

## Teacher notes for activity: Thinking about quality of life

### Resources for this activity

- Powerpoint slides to support activity including the following printable activity frames, available on [www.ashdenawards.org/schools/activities](http://www.ashdenawards.org/schools/activities):
  - Worksheet ‘Thinking about quality of life’
  - Worksheet ‘My quality of life web’ (blank and completed example)
  - Question sheet for independent work
  - Vocabulary sheet for reference and assessment
- 5-minute Ashden Awards films, available on [www.ashdenawards.org/schools/films](http://www.ashdenawards.org/schools/films):
  - **NEST, India:** developing cheap, portable solar-powered lanterns to replace smoky, dangerous kerosene lamps.
  - **TWP/AHDESA, Honduras:** providing stoves which save wood and reduce air pollution to rural and urban households.
  - **MRHP, Tanzania:** using agricultural residues instead of wood to fire high-quality bricks for low-cost housing.
  - **SKG Sangha, India:** using biogas plants to make cooking fuel and high-quality compost from cow dung.
  - **CRT/N, Nepal:** improving traditional water mills so that they can grind grain more quickly, and run other equipment as well.
  - **Nigeria: KXN, Nigeria:** using solar-powered vaccine refrigerators, so that vaccines can be kept cold and used effectively in remote areas.
  - **Practical Action, Peru:** using micro-hydro plants to supply electricity to homes and small businesses in remote villages in the Andes.
  - **Shidhulai Swanirvar Sangstha, Bangladesh:** using solar electricity on boats to bring education and information to water-side families.
  - **IDEI, India:** using cheap, human-powered treadle pumps, instead of diesel pumps, to supply water for irrigating crops.

### Curriculum areas and topics

- Main activity: Geography. Science, English, Citizenship, Education for sustainable development (ESD)
- Further activities: Geography, Citizenship, ICT, English
- Links to topics: Climate Change, Homes, Water, Health, Contrasting Localities, Improving the Environment, Light

### **Suitability**

- Key Stage Two – age approximately 7 to 11 years.
- Main activity needs one or two lessons.
- The detailed objectives and approach can be adapted for use with different age groups.

### **Grouping**

- Mixed ability groupings of four – five pupils for first part of activity.
- Whole class or groups for second part.

## **Background**

Sustainable development has three key aspects: social sustainability, environmental sustainability and economic sustainability. It has been likened to a three legged stool – remove one of the legs and it will topple over. When energy solutions are developed to reduce carbon emissions and improve the environment (environmental sustainability) their impact on quality of life (social sustainability) and available money (financial sustainability) should also be considered.

In developed countries like the UK, where most people have a good standard of living, 'sustainable energy' is often discussed just in environmental terms. However, there are many countries and regions where people lack the resources even to meet their basic needs.

This activity has two parts. The first part is to start pupils thinking about basic needs and what they need for a good quality of life, using one of the Ashden films as a starter. The second part uses a range of Ashden films to think about how sustainable energy can help to improve the quality of life for people in different ways.

## **Prior knowledge**

Pupils need to have some prior knowledge of how energy use affects the environment, and some understanding of how the environment can be improved through careful use of energy resources.

## **Purpose of the activity**

- To begin to develop ideas about the meaning of **quality of life**
- To understand that we all have common **basic needs**
- To know that people's needs are often met in **unequal ways**
- To think about how **energy** helps to improve quality of life

## How to use the resources

### Introductory film and Powerpoint slides

Arrange pupils in mixed ability groups and start by showing the 5-minute Ashden film about NEST, a business which makes and sells solar-powered lights in India.

Ask pupils to identify how these people's lives have been improved by using the solar lights. Encourage them to identify some of the hazards people used to face from using kerosene lamps for lighting, such as the dangers of fire and unhealthy fumes. Reflect on how important it is to have adequate lighting in the home for safety reasons. Introduce the idea that these people have had the **quality of their lives** improved by the solar technology.

Then use the Powerpoint to introduce the learning objectives. Ask the pupils to say what quality of life means to them. Use the prompts on the Powerpoint (slides 4 to 7), encourage pupils to consider different statements that relate to basic needs.

