

Alternative Technology and Weather Learnlink - Generic

About the Activity

This session introduces the concepts of alternative technology and using the weather to create power. Three microclimates are visited on centre, the group will take weather measurements at these sites and discuss alternative technologies that could be used. The group then investigates different types of alternative technology further before moving on to create a video presentation, promoting a type of renewable energy to a preselected country.

Activity Aims

The aim of this activity is to:

- Introduce the alternative technology and weather session and the equipment needed for the activity.
- Allow each participant to collect, record and analyse data.
- Allow each pupil to be involved in creating a video presentation.
- Ensure participants work together supporting and encouraging each other.
- Provide an opportunity for participants to discuss what they have accomplished.

Learning Outcomes

Upon completion of the activity, participants will have:

- Identified a range of weather types and understood the difference between weather and climate.
- Explained some of the different methods used to produce electricity and some of their associated advantages and disadvantages.
- Understood the concept of sustainable development.
- Developed their presentation skills.
- Understood the importance of safety, risk, risk assessment, hazards and rules.
- Demonstrated the ability to listen to, understand and act on instructions received.
- Understanding of the importance of teamwork.
- Consolidated and then improved abilities such as fieldwork skills through performance.
- Contributed to a post activity review led by the instructor identifying what they did well and then suggested ways to improve.

Progression Opportunities

Some participants may also:

- Be able to identify a wider range of weather types and climate patterns.
- Be able to identify the advantages and disadvantages for each of the different methods of producing electricity discussed on session.
- Taken a leadership role in preparing the video presentation task.
- Take the initiative in evaluating their performance and that of the group.
- Be able to assess risks and understand how these may be controlled.

In addition, participants should also have developed in the following:

- Interpersonal communication
- Presentation skills
- Teamwork

Associated Vocabulary:

Words relevant to safety e.g. boundaries, hazards, risk assessment, rules.

Words relevant to equipment e.g. anemometer, barometer, hygrometer, identification chart, light meter, thermometer.

Words relevant to the activity e.g. biomass, clouds, conservation, energy, fossil fuels, geothermal power, hydroelectric power, microclimate, nuclear power, pattern, pressure, prevailing patterns, pollution, rain, solar power, sustainable development, temperature, tidal power, wave power, wind, wind power.

Words relevant to teamwork e.g. achievement, communication, decision making, discussion, encouragement, instruction, leadership, listening, opinion, participation, personal development, praise, responsibility, support, understanding.