Great Bear Rainforest Activity Plan

Inquiry:

What biodiversity exists in the Great Bear Rainforest?

In this activity plan, the students are the teachers. In small groups, students will write inquiry questions and research a life form in the GBR. They will write learning objectives and create activities to teach their topic to the class.

Learning Objectives

Students will:

- Recognize the varied ecological contributions of marine life, terrestrial life, birds, plants, and fungi to biodiversity within the Great Bear Rainforest
- Teach fellow students about the roles of particular animal, plant, and fungi groups in the Great Bear Rainforest ecosystem

Preparing for the Activity Plan

Note: This activity plan may take several classes to complete.

Materials

Blackline master: Resources for Research

Delivering the Activity Plan

Access Prior Knowledge

With the class, review or discuss what students know / have learned about the flora and fauna of the Great Bear Rainforest.

Inquire

- Divide the class into small groups according to the life forms students wish to study:
 - » marine mammals
 - » terrestrial mammals (live predominantly or entirely on land)
 - » fish
 - » birds
 - » reptiles
 - » amphibians
 - » plants
 - » trees
 - » fungi
- Have the groups come up with three inquiry questions about the relationship
 of their chosen life form to the rest of the Great Bear Rainforest ecosystem.
 Have them choose one inquiry / topic to first research and then teach in a
 15-minute lesson to the class.
- For the research, students with a personal mobile device can download the app: Biodiversity of the Central Coast (free for Apple or Android). Or, research the website: https://www.centralcoastbiodiversity.org/ Have the class also check additional resources on the Great Bear Rainforest website.

Experience

- With your help, have groups identify at least one learning objective for the activity / lesson they will teach. What skills or knowledge do they want their classmates to acquire from their lesson?
- Brainstorm with individual groups about how they might best teach their lesson to ensure understanding of their topic. Push students to be creative in their lessons (use stations, skits, games, labs, discussion, outdoor experience, art projects, etc.)

Explore

Each group will teach the class about their topic / inquiry.

Assess

 Have each group member write a reflection on what they did to support the development and presentation of the lesson. Students could self-assess their participation in the research, development and presentation of the lesson.

Go Beyond

 Students collaborate to create a nitrogen cycle game that illustrates how marine nitrogen moves through the Great Bear Rainforest ecosystem.

Resources for Research

Check the Great Bear Rainforest educational website for additional resources.

General

Great Bear Rainforest Biodiversity

https://greatbearrainforest.gov.bc.ca/categories/biodiversity/

- marine life
- mammals
- birds
- plants
- trees

Great Bear Sea > Secondary Environmental Science > Lesson 1: Introduction to the Great Bear Sea

Includes background information on marine life. http://greatbearsea.net/elementary-curriculum/lesson-1/

Hinterland Who's Who

Mammals, birds, fish, invertebrates. http://www.hww.ca/en/wild-spaces/coastal-rainforest.html

Pacific Wild

Photographs and videos of marine mammals, birds, terrestrial mammals, etc. https://pacificwild.org/great-bear-rainforest-in-photos/

Birds

Birds - Great Bear Rainforest

https://greatbearrainforest.gov.bc.ca/tile/birds/

Marine animals

Four Pillars of Ocean Health

https://livingoceans.org/initiatives/ocean-ecosystems/issues/four-pillars-ocean-health

General characteristics of a large marine ecosystem

https://tinyurl.com/yc22mc4h

The Salmon Forest (53:49)

https://curio.ca/en/video/the-salmon-forest-844/

The Salmon Bears—Giants of the Great Bear Rainforest (Teacher's Guide)

https://www.orcabook.com/Assets/PDFs/Guides/thesalmonbears.pdf

Salmon in the Great Bear Rainforest (PDF, 24 pages)

Raincoast Conservation Society

https://www.raincoast.org/files/publications/reports/Salmon-in-the-GBR.pdf

Marine plants

Great Bear Sea > Elementary > Lesson 4: Collaborative Research – Case Study on Kelp

Includes background information on kelp. http://greatbearsea.net/elementary-curriculum/lesson-4/

Terrestrial animals

How Wolves Change Rivers (4:33)

https://www.youtube.com/watch?v=oSBL7Gk_9QU



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