

Aboriginal Contexts in the curriculum: ways of working

Dr Caroline Dean and Dr Kaye Price



Needs



Through the Aboriginal and Torres Strait Islander histories and **cultures cross-curriculum priority**, the **Australian Curriculum:**

“provides Aboriginal and Torres Strait Islander students with the ability to see themselves, their identities and cultures reflected in the curriculum.

...allows all students to engage in reconciliation, respect and recognition of the world’s oldest continuous living cultures”

Alice Springs (Mparntwe)
Education Declaration

DECEMBER 2019



Education
Council

acara AUSTRALIAN CURRICULUM,
ASSESSMENT AND
REPORTING AUTHORITY



Australian Curriculum: Science
Aboriginal and Torres Strait Islander
Histories and Cultures
cross-curriculum priority

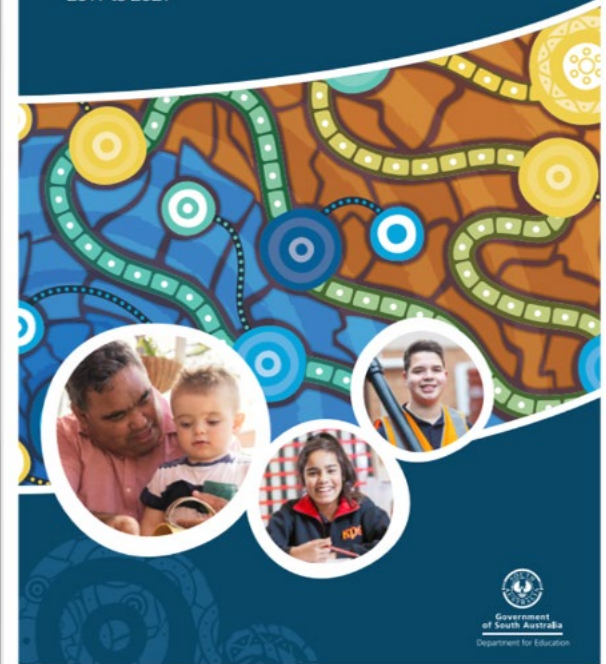
Content elaborations and teacher
background information for Years 7-10

JULY 2019

AC Australian
CURRICULUM

Aboriginal Education Strategy

2019 to 2029



Government
of South Australia
Department for Education

Strategy for Public Education in South Australia



South Australian Aboriginal Contexts in Science Initiative

Resources include **Aboriginal knowledges and ways of knowing embedded in the science curriculum for rigorous teaching and learning experiences for students**



Purpose

South Australian Aboriginal Contexts in Science Initiative

‘The Aboriginal and Torres Strait Islander Histories and Cultures priority provides opportunities for all students to deepen their knowledge of Australia by engaging with the **world’s oldest continuous living cultures**.

Through the Australian Curriculum, students will understand that contemporary Aboriginal and Torres Strait Islander communities are **strong, resilient, rich and diverse.**’

ACARA 2021



Aboriginal and Torres Strait Islander Histories and Cultures: **Organising Ideas**



Country/Place - Organising Idea 1

A TSICPI

First Nations communities of Australia maintain a deep connection to, and responsibility for, **Country/Place** and have holistic values and **belief systems** that are connected to the land, sea, sky and waterways.



<https://v9.australiancurriculum.edu.au/>

Learning Intention

What is the purpose of a classification system?
(Year 7)

An example of a teaching and learning resource to experience:

Year 7 classification.

Now available on Plink

Students learn how Aboriginal Peoples classify living things based on context and usage.

Steps 1 & 2 Grouping and Classifying

Caution:
Some plants are poisonous and extreme care must be taken. Do not eat bush food plants without being shown by an experienced person.



3
Source: [Seeds of South Australia](#)
Kurna name: **Karkarla**
Scientific name: *Carpobrotus rossii*
Common name: **Pig Face**



SCIENCE

YEAR 7 | UNIT 3 | RESOURCE 9

Classification instructions: Kurna Nation organisms

Purpose

To demonstrate a classification system of plants and animals used or found on Country of the Kurna Peoples of the Adelaide region to identify organisms.

How people use these organisms (usage), where they find them, and how they fit into each



Justify your choices
(only look at the picture side no-peeking at the writing!)

