

YEAR 4 SHARING THE PLANET

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LEARNING PLAN OVERVIEW

Subject(s)	<ul style="list-style-type: none"> Natural Sciences Environmental Education
Grade Level (s)	Upper Primary (ages 8-11)
Systems Tool(s)	Systems Iceberg
Purpose of Using Tool	Critical Thinking
Summary	In this lesson, Year 4 students learn about the basics of ecosystems, as well as the potential impact of invasive alien species on them. Some students have prior knowledge of the Systems Iceberg from their time in Year 3. The lesson incorporates short videos to prompt questions about the effects of human activity on ecosystems.

Learning Objectives

- Students can identify the impact humans can have on an ecosystem.
- Students can identify and select relevant information from the videos.

Material and Settings

- The Systems Iceberg 系統思考冰山
- Toddle
- A few different videos relate to plastic pollution
 - <https://www.youtube.com/watch?v=3n2qruJngMg>
 - <https://www.youtube.com/watch?v=KoAka4Qt5KQ>
 - <https://www.youtube.com/watch?v=ColjnLQ84qw>
 - <https://www.youtube.com/watch?v=rOVULqkXL5U>
 - <https://www.youtube.com/watch?v=sKu7JGxA14o&t=1s>
 - https://www.youtube.com/watch?v=0S_sR_H_YmE

Learning Context

- Year 4 students ages 9-10, 28 students.
- Students understand the fundamentals ecosystem.
- Students understand the potential effects of invasive alien species on the ecosystem, whether positive or negative.
- Some students know the Systems Iceberg in Year 3.

Purpose of Using the Systems Thinking Tools

The Systems Iceberg was a valuable tool that helped my Year Four students delve deeper into events and analyze their root causes.

Learning Plan Step-by-step Description

Bringing out the student questions:

After watching the video, we were delighted that students were able to write student questions, and the following are two of the student questions we have summarised:

- What are the reasons that make a healthy ecosystem so crucial?
- What are some effective methods to prevent ecological damage?

Today we will inquire this question:

What are the reasons for the destruction of ecosystems by humans? (Concept: ecosystem and causation)

- Introduction to Systems Iceberg
- Students log in to Toddle
- Students choose to watch different videos, think about the key points of the Systems Iceberg and write down their ideas
- Students share their thinking with peers and write down useful ideas
- Complete a self-assessment using Toddle

REFLECTION

Plusses

- Critical thinking is a key component of the Thinking Skills category within the PYP's Approaches to Learning (ATL). In Year 4, we emphasize the importance of developing critical thinking skills as students learn to evaluate issues and events.
- The Systems Iceberg was a valuable tool that helped my Year 4 students delve deeper into events and analyze their root causes. While doing the tuning-in activities, students' thinking

was on a very surface level, something a Year 1 student could say with little research, e.g., Plastic is terrible for the environment.

Areas for Improvement

I noticed that the students were unfamiliar with the Systems Iceberg thinking model, and they needed a more precise grasp of it.

It would be better if I can...

- Expand this lesson into two lessons.
- Use the "I do, We do, You do" model to demonstrate how to use the Systema Iceberg first.
- Provide enough time for students to watch the videos and find commonalities to gain more insight into the issue.

EVIDENCE

[Year 4 Sharing the Planet PowerPoint](#)