# Workshop 3 – Knowledge in Stories

|  |
| --- |
| Learning Outcomes In this workshop, you will practice and get feedback on:   * To learn about one of the oldest cultures in the world; the concept of Dreaming and the creator of creation for Aboriginal people the Waarkal (also known as the rainbow serpent and spirit snake). * Ways of knowing – how knowledge is entwined in stories * Sources of knowledge – how to find culturally appropriate and reliable information |

**Introduction**

This tutorial is an essential part of your overall learning about Aboriginal people, culture and science. It will cover some important aspects of the Australian Aboriginal cultural worldview. Carbon dating has demonstrated that Aboriginal cultural artifacts, art, bones, cloth, wood and plant fibers date back to between 45,000 to 65,000 years. This supports Aboriginal people having occupied this continent known today as Australia since this time.

Terms such as Dreaming, past, present and future within the Dreaming, Aboriginal concept of time, Stories and Legends, connection with country and the Waarkal (Spirit Snake, Rainbow Serpent, creator of creation) will be explained.

This and the next three workshops will provide much knowledge and experience from a variety of Aboriginal groups across Western Australia and Australia. Relating to Aboriginal cultural ways and processes, sustaining and caring for the environment, eco system and native animals and plants. Directly connecting with current and future issues of worldwide climate change.

**References**

Stanner, W.E.H. (2011). The Dreaming & Other Essays. Introduction by Robert Manne. Black Inc. Agenda. Australia.

Connolly, Michael J. (2020). Waarkal Oral Story. Munda-gutta Kulliwari Dreamtime Kullilla-Art <https://www.bing.com/images/search?q=pictures+of+the+rainbow+serpent>

Balardong Elder. (1976). The legend of the two hills in York. York, Western Australia.

**Activity 1. Oral traditions**

**Story by Michael Connolly**

Long ago in the Dreamtime when the earth lay sleeping and nothing moved or grew, lived the Rainbow Serpent. Then one day the Rainbow Serpent awoke and come out from beneath the earth. Refreshed from her long slumber she travelled far and wide leaving winding tracks from her huge body and then returning to the place she had first appeared.

On her return she called to the frogs "come out!" The frogs came out slowly as their bellies were full of water which they had stored during their long sleep.

The Rainbow Serpent tickled their stomachs and when the frogs laughed, the water spilled out all over the earth to fill the tracks of the Rainbow Serpent. This is how the lakes and the rivers were first formed.

With water, grass and trees began to grow which woke all the animals who then followed the Rainbow Serpent across the land. They were happy on earth and each lived and gathered food with their own tribe. Some animals lived in rocks, some on the vast plains, and others in trees and in the sky.

The Rainbow Serpent made laws that they were all to obey but some began to make trouble and argue. The Rainbow Serpent said "Those who keep my laws will be rewarded; I will give them human form. Those who break my laws will be punished and turned to stone & will never to walk the earth again". Those who broke the law became stone and were turned into mountains and hills and those who were obedient were turned into human form and were each given their own totem of the animal, bird or reptile from when they began.

The tribes knew themselves by their totems - kangaroo, emu, carpet snake, and many, many more. So no one would starve, the Rainbow Serpent ruled that no man should eat of his totem, but only of other totems. This way there was food for everyone.

The tribes lived together on the land given to them by the Rainbow Serpent or Mother of Life and knew the land would always be theirs, and no one should ever take it from them.

Michael J Connolly  
Munda-gutta Kulliwari  
Dreamtime Kullilla-Art

2020

**Legend of the two hills in York (Balardong Elder in 1976.)**

"There is two big hills in York the biggest is Walwalling (known today as Mt Bakewell) which means 'place of weeping' and the other hill is Wongborel (known today as Mt Brown) which means 'sleeping woman'.

Now there's a reason for these two hills to have these names.

The Noongars gave these names to the hills because of what happened a long time ago. This is in the dreaming.

Years and years ago one family of Noongars came here to live in York. They cleared some of the trees away and burned the bushes and the grass. Every year they would burn the grass and when the new grass would grow the kangaroos would come and eat the new sweet grass.

The Noongars would kill the kangaroos for food and they would use the skins to keep themselves warm because it would get cold in the valley of the two hills.

Anyway as the time went by the family got bigger and there were too many people living in the valley. So the old man said to his two youngest sons I want you to go and see what food you can get up in the hills. The youngest son left early in the morning and started climbing the hills they came with lots of different types of foods. They told their Father that there was plenty to eat in the hills.

The old man decided to send his two youngest sons and their wives to live on the two hills. His two youngest sons had many children and grandchildren. Time went on and the old man was ready to die, so he sent for his sons and their children and grandchildren. Down from the hills they all come to see the old man.

They all played sports and games and danced around the fires and hunted together and all had a big feed. The old man watched the games, he watched them all dance around the fire, and he ate the food that was caught for him and then he died with all his family around him.

Every year at the same time the hills Noongars and the valley Noongars would meet in the valley. They would dance around the fires, play games and hunt and eat together. For many more years they did this.

Then one year something wrong happened, one young fulla whose name was Wundig came down from the hills, he had moorditj marts (good legs) and he could run fast and was a good hunter.

It was soon time for him to marry the yorga (girl) he was promised, she was from over the other side of the hills. But Wundig wanted to marry Wilura who was from the valley people. They decided to take off together. This was wrong way because they were related.