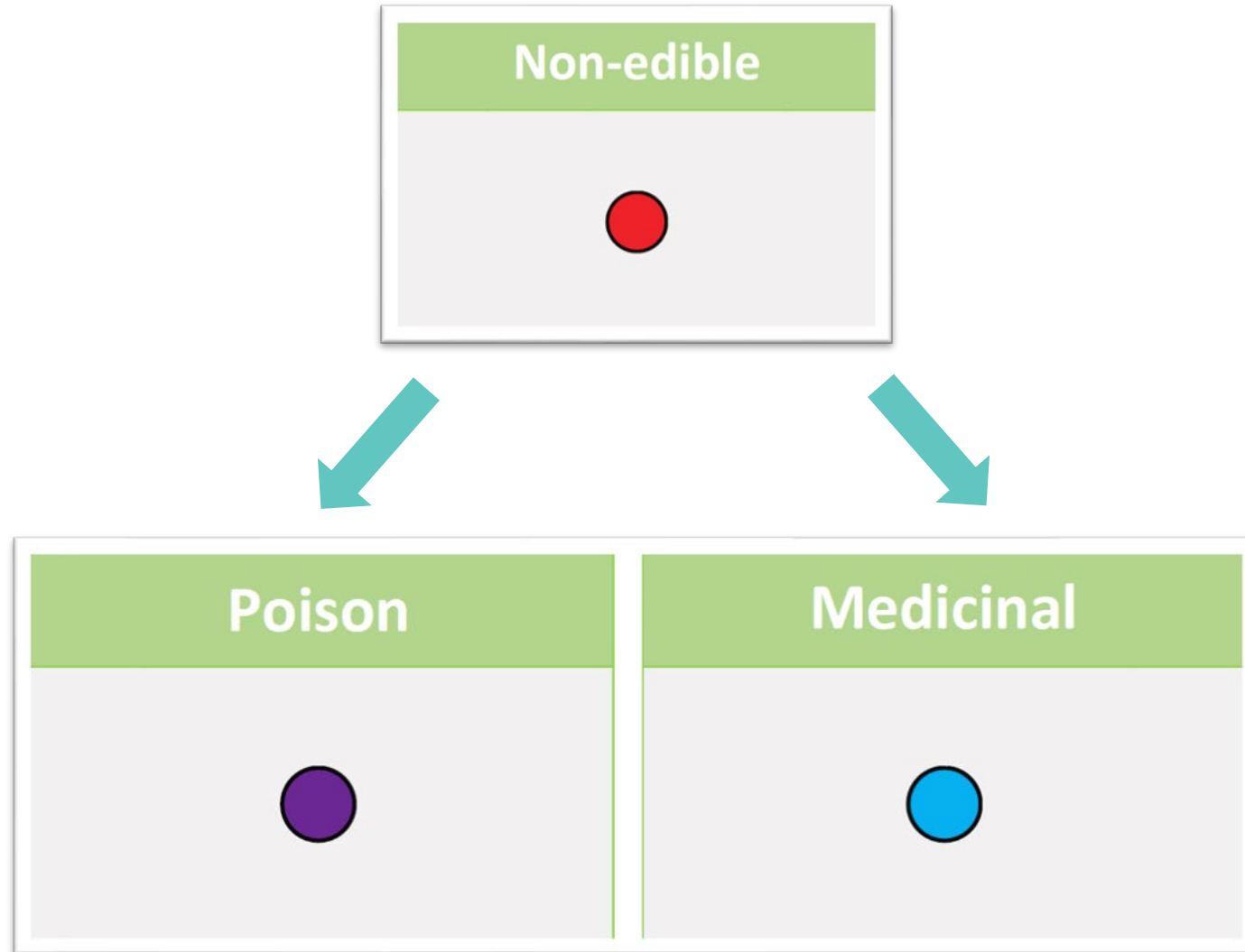
Edible



Non-edible



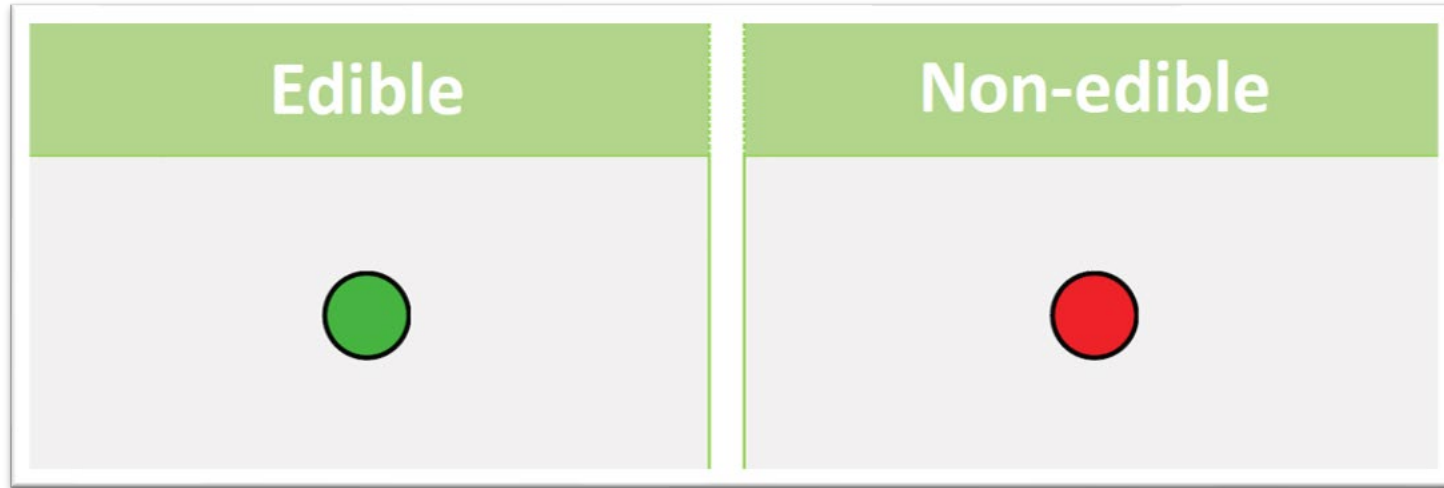
Step 3 Grouping and Classifying



Step 4 Grouping and Classifying



Step 5 Grouping and Classifying



Gallery Walk

What is the same or different? ...Why?

Prompting Questions

- Why might it be useful to classify according to where organisms are found?
- Is there one right way to classify plants and animals?
- How would Narungga and Kaurna Peoples find out the information they need to classify organisms? How might they teach each other?
- Why would this system be very useful?

Prompting Questions

- Why might it be useful to classify according to where organisms are found?
- Is there one right way to classify plants and animals?
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Classification

Year 7 Classification of Living things

Aboriginal Science elaboration

Many living things are grouped by Aboriginal Peoples based on their **context** and **usage**

Aboriginal Cultural knowledges

Science Curriculum

Pedagogy

Assessment



Contextualising science to a:
Kurna context, with Jack Buckskin and James Tylor
Kurna Cultural Consultants
Narungga context with
Narungga Elder Ron Newchurch

Classification

Year 7 Classification of Living things

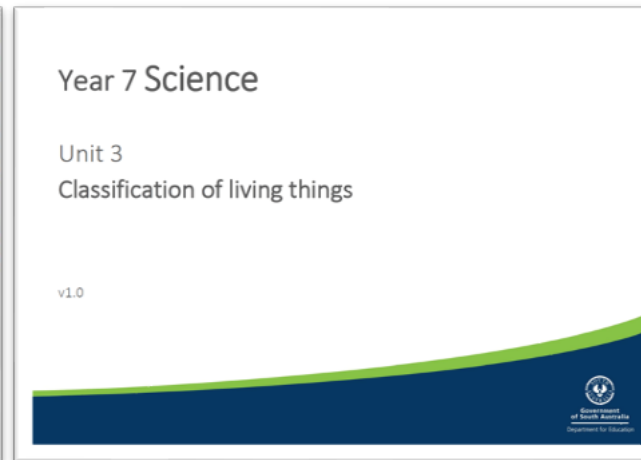
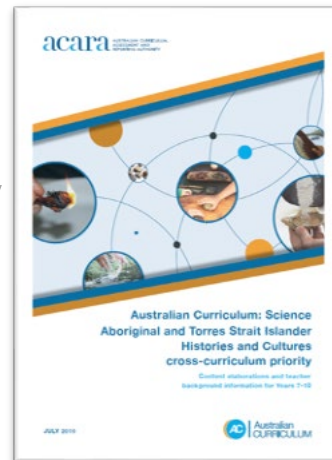
Resources now available on Plink

Science understanding (what)

Biological sciences

Classification helps organise the diverse group of organisms.

