

Year 5: HASS, Geography and Mathematics

Lesson Plan 1: An ecologist's view of Lagoon of Islands

Introductory activity (engage)

(10 minutes)

In the 1960s, many dams and power stations were being constructed to provide electricity for Tasmanians. Discuss with your students (or do a Think/Pair/Share where students turn to a partner and discuss before discussing as a class):

In general, did people in the 1960s think much about how landscapes change and/or how the environment is affected by large projects like hydropower dams?

No, the focus was on the excitement around hydropower providing ample amounts of electricity for our needs. Nowadays multiple environmental assessments and approvals need to happen before any projects could be approved. This protects environmentally sensitive areas.

Why have attitudes changed? Why is this important now?

Lesson 1 (explore)

(10 minutes)

Watch the first 1:16 minute of the online video resource

The Restoration of Lagoon of Islands

<https://www.youtube.com/watch?v=TYTyn8Jqtgw>

(Pause or stop the video at 1:16 minutes when the black title page *The Restoration of Lagoon of Islands – a story of second chances* appears.)

Materials	Quantity
Smart board or projector	1
Internet connection	1
YouTube video The Restoration of Lagoon of Islands	
KWL Chart	1 each
Glossary template	1 each

Lesson 2 and 3 will be based on the remainder of the video and other written resources.

In this lesson students will meet Emeritus Professor Peter Tyler, freshwater ecologist and internationally regarded expert on lakes. Professor Tyler's viewpoint is presented in his narrative as he outlines the unique characteristics of Lagoon of Islands and predicts the outcome for the dam built in 1964.

Ask your students to 'look and listen' for key dates, characteristics or describing words during the video.

- Have students volunteer one of the 'look and listen' items they noticed for discussion or recording
- Prompt students to identify technical or key words that they do not know or understand

Options for assessment and extension

Learning Area	Option/s	
HASS – Inquiry and skills Individual exercises that continue lessons 1–3	Students create a KWL chart. In this lesson complete section 1 <i>‘What do I know’</i> using the information they have learnt in the video Students use section 2 to develop their own questions to guide their individual inquiry for the next lessons	Students create a timeline from the key dates they have identified in the video Extension Add quotes, facts, figures, images or other research pieces to the timeline
HASS – Inquiry and skills Group Activity (4 people)	Examine Professor Tyler’s narrative and explore any views expressed. - Consider: - Is it a past or present viewpoint - What was his view of Lagoon of Islands (characteristics, significance, environmental value) - What was his prediction for the dam? - Each group to collate their own list and present back to the class	
HASS and Geography Knowledge and Understanding	Create a poster (or other) of the characteristics of Lagoon of Islands - Research identified characteristics Extension - Consider what human influences could impact these characteristics	Using a digital map, locate Lagoon of Islands - What do you notice about its location? - Find the surrounding rivers and streams - Look for any other characteristics - Where is it in relation to your school?
Literacy	Students create their own glossary of the technical and key words they did not know or understand (glossary template provided). Students find out the meanings of their glossary words. (hint: conclusion, dammed, destroyed, ecology, ecological changes, extent, expert, forecast, formation, irrigation unique, water level, wetland)	Create a text based on Professor Tyler’s narrative. - Diary entries based on his visits to Lagoon of Islands - A letter to the Hydro expressing his point of view or prediction for the dam - Other

Elaborate and review

As a class group review:

1. New words, technical words and what they mean

a. Each student shares a word from their glossary sheet

- Why did you choose this word?
- In your own words describe it's meaning?
- Do you think you will use it again? (projects, science experiments, other lessons?)

b. As a class discuss what tools or strategies you can put in place to remember and use these words.

- Create a classroom list, poster or word wall for future reference

2. Unique environment

In 1964, the then Hydro-Electric Commission dammed Lagoon of Islands to supply irrigation water to farmers downstream.

- What type of resource is water? (natural resource)
 - Discuss why is water important to farms?
 - In what ways would supplying large amounts of water to farmers have influenced the business decision to build the dam?
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