The valley Noongars thought Wilura was living with Wundig up in the hills and the hills Noongars thought Wundig was living with Wilura down in the valley.

The valley Noongars went looking for Wilura up in the hills. The hill's Noongars told the valley Noongars that they didn’t know where the two young fullas were.

The valley Noongars wouldn't believe the hill Noongars and a big fight started. The hills Noongars were too good on their own land in the hills and a lot of valley Noongars were killed. The valley Noongars still left alive looked up and saw more hill Noongars coming from the other hill, there was too many of them so the valley Noongars went back down to the valley and called on their Mubarn man (clever fulla) and asked him to use his Mubarn. As the other hill people came over the big hill and down the slope they were turned into Balgas (black boy bushes) to this day you can see them still standing on the big hill (Eastern side).

The Mubarn man then turned his Mubarn on Wundig and Wilura and they both died.

Wundig's Karnya (shame) would stay on Walwalling (known today as Mt Bakewell) and his yorga (girl) Wilura's Karnya (shame) was sent to the other hill that he call Wongborel (known today as Mt Brown). The Mubarn man said that Wundig and Wilura would never meet again until the two hills came together and the river runs between the two hills. This is how it still is today. (York is on a fault line for earthquakes so maybe not in our lifetime but it could happen in the future).

The Mubarn man turned back to Walwalling and said that if any Noongar climbed the hill they had to climb to the top, if they didn't make it to the top then someone in their family would die. So if you are going to climb Walwalling today make sure you can climb it to the top".

**Activity 1.**

Write a few sentences identifying science embedded in the stories

**Activity 2.**

In your *evidence-based writing task* you explored 4 papers about Aboriginal rock art.

In groups, use your learning to summarise how rock art preserves and communicates knowledge in Australian Aboriginal culture.

How does this differ to knowledge management in western science?

**PART 2. Finding Reliable Sources**

**Global Challenges Topic**

*Research and write an argumentative essay that examines engagement between Western scientific and Indigenous knowledge systems, by demonstrating how Indigenous knowledge precedes, contributes to, collaborates with, or complements STEM (Science, Technology, Engineering or Maths) to address a Global Challenge.*

Identify a broad topic you would like to explore further and write about:

NOTE – we have excluded *Australian bushfires and Cultural burning* as a topic as we will use that as a case study in the unit.

**My Research Topic:**

**Activity 3. Searching for academic texts using databases.**

1. Review the *Evidence-Based Writing Module - Library Databases* to learn how to search the Library databases and how to find information.
2. Try the online Module Quizzes to check for understanding.

**Proquest Search Phrase Tips**

|  |  |  |  |
| --- | --- | --- | --- |
| Type |  | Example Expression | Example Output |
| Boolean Operators | AND | Marine AND Coastal | Only records with BOTH Marine and Coastal |
|  | OR | Marine OR Coastal | Records with Marine only, Coastal only, Marine and Coastal |
|  | NOT | Marine NOT Coastal | Records that contain Marine but do not contain Coastal |
| Truncation Character | \* | molecul\* | Records that contain molecul**e**, molecul**es**, molecul**ar**, etc |
| Wildcard Character | ? | b?te | Records that contain b**y**te, b**i**te, b**a**te, b**u**te |
| Exact Phrase Match | “” | “Endocrine Disrupting Compounds” | Records that only contain each word in the correct sequence |
| Two word search | x y | Operating System | Records that contains both Operating and System (an AND but not an exact match) |

**Be Careful of alternative spellings: Noongar/Nyungar/Nyoongar/Nyoongah/Nyungah/Nyugah and Yunga (**<https://www.noongarculture.org.au/noongar/>)

1. In the table below:
   1. List 2-3 main concepts of your research topic below.
   2. For each concept Record a set of 5 - 8 keywords. Consider synonyms, alternative spellings and both the singular and plural forms of words.
   3. Rewrite the list of key words as a search phrase incorporating **truncation characters, wildcard characters and Boolean Operators** (consider plurals and alternate spelling).

|  |  |  |
| --- | --- | --- |
| **Main Concept** | **Keywords** | **Search Phrase** |
|  |  |  |
|  |
|  |
|  |
|  |
|  |  |  |
|  |
|  |
|  |
|  |
|  |  |  |
|  |
|  |
|  |
|  |

**Activity 4. Finding Credible Sources**

1. Review the *Evidence-Based Writing Module - CRAAP Test*
2. Find one peer-reviewed science article and one source of Indigenous knowledge that you might use to start researching this topic.
3. Use the CRAAP method to provide a brief justification for why you believe these are appropriate and reliable sources.

|  |
| --- |
| **Source - Peer reviewed science paper** (APA 7th Formatting style): |
| Currency (date of publication, update, revision): |
| Relevance (intended audience): |
| Authority (scholarly, peer reviewed): |
| Accuracy (and verifiability): |
| Purpose (and point of view or objectivity) : |
| **Justification statement** (provide a summary statement of why this article is reliable) |

|  |
| --- |
| **Source - Indigenous science paper** (APA 7th Formatting style): |
| Currency (date of publication, update, revision): |
| Relevance (intended audience): |
| Authority (scholarly, peer reviewed): |
| Accuracy (and verifiability): |
| Purpose (and point of view or objectivity) : |
| **Justification statement** (provide a summary statement of why this article is reliable) |