Aboriginal Cultural knowledge
Science Curriculum
Pedagogy
Assessment




Ways of working...

Introducing the South Australian Aboriginal Contexts in
Science Initiative
with Dr Kaye Price and Joe Sambono

<https://vimeo.com/791062152/95fd2b03a9>

Introducing the South Australian Aboriginal Contexts in Science Initiative

After watching the video...

- What did you notice, what do you wonder?
 - What was new thinking for you?
 - What were the key messages?
- 

‘Research suggests that non-Indigenous teachers are fearful of embedding Aboriginal and Torres Strait Islander histories and cultures into their teaching and learning out of fear of making mistakes, fear of perceived tokenism and/or fear of causing offence.’

Booth 2014; Hogarth 2018; Shipp 2013 all cited in Hogarth 2022

A teal-colored triangle is located in the bottom right corner of the slide, pointing towards the top right.

Lacking
resources

I don't know
enough
about the
background
knowledge

I might
cause
offense

I can't find
anything
on
YouTube!

Resources not linked to
Australian Curriculum
concepts

How do I
teach my
learning area
content?

Where do I
find sources
of
information?

I don't have
enough
time!

Is the
information
credible and
accurate?

The challenges...

- Respectfully representing Aboriginal knowledges and ways of knowing by converting diverse source materials into classroom materials for SA teachers
- Quality assuring material for culturally appropriate terminologies and sensitivities
- Keeping teachers in the culturally safe zone

Ways of working ... solutions and supports



Curation of knowledges from sources

Sources, sources and more sources...

First Nations
Australian Peoples

Science knowledges, technologies, genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts.



ACARA Science-Teacher Background



Archives, newspapers and expedition records



Non-fiction books



Academic papers



PhD dissertations



Government reports



Cultural Institutions



First Nations Dictionaries



Dendroglyphs, petroglyphs and rock paintings



Documentaries and videos



Photos, paintings and drawings

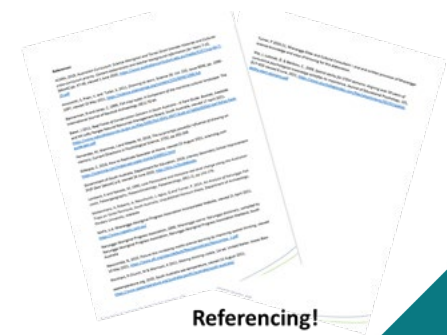
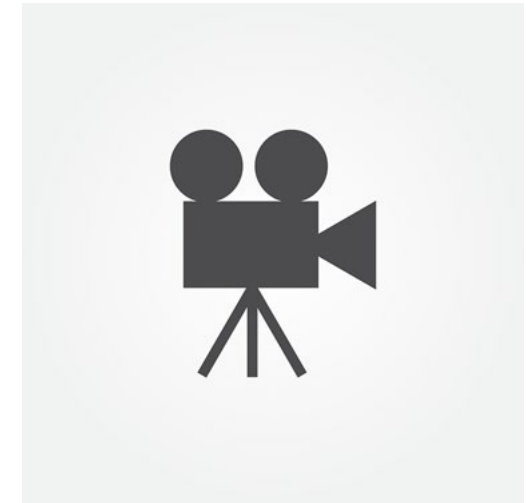
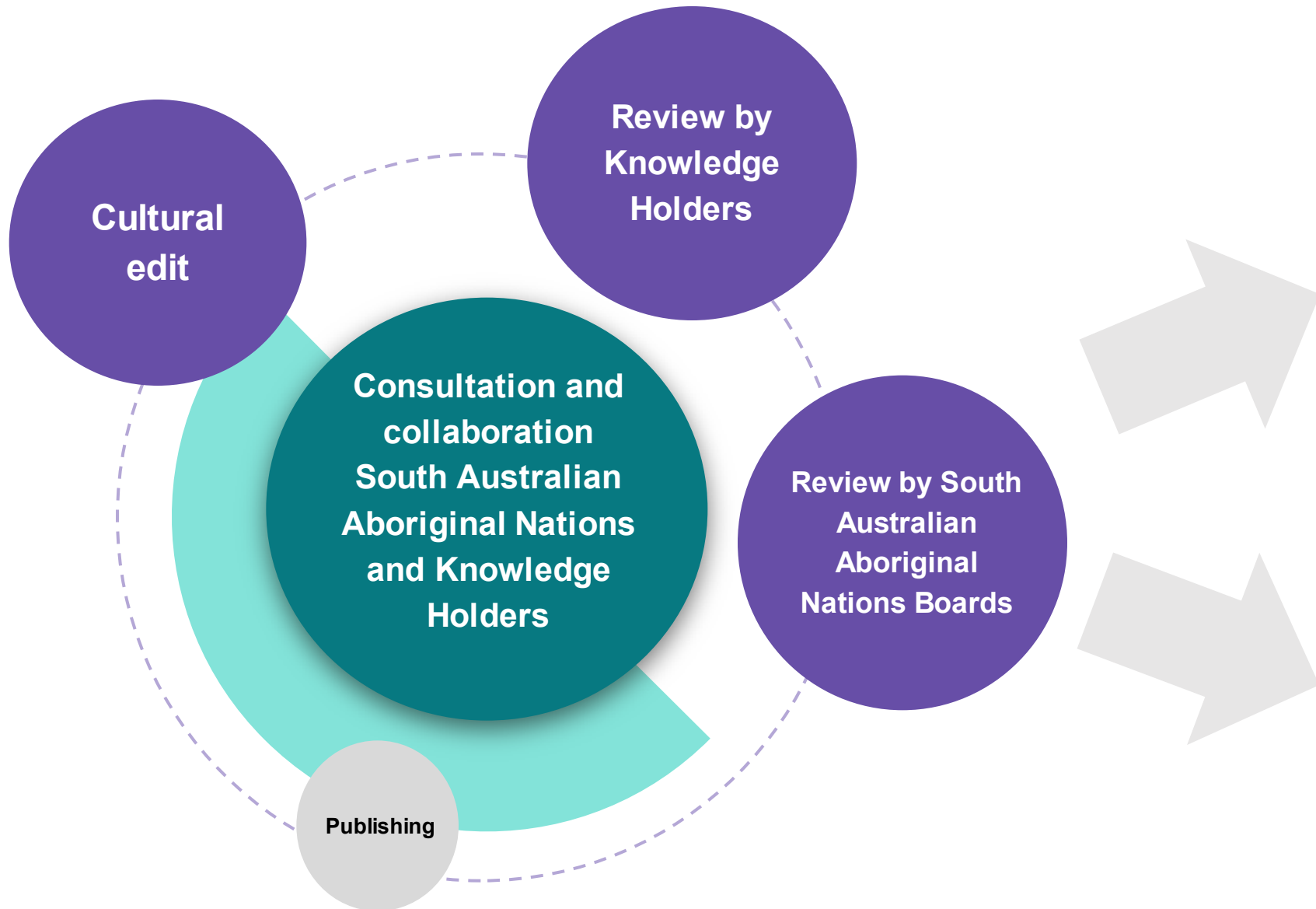


Picture books



Biographies and fiction books

Accountability and responsibility



Referencing!

