

Example activity - A New Zoo at Blenheim Palace?

This activity is an opportunity to engage in argumentation about a socio-scientific issue. The issue is described in a letter distributed to the students and they are asked to argue for and against an issue in small groups - in this case, the development of a new zoo - and provide justifications for their point of view.

Aims

The aim of this exercise is for students to generate arguments for and against the development of a new zoo.

Learning goals

In this activity students will have the opportunity to:

- generate ideas for and against the development of a new zoo;
- learn to use evidence to justify their conclusions about the desirability of a zoo;
- work in groups to construct arguments collaboratively.

Curriculum links

Examples from RE KS3

- Discuss and evaluate how religious beliefs and teachings inform answers to ultimate questions and ethical issues
- Reflect and evaluate their own and others' beliefs about world issues such as peace and conflict, wealth and poverty and the importance of the environment, communicating their own ideas
- exploring the connections between religious education and other subject areas such as the arts, humanities, literature, science.
- How do different religious and other beliefs, concepts, principles and experience inform views and actions on global issues?

Examples from KS3 science

- The social and economic implications of science are important but, generally, they are taught most appropriately within the wider school curriculum: teachers will wish to use different contexts to maximise their students' engagement with and motivation to study science
- changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn
- may lead to extinction
- the importance of maintaining biodiversity and the use of gene banks to preserve hereditary material.

Teaching points

For this activity, students will need to carry out some research to use as an evidence base when justifying their positions. For instance, they could do internet research to find out more about zoos. Many students will have visited zoos and their personal experiences will provide a useful evidence base. There are different ways this activity can be structured, for which there are different possible outcomes.

Teaching sequence

Describe the scenario (an example is given below). Emphasise the purpose of the activity - to construct arguments, justified with evidence, either for or against the new zoo.

There are two different strategies that can now be adopted in this activity. The following guidance suggests two possible alternatives.

- A. *Group brainstorm and group decision making*
- B. *Role play and individual decision-making*

Example scenario description to give students

Blenheim Palace are considering developing part of the estate into a zoo. They would like to canvas local public opinion on this. Some people believe that zoos should be banned. Others think that zoos serve a good role in our society. They need your help in deciding whether or not they should go ahead with this development. Your job as a class is to provide arguments for or against the development of the new zoo. There is no right or wrong answer for this project. It is important, however, that you provide reasons and evidence to support the claims you are making, and you are able to explain the reasons.

A. Group brainstorm and group decision making

Organise the students into groups of 3 or 4 and ask them to generate arguments for and against the development of the zoo. Give them about 15 minutes to do this, and provide some paper to record the outcomes of their discussions, perhaps using a diamond 9s format. • While the students are working, encourage discussion by asking the following questions to help generate thinking and argument. The questions may stimulate agreement or disagreement. The themes associated with keeping animals in zoos and animal survival addressed by the questions are shown in brackets.

Questions to stimulate agreement with zoos

1. Are wild animals killed by hunters and poachers? [ethics of hunting]
2. Are animals in zoos well fed? [availability of food, appropriateness of diet, ethics of care]
3. Are animals in zoos safe from predators that want to kill them? [safety]
4. Do zoos allow you to see and study a large number of different animals? [education and research opportunity]
5. Would some animals have become extinct if it wasn't for zoos? [survival/protection/ scope for expanding a gene pool/ selective breeding for reducing effects of genetically diseases]
6. Can you see wild animals you learn about in school living in their more natural homes on television? [education]
7. Do wild animals have to find their own food? [food, effects of climate change and increased population (ethical, economic and moral choices made by humans)]
8. Can zoos release animals back to the wild? [recovery after illness or injury/ protection]
9. Do zoos allow scientists to study rare animals? [research]
10. Do we have duty of stewardship to care for other animals? [religious and moral obligation]

Questions to stimulate disagreement with zoos

1. Do animals in the wild have lots of places to live in? [freedom]
2. Is it cruel to keep animals in cages? [ethics of care/unnatural habitat]
3. Can wild animals be protected in parks and nature reserves? [protection from poachers and other threats e.g. habitat loss]
4. Are wild animals afraid of human beings? [ethical/psychological]
5. Can animals be bored and lonely in zoos? [ethical/psychological harm of being isolated from family groups]
6. Can animals breed naturally in zoos? [reproduction/survival/ ethics of IVF for animals]
7. Should animals be treated the same as people? [religious principles]
8. Is all life sacred? [religious principles]

Once students generate arguments, a further group activity is to ask them to rank the arguments from most important to the least important, perhaps using a diamond 9s format, and provide reasons to justify the ranking. This process will encourage further argumentation and should take about 10 - 15 minutes.

A useful ending to this strategy of presenting the zoo activity is to ask groups to present the outcomes of their discussions. Tell them that you want them to present what they have decided about the zoo and to give their reasons. Asking all the groups to present orally, one at a time is not necessary. Instead, pick a few groups and hold a whole class debate after two or three presentations. Alternatively, each group could produce a PowerPoint or a poster to provide a visual resource for whole class discussion.

B. Role play and individual decision-making

Plan to assign roles to students, using your knowledge of people who would have an opinion on the development of a new zoo. For example:

- Residents from local West Oxfordshire villages
- Residents from Oxford City and wider Oxfordshire
- School teachers
- School students
- Oxfordshire County Council
- West Oxfordshire Council
- Zoologists
- Conservationists
- Religious groups e.g. Buddhist, Hindu, Christian, Islam (steer students towards principles of stewardship, reincarnation, sanctity of life and non-harm)

Organise students into pairs and assign a role to each pair. Give 5-10 minutes for the pairs to take a position for or against the zoo, bearing in mind their role. Ask them to justify their arguments with evidence.

While this discussion is underway, listen to the groups to establish who is arguing for and against the zoo.

Reorganise the pairs, so that each person is now paired with a student who has taken on a different role with an opposing position. Give the students 5 to 10 minutes to present their arguments to each other, and to construct counterarguments. Now hold a plenary discussion

where you ask whether any students changed their minds and why. You could also ask the students to vote for or against the zoo, then pick on some individuals to share their reasoning with the class.

Whichever strategy you choose, you can follow up by asking students to prepare their own written answer to the scenario for homework.

NOTES AND COMMENTS: