Studland Bay

Enquiry 5: How do people benefit from Studland Bay?

Context and Learning Aims

Pupils will be supported in and outside of the classroom to:

• Understand the range of ways that people interact with and benefit from the internationally important environment of Studland Bay

• Gain an awareness of the concept of ecosystem services.

• Explore the concept of benefit and how this may be defined in various ways.

• Apply understanding of the value of ecosystems to Studland Bay. Through the investigation the pupils are able to identify different ways in which people interact with and benefit from its environment.

• Apply what they have learned through the case study of Studland Bay and consolidate their understanding through an investigation of a specific environmental area or ecosystem within their own locality.
Learning and teaching activities and curriculum progression

Key Question 5.1: How do we benefit from anything?

Ask the pupils what the word *benefit* means? Encourage discussion and write responses on the board. Benefit means: *to gain value or an advantage from something*. Now get the pupils to consider the meanings of the two words *value* and *advantage*. It is likely that their first association with the word *value* might be to define it in monetary terms e.g. profit gained from something or the price of something such as a house or car. Encourage discussion amongst the pupils. How else do we define the value of something or the benefit to be gained from an activity or experience? Support them to consider the example of a holiday. What is the value to people of a holiday? The holiday company benefits from people spending money with them e.g. air fares; staying at hotels and eating at restaurants. But what about the value of a holiday to the people going on it? How do they benefit e.g. relaxing and de-stressing; spending time with their family; meeting new friends; learning new hobbies etc. Can these things be given a financial value do they think? So value can be defined in lots of ways. Some of these ways will have a financial value but others will not.

Key Question 5.2: How do people benefit from the annual Glastonbury festival?

Show the pupils the photographs in Resource 5.1. Do they recognise what and where it is? Give the pupils time to look at the images and identify people, activities and events. All of the photographs are of the annual Glastonbury festival which began in 1970 and extends over four days in June. It is the largest greenfield festival in the world and is attended by over 175,000 people each year. Now show the accompanying short film by Chris Brockhurst of the 2013 festival in Resource 5.2. Now ask pupils to consider the benefits of the festival under the two categories above i.e. profit and advantage. Support discussion about who will make money from the festival? Pupils can access the festival website at http://www.glastonburyfestivals.co.uk/ to check out ticket prices for those attending together with all of the vendors i.e. people and firms who will be attending in order to sell things to the festival goers. How will people get to the site? By train; car; bus or coach? How will people profit from this? Help the pupils to consider the advantages for festival goers of the events. What are the benefits for them? These will be less tangible in many ways but support the pupils to think about things such as the benefits of a break from work; the happiness of meeting up with old friends and family members; fantastic memories; team spirit and comradery; meeting new friends; seeing a favourite band; hearing live music; the satisfaction of successfully completing a new challenge such as learning to juggle or walk across a trapeze; the elation of having planned a trip and been independent perhaps for the first time.

Before moving on ask the pupils to explain what they consider the main difference is between the two types of benefit – *profit* and *advantage*. One can be measured easily in terms of monetary profit or reward whereas the other is very difficult to measure because it’s about more personal things such as the emotional; spiritual and cultural value which we attach to things. Whilst these can’t be measured they are of at least equal importance to profit. All of these things are important for our quality of life and our emotional and psychological well-being.
Print off Resource 5.3 which is an article by a journalist in the newspaper *Daily Telegraph*. Ask the pupils to read through it and underline all of the benefits that the research at Michigan University suggests comes from a good ‘tramp in the countryside’? Do the pupils feel that any of these advantages might also have a knock on financial benefit in the long run e.g. perhaps promoting a sense of well-being through exercise might mean that someone had less absence from work? More able pupils may want to research the hormone serotonin which is often referred to as a mood hormone. Walking in the countryside (and exercise in general) can naturally release these feel-good hormones that are so vital to feeling happy and calm so helping to maintain good mental health.

**Key Question 5.3: Who benefits economically from Studland Bay?**

Give the pupils the Ordnance Survey map extract of Studland Bay to examine in Resource 5.4. Studland Bay stretches from the Foreland or Handfast Point in the south to South Haven Point in the north. If each grid square on the map is 1Km2 then approximately how many Km along the SW coast path is it between these two locations? Remind them that economic benefit is about the generation of money and the pursuit of profit. Working in pairs, have the pupils identify as many things on the map as they can which will benefit people economically. This may require support and some direction at least initially. For example prompts such as:

- The owner of The Warren Wood in SZ0482;
- The builder who built the houses at Glebe Estate with their magnificent views across Studland Bay in SZ0381;
- The owner of the Hotel in Studland SZ0382;
- The National Trust who operate the pay and display car parks all along the coast and runs cafes and gift shops;
- The owner of the horse riding stables in SZ0382;
- Isle of Purbeck Golf Club SZ0182 with views across Goodlingston Heath and Studland Bay;
- The Visitor Centre and Hotel in SZ0383;
- The operators of the ferry which connects South Haven Point with Sandbanks.

Encourage the pupils to discuss the ways in which each of these stakeholders will benefit economically from Studland Bay. Challenge the pupils to consider other stakeholders who will also benefit from Studland Bay but which will not be shown on the map. How many can they think of in a very beautiful sandy coastline which is extremely popular with visitors and tourists? Resource 5.5 contains some prompts.

**Key Question 5.4: Who else benefits from Studland Bay?**

Now move the pupils on to consider the other kinds of benefit they identified earlier for the Glastonbury festival exercise i.e. something that puts somebody in a favourable position or state of mind. Give the pupils the following resources and scenarios:

In Resource 5.6 there is a photograph of a man and a woman walking their dog on Studland beach. Tell the pupils to imagine that he is recovering from a recent heart attack and she is mourning the death of her father. How might walking along Studland beach on a
beautiful early winter morning benefit them by placing them in a more favourable position or state of mind? Take the opportunity if it arises to extend the pupil’s thinking.