**Teacher
guidance
developed in
consultation...**

Indigenous Cultural and Intellectual Property (ICIP) protocols

01

Cultural safety in the classroom

02

Engaging with Aboriginal Communities

03

Use of Aboriginal languages

04

Teacher tips and alerts

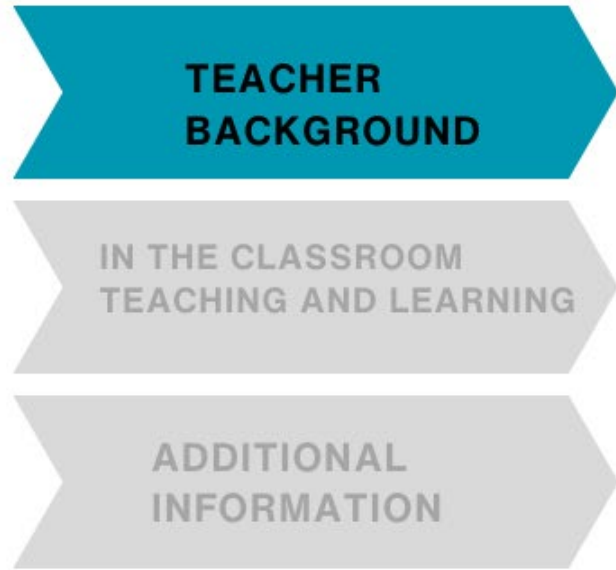
Resources supporting teachers

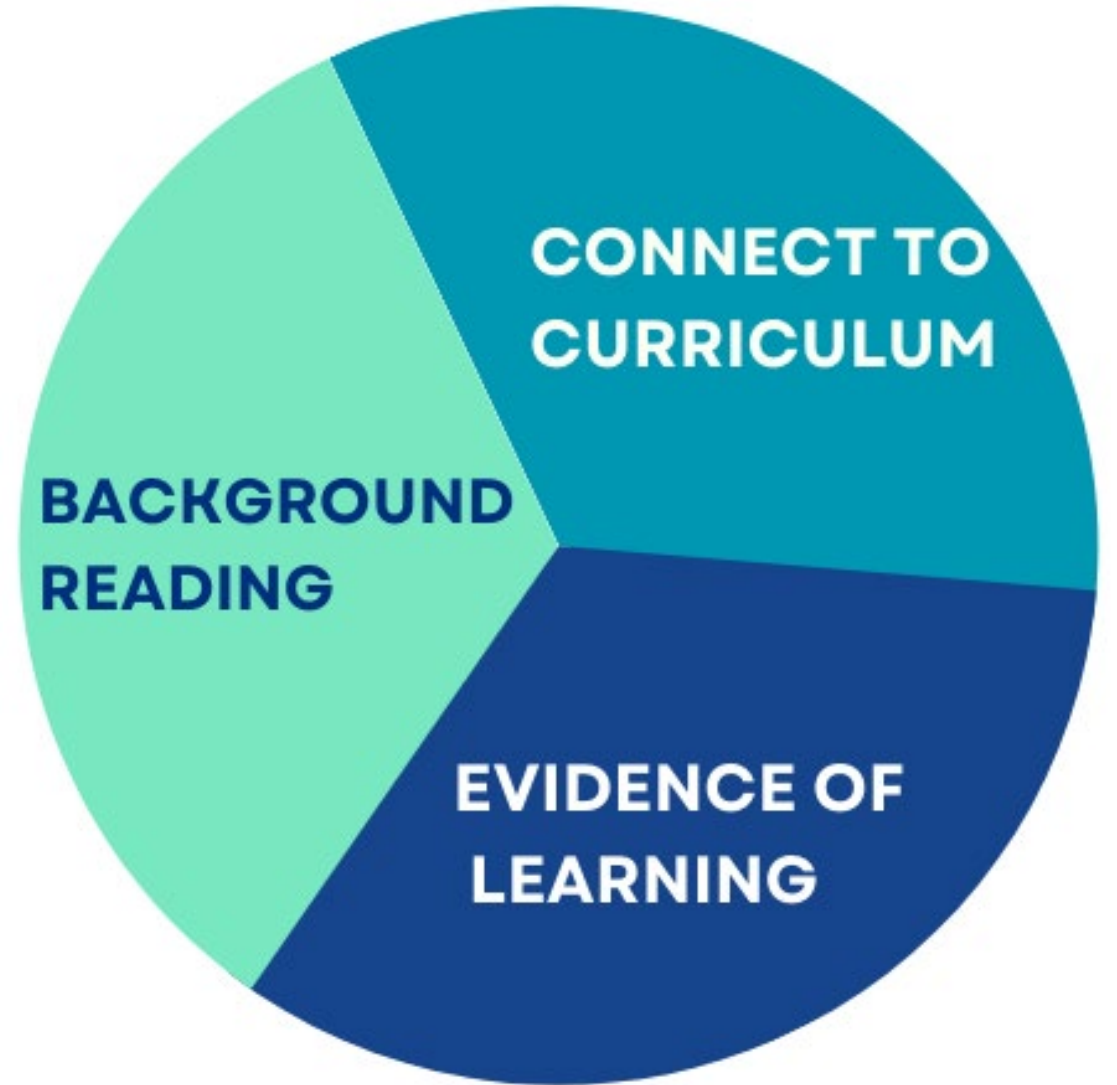
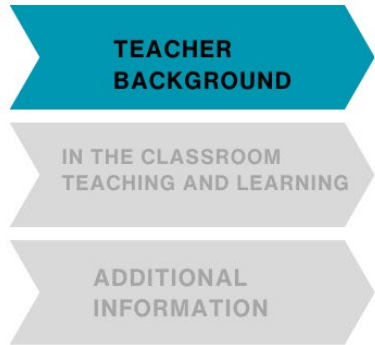
- **Aboriginal Cultural knowledges**
- **Science Curriculum**
- **Pedagogy**
- **Assessment**