Provide each group of pupils with a copy of the worksheet 'Thinking about quality of Life' (slide 11) and ask them to cut out the statements they have been given and arrange them in the categories given: people, places and resources. There should be one set of statements per group of pupils. The pupils' task is to consider each category of statements in turn and agree how they should be ranked in order of importance. There is one blank statement for each category so that the group can add a statement of their own should they wish.

Get feedback on how the groups have ranked the statements and consider similarities and differences between the ranking. Ask pupils to explain their choices and any difficulties they have had over agreement.

Each group of pupils then has to decide what they think are the six most important statements overall – it might be useful here to give the pupils a time limit of 10 minutes to make their choice. This will involve a lot of discussion and groups can compare their responses.

Finally, give each individual pupil a copy of the worksheet 'Quality of Life Web' and ask them to put their personal choices into the six spaces (which are not necessarily the choices of their group). Ask pupils to think about how their identified needs are related, and draw lines on their web to show those which have an effect on other choices. An example of how this might look is given on the next slide.

### Plenary session

As a plenary, pupils could review each others 'webs' and see what commonalities exist. They should notice that basic needs are very much interlinked. Then take the needs which are identified most frequently, and think in what ways energy is important to meet these needs. Ask pupils if there are any basic needs which can be met without the use of energy. Consider how our needs would be met if we could no longer rely on, for example, sufficient energy to grow food, cook and refrigerate food, operate factories and machines, heat our homes, schools and workplaces when needed, run filtration plants to clean water.

There are further questions on slide 9 of the Powerpoint that could also be explored in a plenary session.

Finally, show the very last slide which is a diagram to show how 20% of the world uses 80% of the energy. Ask them if they think this is fair. Can they guess from this how percentages compare to carbon dioxide output? Can pupils think about how these facts relate to quality of life in different regions of the world? Are there great differences in energy consumption in our own country and why? Who uses the most energy and who might not have access to enough energy? What factors do you think affect this?

### **Follow up lessons**

Show some of the suggested Ashden films to the whole class with some discussion time. Or, more appropriately for older pupils, the films can be watched in small groups in the ICT suite. Pupils should be given some time to discuss the questions in their groups, and write up their own answers using the ideas of the whole group and one person as a scribe. As a plenary, the questions can be answered as a class.

The last question asks what we can learn from others and this is a very important aspect of the enquiry process. We need to realise that although people may be financially poorer than us they may be richer in other terms, and that there is much to be learnt about the careful use of resources.

There is a useful list of vocabulary that can be used for pupils to check and self-assess their understanding. Some of the vocabulary is quite challenging.

### **Further activities**

- 1) The different films suggested can provide stimulating discussion and learning about quality of life and sustainable energy use. One possibility is to watch these films over a series of lessons and use the questions given to promote ongoing discussion and learning. Find out where the different films are located, and make a record of the key points you cover in each film, using mapping software such as Infomapper (to annotate locations) or Quikmaps.

**Geography, Citizenship ICT, English**

- 2) Link this to any work being done on a relevant non - UK contrasting locality. Use the 'diary of a day' approach to compare your 'energy day' (the energy you use, where you use it and when) with that of a child from your chosen location. Explore the similarities and differences between your lives in terms of the resources you consume and the feelings you have about friends, family and home. Plot and link locations you compare using mapping software, highlighting the similarities and differences through the use of an appropriate key.

**Geography, Citizenship, ICT, English**

- 3) 'The day the lights went out' Use this as a title for a piece of creative writing. Ask pupils to imagine that they woke up one morning to find that none of the electrical or heating appliances worked in their house. What is more, when they went to school they found that

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everyone had the same problem. There were no buses, no shops open and school was cancelled because it was too cold. Ask pupils to describe their day.

**English**

- 4) Write a letter to one of the communities shown in an Ashden film and tell them what you have learnt from their project. Describe how you are helping to take care of the environment in your school.

**English, Citizenship**

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