Could there also be an indirect economic benefit also? For example if the man recovering from a heart attack finds that regular exercise along the beach improves both his fitness and well-being he may feel that he needs fewer hospital check-up appointments which will save the National Health Service (NHS) money. He may return to work earlier so helping his company to produce more profit that will be taxed by the government. His company will have to pay less sickness benefit. In the same way the woman may find that the exercise she gets and the peaceful space it provides for her to remember all the good times she spent with her father, might mean that she no longer needs visits to the doctor and tablets to help her sleep at night, which again saves the NHS money.

The man in Resource 5.7 was made redundant from the job he had been doing for 25 years. At the moment he is feeling despondent and depressed about ever working again. The government is paying him job seekers allowance. He feels he has lost a lot of respect from his family and has low self-worth. He comes and walks through the Godlingston Heath National Nature Reserve at Studland Bay every day. Knowing what we do about the advantages of doing this how might this benefit him?

The woman in Resource 5.8 has a very stressful job as Chief Executive of a very large hospital trust in London. She is also a very keen birdwatcher and at weekends she always tries to drive down to Studland Bay to walk and bird watch. How do you think both she and the work she does might benefit from her doing this?

Finally ask the pupils to consider how people who do not work in and around Studland Bay and have never even visited Studland Bay might still benefit from it? Show them the images in Resource 5.9 as clues and prompts. Divide the pupils into groups to discuss this and feedback. Summarise on the board. The images in Resource 5.10 could be used at any time during discussions to develop ideas and consolidate thoughts. Can the pupils make the link between:

The trees at Studland Bay which take in carbon dioxide from the atmosphere as an energy source and release oxygen as a waste product, so producing clean air, which benefits people everywhere, not just in Studland Bay;
- The trees and sand dunes which act as a natural defence against the incoming high tides and storms and prevent flooding inland which can be both traumatic and expensive for those who suffer it;
- The link between bees which collect nectar from the heather growing on Studland Heath which then pollinate farmer’s crops many miles away.

All the above are examples of ecosystem services.
Key Question 5.5: Who benefits from your local environment?

Studland Bay is a precious natural habitat. Some areas are a National Nature Reserve and other parts are Sites of Special Scientific Interest (SSSIs). As a summative piece of work to this enquiry the pupils can investigate through fieldwork a local habitat or environmental area near to their home or school which has a designation as an important natural habitat and ecosystem. This might be a local Area of Outstanding Natural Beauty or Local Nature Reserve for example. Using what they have learnt about the very different types of value of Studland Bay the pupils can use the table in Resource 5.11 to record their ideas about the value of this area for discussion back in class. This table is a simplified version of that which appears in DEFRA’s An Introductory Guide to Valuing Ecosystem Services at www.defra.gov.uk. What it does is to encourage pupils to look at environments from different perspectives i.e.

- What does this environment produce for us which is essential for life e.g. food; fresh water; timber; fish etc.
- What does this environment help to control and regulate for us e.g. helps to prevent flooding; soil erosion; increases oxygen in the atmosphere; absorbs carbon dioxide from the atmosphere and helps to reduce the build-up of greenhouse gases etc.;
- What does this environment do to promote health and well-being amongst people e.g. spiritual enrichment; recreation; leisure activities; hobbies etc.
Sample Resources from Enquiry 5. The complete set of resources supporting learning in this enquiry are available on the accompanying DVD and online at www.lcco.eu

Resource 5.1

Credit: Bennydigital

Resource 5.1

Credit: Imagen
Walking in the countryside is good for the brain as well as the body

By Louise Gray, Environment Correspondent December 25th 2008

Families setting off for a Boxing Day walk to burn off the over indulgence of Christmas can feel especially pleased with themselves this year as scientific research shows a tramp in the countryside is also good for the brain.

Countryside walkers - Walking in the countryside is good for the brain as well as the body

After a full roast turkey lunch, it is traditional to try to work off the calories with a long walk in the great outdoors. Now scientists have shown that "interacting with nature", even in the middle of winter, boosts memory and concentration levels. In fact, just an hour strolling through countryside increases the brain's performance by a fifth – just in time for a family round of Trivial Pursuit on Boxing Day night. In contrast a walk through busy streets, perhaps shopping for sales bargains, has no improving effect on the brain at all.

The research was carried out at the University of Michigan. One group was sent out on a 50-minute walk through streets lined with office buildings and busy with traffic while the other took a secluded, tree-lined route.

Afterwards the volunteers' mental skills were assessed in a series of tests, and compared to their performance before setting off on the walks. Results showed that those who took the "nature route" improved their short-term memory by 20 per cent. There were no improvements after walking down city streets.

It is thought that the countryside is "restorative" because it allows people to switch off, while walking in towns and cities requires attention.

Marc Berman, a researcher at the University of Michigan, suggested a dose of nature can help cure mental fatigue. "I would highly recommend going away for a little break in the country or simply going for a walk in a park in a town," he said. "Our research has shown that this really is not subjective – the effects on memory and attention are real."

The research, published in the journal Psychological Science, also found memory and attention improved after simply looking at pictures of nature rather than photos of built-up areas.

Mr Berman added: "Interacting with nature can have similar effects as meditating. You don't hear people say, 'Well, I got really tired out looking at this beautiful waterfall'. Nature does not make any demands of you.'"
Resource 5.9

Credit: David Weatherly

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