**TEACHER
BACKGROUND**

**IN THE CLASSROOM
TEACHING AND LEARNING**

**ADDITIONAL
INFORMATION**





Evidence of learning

Science Understanding

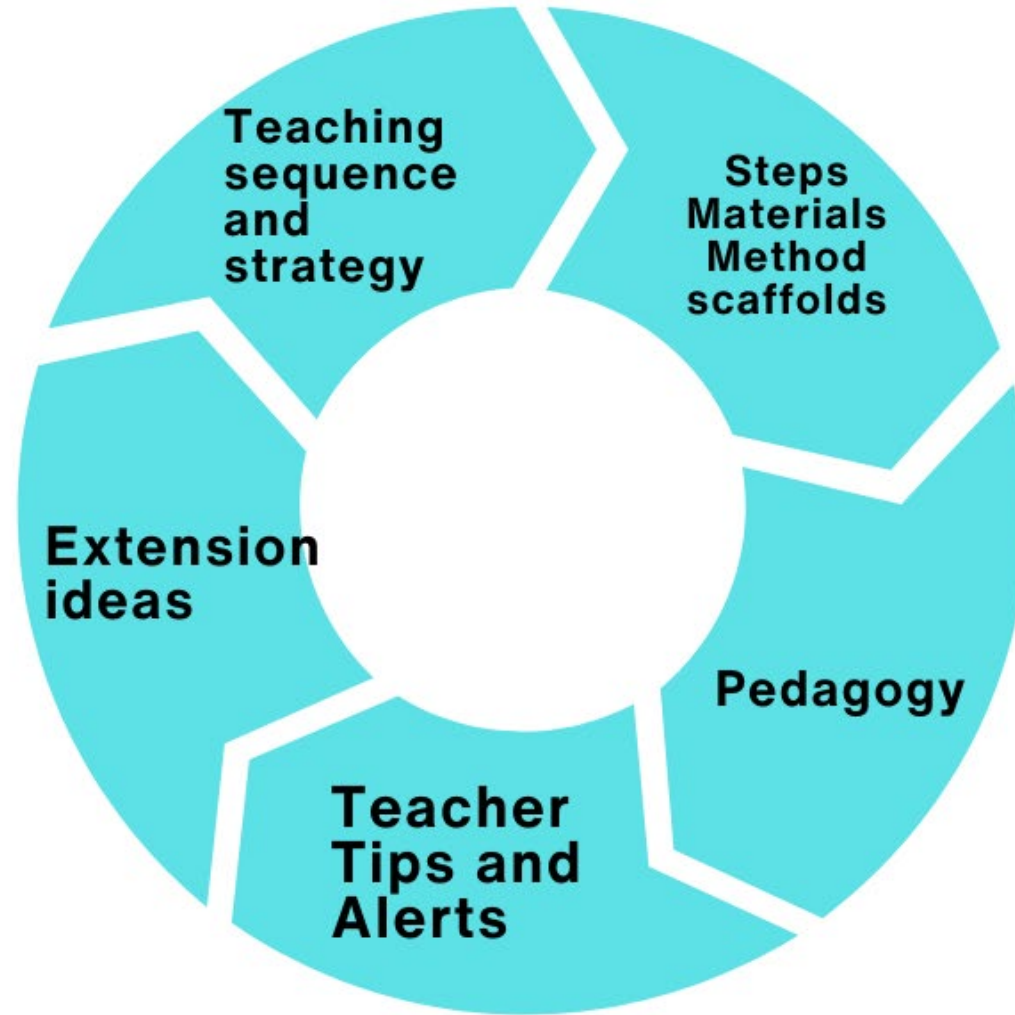
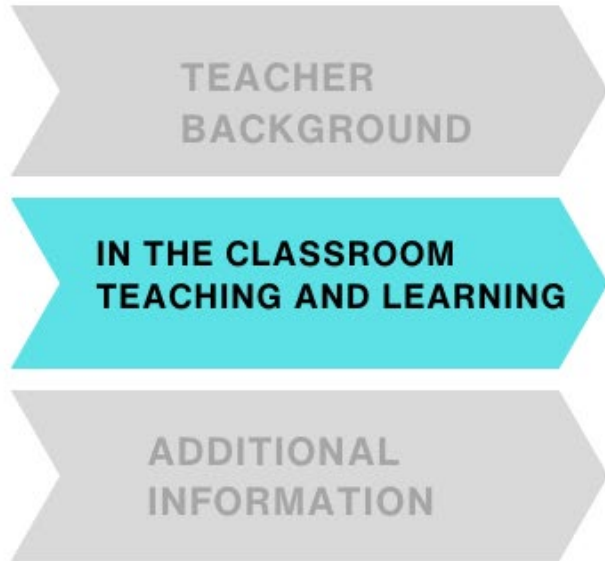
Students can:

- demonstrate an awareness that Aboriginal classification systems are complex and sophisticated
- demonstrate an understanding that all classification systems serve a purpose of relevance and importance to the user
- appreciate the reasons for a classification system based on context and usage
- classify organisms given information about their appearance, location and uses
- compare different systems for classification.

Literacy

Students can:

- use a think, pair, share strategy to consider and compare Aboriginal Peoples' classification criteria with that of Linnaeus taxonomy
- demonstrate dialogic discussions about the naming and grouping of organisms.



