prepare their children for life within their society. Many of these games had specific individual skills as well as tasks the group had to achieve, which were directly related to improving their hunting and gathering skills to enhance survival of the clan.

For example, if there was a skilled spear thrower, it was his responsibility to the group to teach others to be just as good as he was. By teaching others to perform to the same level of proficiency, the group was not dependant on one person, who was the best spear thrower, for food, hence their chances of survival were increased. The survival of each First Nations clan was directly dependant on the ability of all members to be skilled food and resource gatherers. The ability to share their skills and help one another to improve was of crucial importance for the survival of the group, so the games they developed to improve their physical skills reflected communication, support and cooperation with one another, in order to achieve a collective goal.

Over the years, sport has played a major role in developing a socially cohesive environment within First Nations communities and many of the games you see today have evolved from traditional games of the past.

In various places accounts have been recorded of leaves being folded into shapes to make a propeller or 'spinner' type of toy. The children ran with them or held them into the wind, or they were thrown into the air to drop to the ground. Aunty Ruth Hegarty of Cherbourg (follow this link to learn more about Aunty Ruth <https://www.qatsif.org.au/our-patrons>) recalled using cardboard and a straw to make propellers. The cardboard was decorated with coloured flowers and the players ran against the wind.

First Nations Australians' games and activities like Koara have a rich history as they have been passed down through generations. However, some traditional First Nations games were almost lost after colonisation and today extensive consultation with First Nations Elders is necessary to re-establish the traditional instructional games and their rules.

BACKGROUND

Preserving the games

The information contained in this lesson plan about Koara is sourced from a document called Yulunga: Traditional Indigenous Games prepared by the Australian Sport Commission. It contains a wide selection of games and activities from Aboriginal and Torres Strait Islander societies all around Australia and provides an opportunity to learn about, appreciate and experience aspects of First Nations culture by playing traditional instructive games. The Yulunga document explains the rules and rationale behind the games and provides information on the geographic region and peoples who devised and played each game.

The Yulunga: Traditional Indigenous Games resource helps provide all Australians with a greater understanding and appreciation of First Nations Australian culture — the way it was many thousands of years ago and still is today. The resource recognises Aboriginal and Torres Strait Islander knowledge and cultural sharing and provides the opportunity for First Nations Australian Peoples to be seen as “Peoples of knowledge”.

The Yulunga resources were created based on extensive research, including several hundred accounts collected over many years from all parts of Australia and the Torres Strait Islands. Many of the original accounts of games were recorded during the nineteenth century by explorers, government officials, settlers, scientists and missionaries. There are comparatively few descriptions of games and sports by First Nations Australian people, but efforts have been made to include a significant level of First Nations input.

The games and activities in Yulunga: Traditional Indigenous Games are:

- played in their traditional forms with modern equipment
- modified for safety, ease of use or to cater for all ages and abilities
- reconstructed from incomplete accounts

Approval was sought from the Traditional Owners of the games or from a representative Aboriginal or Torres Strait Islander organisation. When the games are used as part of school or sporting program it is recommended that local Elders and First Nations Australian groups are informed of plans and invited to participate in some way.

About Iwanyi

Iwanyi, also known as Sunday Island and Ewenu or Ewuny in the Jawi (Djawi or Djai) language, is an island off the coast in the Kimberley of Western Australia. It is a small island at the entrance to King Sound, several kilometres east of Cape Leveque, at the southwestern end of the Buccaneer Archipelago. The island occupies an area of 1,198 hectares.

BACKGROUND

It is the traditional country of the Jawi People, most of whom now reside at communities on the mainland at Cape Leveque. Iwanyi was once home to the Jawi People that lived there before a mission was established in 1899 when two non-Indigenous men, Sydney Hadley and Harry Hunter established a trepang (collecting sea cucumbers) and pearling station. In their building and operations they relied on the local People's labour and knowledge of the reefs, from both the Jawi People of the island group and the Bardi people from the nearby mainland peninsula.

Hadley established a school in the form of a private mission, which received government support. However, the histories of missions in this country are diverse and often dark. In the nineteenth and twentieth centuries, many First Nations Australians were forced from their Country and on to missions. It was not unusual for families to be separated and sent to different areas, sometimes across state borders, with no idea of where their loved ones ended up. Missions were created and designed to house First Nations people, convert them to Christianity and prepare them for menial jobs, ostensibly to 'protect' them in a very patronising, paternalistic sense. Mainstream Australian thinking at the time was that Australia's First Peoples were a 'dying race'.

In 1905 it was reported that there were 90 permanent residents at Iwanyi and 23 children at school, who were under the 'guardianship' of the departments responsible for Aboriginal welfare.

During the war the pearl-shell market collapsed and Hadley fared badly and sent many of his Aboriginal workers back to their own country on the eastern side of the peninsula. He sold the mission to the Australian Aborigines Mission, which continued to operate until 1962, instituting a strict discipline policy which led to many residents leaving the mission. In 1964, a destructive cyclone crossed the peninsula and all the Aboriginal people who were not bedridden or close to death were transferred to Derby (on the mainland). Many wanted to return to the island and six houses were built for the people who returned and subsequently died on the island. The Iwanyi mission was formally closed in 1965, and in 1972 the Jawi people formed a community at One Arm Point (on the mainland). The island is now uninhabited.

Artwork

Artworks have been created by:

- Cortney Glass, a contemporary digital artist, originally from Katherine, Northern Territory. and a Dagoman, Wardaman, and Gurindji woman
- Sheri Skele, a proud Bidjara woman and a contemporary Aboriginal artist who calls her artworks Bigi Nagala, which means 'I am dreaming' in Bidjara

BACKGROUND

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