Fieldwork: Environmental evaluation
Developing a strategy for evaluating the environment

Help your pupils to appreciate and evaluate the outdoor environment by carrying out an environmental evaluation at different sites and comparing their results.

Take them to the first site and explain how to carry out the evaluation. They should score the environment on a scale of 0 -10 (0 = broken/ blasted/ blighted; 10 = wonderful/ sublime) by considering four aspects of the environment (atmosphere, hydrosphere, lithosphere, biosphere) and rolling them into one figure.

0

Blasted: a **home destroyed by a tornado in Kansas, USA.**

This image is a work of a Federal Emergency Management Agency employee, Adam Dubrowa. All FEMA images are in the public domain.

1
2
3
4
5
6
7
8
9

Increasing score - improving

10

Sublime: **Loch Lomond, Scotland.**

Introduce the four environmental aspects as:

- atmosphere – wave your hand through the air;
- hydrosphere – the 'watery' stuff – particularly obvious if it is raining or there are puddles around;
- lithosphere – the solid stuff on which you're standing;
- biosphere – the green stuff all around.

Then ask them to stand a short distance away from the others, look around them, smell the air, sense how they're feeling and, after thinking for a few moments, put their four-part evaluation into to one single 'Environmental evaluation' figure and write it down.

Then gather them together again for a discussion.

- Who has given the highest figure and why?
- Who has the lowest figure and why?
- Which is the right answer? (*They are all 'right answers' since this depends upon personal perception – but pupils may be surprised to find that different answers can all be 'right'*)
- What is the average group answer? (Ask them all for their answers, one by one, and then work out an approximate average).

They should note down the group average, for comparison with the next site.

Repeat the evaluation at other different sorts of sites.

Finally, discuss with the pupils whether or not this is 'scientific'. Explain that if there were a public inquiry about, for example, whether to build a new major road through the area, then a whole range of different scientific, geographical and environmental aspects would have to be considered, including the 'quality' of the environment and the views of the local population. An environmental evaluation of this type might be very useful in this discussion.

The back up

Title: Fieldwork: Environmental evaluation.

Subtitle: Developing a strategy for evaluating the environment.

Topic: A method to help pupils to evaluate and appreciate environments.

Age range of pupils: 8-18 years

Time needed to complete activity: 10 minutes at each site.

Pupil learning outcomes: Pupils can:

- describe the local atmosphere, hydrosphere, lithosphere and biosphere;
- explain how each of these contributes to environmental quality;
- discuss the meaning of 'scientific';
- develop an evaluative approach to different types of environment.

Context:
Pupils are given a scale to use in environmental evaluation, and then asked to apply this scale to different environmental circumstances, that can range from a local small environment to a panoramic view.

The objective of the activity is develop an evaluative approach to environments of all types, which pupils can apply wherever they are in the future.

Following up the activity:
Try to embed this evaluative approach by carrying out the activity at several sites, and then by repeating it in the classroom whenever landscape photographs are shown. If you are successful, pupils may return from holiday and tell you they've been to a '9' holiday destination, etc.

Underlying principles:

- Environmental quality can be calibrated but ….
- … the calibration will vary from person to person depending upon their perceptions.

Thinking skill development:
Pupils seek a pattern (construction) which can then be applied to different circumstances (bridging).

Useful links:
More information on environmental evaluations can be found at: http://www.enviroeval.com/

Source: This idea was devised by David Thompson, who passed away recently. This Earthlearningidea is published in his memory.