Developing resources...

use **accurate language/ terminology and sensitivities** appropriate when describing Aboriginal ways of knowing and doing

Teacher Alert

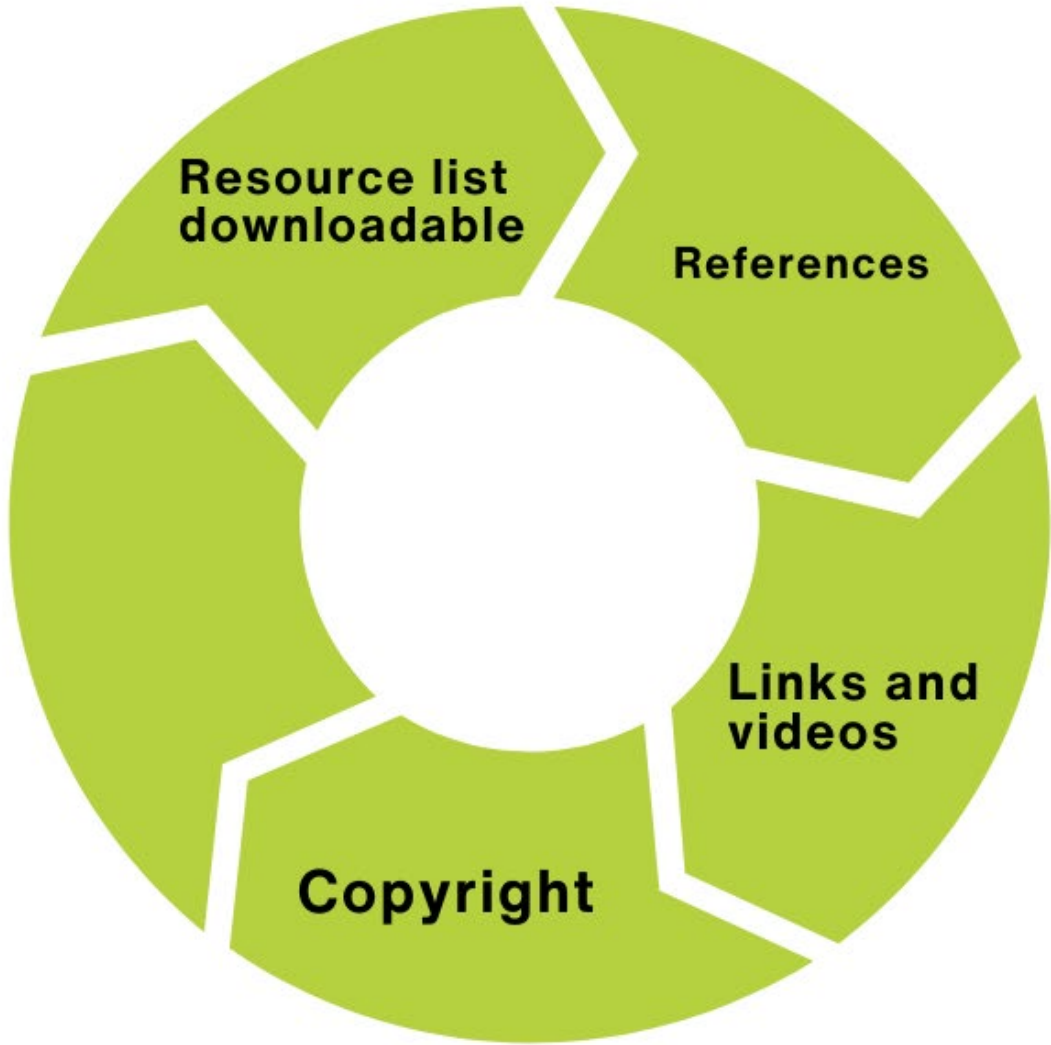
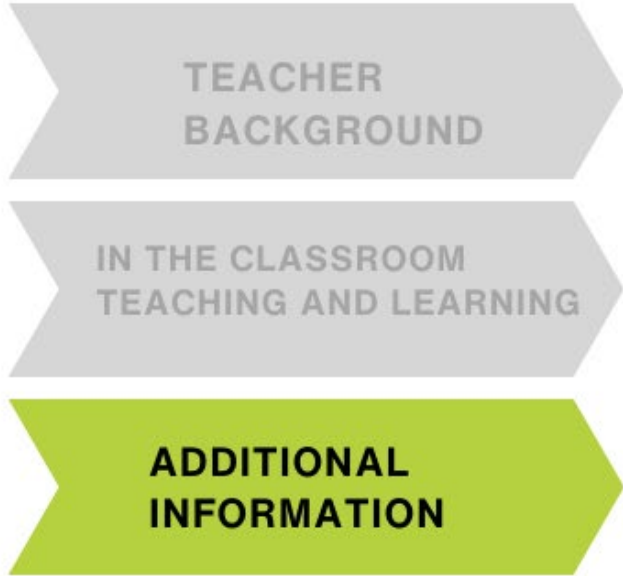
This is a generic activity and **NOT** based on any Aboriginal Nation's specific methodology of naming or classifying but is intended to give students a lived experience of **ONE** way that classification might be done.

Developing resources...

use **accurate language/ terminology and sensitivities** appropriate when describing Aboriginal ways of knowing and doing

Teacher Alert

Although Australia is often described as a harsh environment to survive in. It is not appropriate to label Aboriginal Peoples as **'survivors'** in their own Country. In contrast Aboriginal Peoples were living, thriving and flourishing for 60,000 years before invasion.



Teacher Background document structure

SCIENCE YEAR 7 | UNIT 3 | RESOURCE 6

Teacher resource: Investigating classification systems background information

South Australian Aboriginal Nations: Narungga (Nharangga) and Kaurna

Various spellings of Narungga/Nharangga within a teaching and learning resource acknowledge the diversity of identities, histories, cultures and perspectives within and across Narungga/Nharangga Communities in the reclamation of language.

Purpose
Students explore ways of grouping living things through observable physical similarities and consider organising groups. The key ideas are pattern, order and organisation, for example similarities and differences in patterns can be used to sort and classify organisms. In this resource students explore a different system from the Linnaean system of classification to consider a classification system based on the context and usage when naming and grouping organisms found on Country within Narungga and Kaurna Nations of South Australia. This resource does not describe specific ways of either Narungga or Kaurna Nations ways of knowing. Traditionally Aboriginal Peoples classified organisms to assign use and context to them. This experience allows students to consider the purpose of a classification system and compare it to the scientific classification of Linnaeus.

Cultural knowledge has been provided by:

- Narungga Elder Ron Newchurch
- Kaurna Cultural Consultants James Tylor and Jack Bucksin (History Trust of South Australia 2020).

Caution: Some plants are poisonous and extreme care must be taken. Do not eat bush food plants without being shown by an experienced person.

