

Learning Area Overarching Idea(s)

COMMUNITIES REQUIRE AN INFORMED AND COOPERATIVE APPROACH IN ORDER TO ASSURE SUSTAINABILITY

Lesson Goal:

- To address one of the guiding questions: To what extent has human interaction with river systems contributed to a change in their wellbeing?
- To investigate the environmental pressures that rivers are under.

Students will use images and a text from a textbook to explore the environmental pressures faced by rivers systems. They will create captions to describe the issues in their own words. They will work in pairs, and put the results of their activities in their workbook.

Lesson plan:

1. Introduce the notion of unspoilt rivers / natural rivers. Is there such a thing? Do you think there is any river on earth which is untouched by humans? High up in the mountains? What about rivers close to the sea?
1. Introduce the guiding question: (To what extent has human interaction with river systems contributed to a change in their wellbeing?) Reword this sentence in their own words. Brainstorm ideas on the whiteboard + students write in workbook:
For instance:
 - How are rivers changed by humans?
 - How do humans change rivers?
(Use re-written form of the guiding question)
2. Notes for in workbook:
Rivers are complex natural systems that depend on a balance between inputs and outputs. Any changes in river flow and water quality can affect the health of habitats in streams and on riverbanks. The water in many of Australia's major rivers is nearly all being used. This means that a large amount of water has been diverted away from them.
3. Introduce booklet / textbook copies.
4. Start reading text on page 42 and 43. Students to highlight keywords with highlighter.
5. Handout images, instruct students to cut out images and stick in workbook, leave space to write.
6. Students work in pairs to write a caption in their own words for each image, based on the text in the textbook.

Focus for filming:

Focus on my instructions and the students working in pairs.

Focus on student outcomes (photo copy work from students workbooks)

Definitions if needed:

algal bloom: rapid algal growth caused by high levels of nutrients (particularly phosphates and nitrates) in water

sediment: something that does not dissolve in a liquid such as water, and settles on the bottom (e.g. mud)

weir: a dam in a river or stream to stop and raise the water level

run-off: that proportion of rainfall which is not absorbed into the ground and finds its way into watercourses, eventually flowing to the sea.

