Key Stage 3 – Development decisions

Notes for teachers

At a glance

The balance between providing resources for a growing and technologically advanced population and protecting biodiversity is an ever-increasing problem.

In this activity, students gain an insight into the work of researchers at The University of Oxford’s Interdisciplinary Centre for Conservation Science (ICCS) and model the conflict between development and the needs of people and the environment. They role play a stakeholder meeting between local villagers and developers, mediated by conservation researchers, to see if they can come to an agreement on proposed development ideas.

Learning Outcomes

- Students learn what conservation is and why it is important
- Students discuss negative and positive environmental and social impacts of development to make a decision.

Each group of students will need

- Copy of student worksheet page 1
- Copy of map from worksheet page 2
- Cards cut from worksheet page 3/4

https://www.oxfordsparks.ox.ac.uk/content/conserving-nature
Possible Lesson Activities

1. Starter activity
   - Give each pair a copy of page 1 of the student worksheet and ask them to look at the image of a rainforest being cleared.
   - Ask the students to work in small groups and give each an A3 piece of paper. Assign each group the task of either:
     - Discussing the reasons for the forest clearance (positive impacts)
       Example ideas: to provide wood for building; to build roads so local people can move around easily; to make room for farms to provide more food; to provide land for housing; so the area can be mined to provide metals.
     - Discussing the negative impacts of the forest clearance
       Example ideas: loss of habitat or food for animals; loss of plant species; reduction in trees which affects climate change; reduction in biodiversity of area; reduction in recreation for local people.
   - Ask groups to feedback their ideas. Discuss the fact that humans need to use natural resources to provide services but there is often a conflict between the need for development and doing this in a way that does not negatively impact on the environment and people's lives.
   - Introduce the term 'conservation' as a way of protecting the environment. Show them the animation 'Conserving nature' to explain more.

2. Main activity: Preparation for meeting
   - Ask students to read through the information on page 1 of the student sheet.
   - Place students into three groups: villagers, developers and researchers. Give each group a copy of the map from page 2 of the student worksheet.
   - Give the villagers group cards cut from page 3. Each card outlines one way that they use the natural resources in the area (river, forest and grassland). They should place the cards face down on the table, turn over one at a time and read it out. They then place the cards in order of how important they think that need is.
   - Give the developers cards cut from page 4. Each card outlines one way that they could develop a natural resource. The amount of money indicates how much profit they could make. They should place the cards face down on the table, turn over one at a time and read it out. They then place the cards in order of preference of what they would like to develop.
   - Give the researchers cards cut from both page 3 and page 4. As they are going to act as mediators between the villagers and the developers they need to look though all the information. They choose cards that have a negative impact on the environment and discuss why. They could be affects of both the actions of the villagers (e.g. catching bush meat) and the developers.

3. Main activity: Holding the meeting
   - The groups then come together to have a stakeholder meeting.
   - The developers should start and present their top three ideas for development.
   - The villagers should respond to each of these in turn, to express how they feel about them: how will it impact them?

https://www.oxfordsparks.ox.ac.uk/content/conserving-nature
• The developers then get a chance to persuade the villagers by discussing how each idea could have a positive impact on the villagers e.g. bringing tourists to the area will bring jobs.
• The researchers should mediate the discussion and help the groups choose what developments will benefit both parties and not have too much of an impact on the biodiversity of the area. They should also suggest ideas to the developers that will benefit the villagers and the environment e.g. developers can build roads so villagers can get to the local town to buy meat so they don't have to hunt bush meat.

4. Plenary
• Ask the groups to make a final decision on which development idea will go ahead.
• Students should then work alone to write down the development that was chosen, its positive and negative impacts on the environment and the villagers and why it was chosen.
• If students are interested in finding out more about the work of conservation scientists at The University of Oxford they can watch the Facebook LIVE video in the weblink below.

Weblinks
Conserving Nature animation
https://www.oxfordsparks.ox.ac.uk/content/conserving-nature

Facebook LIVE interview with two researchers from the ICSS
https://www.oxfordsparks.ox.ac.uk/content/facebook-live-conserving-nature