The different spellings of Narungga/Nharangga

'Since 1788, most of the traditional languages have ceased to be languages of everyday communication because many Aboriginal and Torres Strait Islander Peoples were forced to stop speaking their languages as a result of government policies aimed at assimilating communities into the non-Indigenous population.' (ACARA 2021)

'Many colonial attempts to document First Nations languages and cultures introduced inaccuracy and misrepresentation. This includes inaccurate spellings for names, nations and locations.' (Australian Government 2021)

'The unfamiliar sounds to foreign ears resulted in around eight different spellings being used over the years, of which 'Narungga' was the most commonly used in recent times ... [In the process of reviving this language] a consistent contemporary spelling structure had to be built around it during recovery to enable it to be taught in today's world. Consequently the 'Nh' at the beginning of Nharangga was adopted during the community language recovery workshops to best replicate the sound of the word spoken traditionally, and Narungga is the English version.' (NAPA n.d.)

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Science Year 7 Unit 3 - Classification of living things - Resource 6

File Edit View E-Sign Window Help

Home Tools Science Year 7 Unit ... x S

Bookmarks

- Teacher resource: Investigating classification systems background information
 - South Australian Aboriginal Nations: Narungga (Nharangga) and Kaurna
 - Purpose
 - The different spellings of Narungga/Nharangga
 - Indigenous Cultural and Intellectual Property (ICIP) protocol
 - Engaging with Aboriginal Communities
 - Cultural safety
 - Use of language
 - Teacher background
- Learning intention:
- Evidence of learning
- Teaching and learning
- Extension ideas
- References

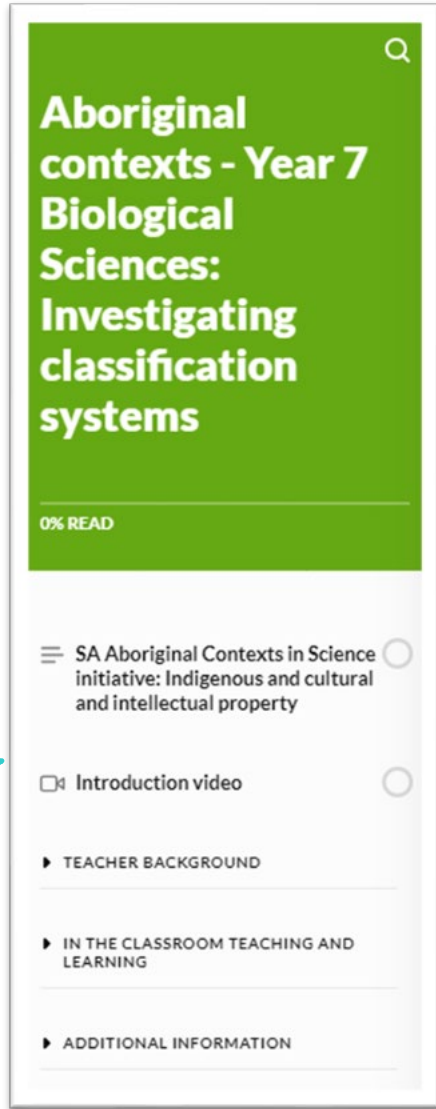
PDF bookmarks to assist in navigation

Teacher Background document structure



Resources now available on Plink

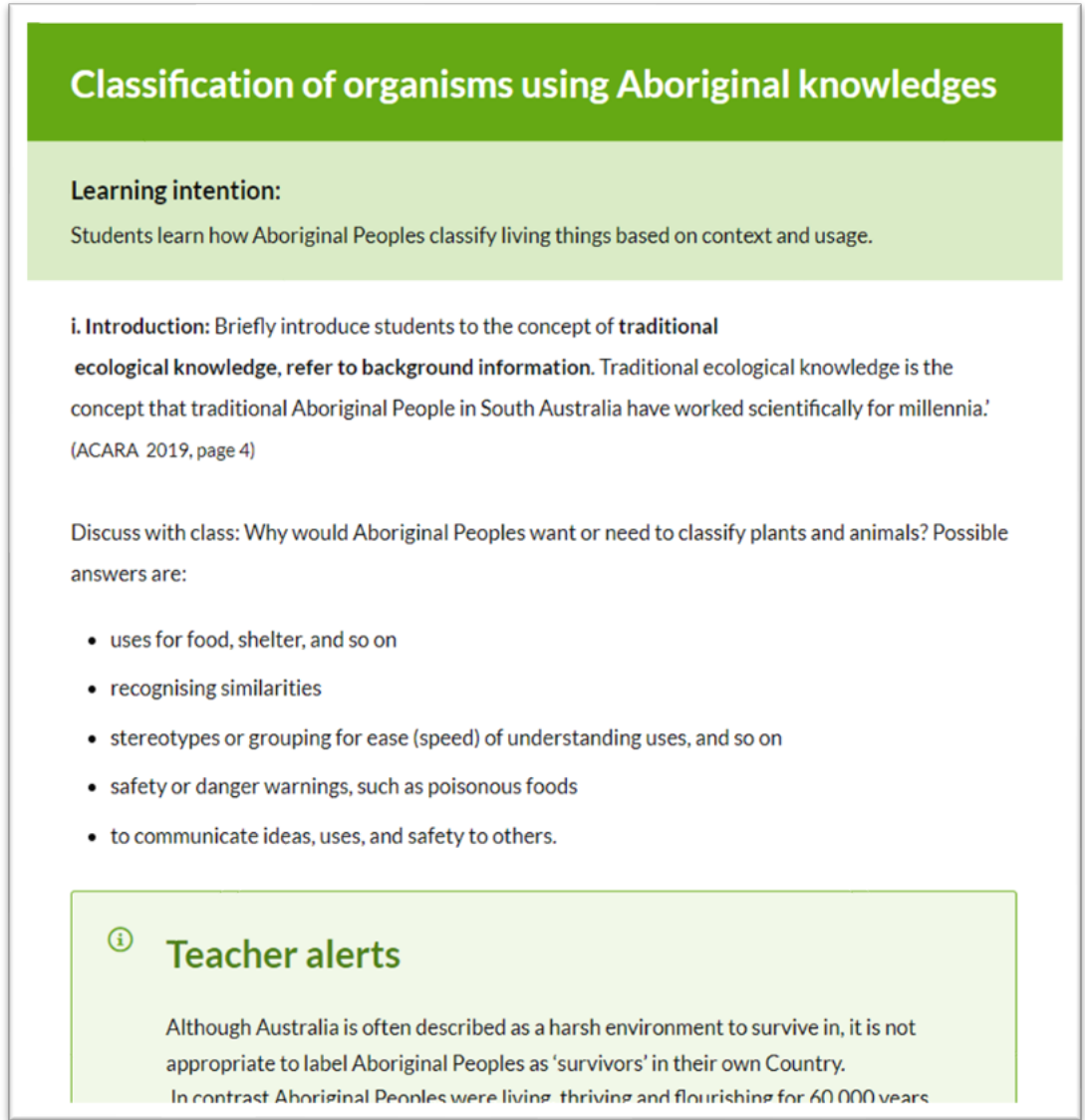
Side bar to aid navigation



Aboriginal contexts - Year 7 Biological Sciences: Investigating classification systems

0% READ

- SA Aboriginal Contexts in Science initiative: Indigenous and cultural and intellectual property
- Introduction video
- TEACHER BACKGROUND
- IN THE CLASSROOM TEACHING AND LEARNING
- ADDITIONAL INFORMATION



Classification of organisms using Aboriginal knowledges

Learning intention:
Students learn how Aboriginal Peoples classify living things based on context and usage.

i. Introduction: Briefly introduce students to the concept of **traditional ecological knowledge**, refer to **background information**. Traditional ecological knowledge is the concept that traditional Aboriginal People in South Australia have worked scientifically for millennia.' (ACARA 2019, page 4)

Discuss with class: Why would Aboriginal Peoples want or need to classify plants and animals? Possible answers are:

- uses for food, shelter, and so on
- recognising similarities
- stereotypes or grouping for ease (speed) of understanding uses, and so on
- safety or danger warnings, such as poisonous foods
- to communicate ideas, uses, and safety to others.

Teacher alerts

Although Australia is often described as a harsh environment to survive in, it is not appropriate to label Aboriginal Peoples as 'survivors' in their own Country. In contrast Aboriginal Peoples were living thriving and flourishing for 60 000 years

Key Messaging

- Resources developed **in consultation** with SA Aboriginal Nations
- This initiative **recognises the importance** of Aboriginal Peoples **cultural and intellectual property rights** in teaching practice
- Teachers are **teaching the science**, whereas the videos and learning tasks are providing the cultural contexts
- **Showcasing** South Australian Aboriginal contexts
- **Diversity** of Aboriginal and Torres Strait Islander contexts
- Resources are **credible, accurate** with appropriate sensitivities and terminologies
- **Foster culturally safe classrooms** by knowing the students, recognising and scaffolding literacy and numeracy needs
- Learning tasks designed to **keep teachers** in a **culturally safe space**.

Adapt where appropriate, when in consultation with local Aboriginal Nations

Our **guiding principles** describe how we make decisions and approach our work in ways that best use the levers to achieve our areas of impact.



Learning system



In public education, we learn with and from each other and have the confidence and vulnerability to try new things or change the things we think can be done better.

We will leverage expertise and be open minded to expert referencing.

Our **guiding principles** describe how we make decisions and approach our work in ways that best use the levers to achieve our areas of impact.



Trust and verify



We will empower our staff with the autonomy to do great work, without losing sight of the big picture and provide support and structures to make informed decisions to deliver on our purpose.

Reflections on processes for Aboriginal Contexts in curriculum resources

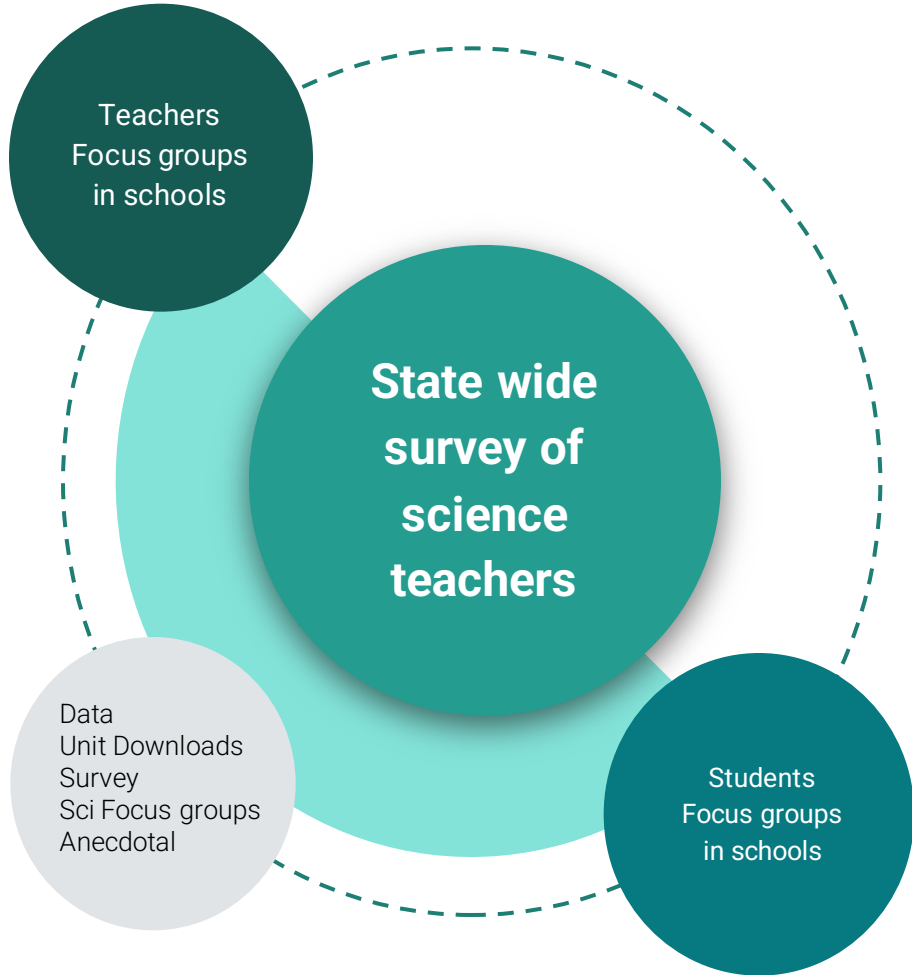
How might the systems and processes at your school...

- a) **support** effective teaching and learning of Aboriginal and Torres Strait Islander histories and cultures?
- b) **challenge** effective teaching and learning of Aboriginal and Torres Strait Islander histories and cultures?

Reflections on processes for Aboriginal Contexts in curriculum resources

- **What else do you need** to support you in being an advocate when showcasing and revealing Aboriginal and Torres Strait Islander histories and cultures?

Evaluation



What else do teachers need?

Recommendations

We are seeking teacher participation to complete a [Survey for South Australian science curriculum resources](#)
via hyperlink above or QR code



Contact

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Initiative

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