

Environmental interaction and sustainable development, viewed from the people and environment perspective

(Extract from: Bennetts, T. 'Improving geographical understanding at KS3', Teaching Geography Summer 2008. pp 58–60)

'This analysis of the 'people and environments' perspective is an attempt to identify concepts which are particularly important to the understanding of a distinctively geographical perspective. I suggest that among the most important of the ideas which underpin the development of students' understanding of this broad perspective are:

- environment
- the dynamic character of environments
- environmental influences on people
- the human impact on environments
- the quality of environments
- environmental hazards
- resources
- sustainability
- environmental and resource management.

Environment

We use the term 'environment' in two main ways, both of which are pertinent to geography. At one level, environment refers to the surroundings in which an individual or community functions. At another level, we recognise different types of environment, each of which has a characteristic combination of features, conditions and processes which are interrelated, often in complex ways. How environments function is an important focus in both physical and human geography. A useful distinction can be made between natural environments and environments which have been modified or, to a large extent, created by human activities. Most large-scale environments have been affected to some extent by human beings, either directly or indirectly.

The dynamic character of environments

All environments change over time, some slowly and some very rapidly. Some changes are cyclic, for example, those associated with the natural diurnal and seasonal changes that occur even in very stable conditions. More drastic changes, whether slow or fast, can alter environments in irreversible ways. The built environments created by human beings, especially large urban settlements, can be subjected to a rapid pace of change. Settlements can expand or decline; and their internal morphology can be reshaped in response to economic and social developments, changing lifestyles and changes in the architecture as well as the use of buildings.

Environmental influences on people

Throughout history, environments have had a strong influence on human decisions and behaviour, as a consequence of the different opportunities they offer and the different constraints and challenges they present. Environmental conditions have strongly influenced which parts of the world have been settled and what human activities these areas have supported. However, the human responses to environmental opportunities and constraints are greatly influenced by the technological, economic, social and organisational capabilities of groups, communities and nations.

Human impact on environments

Human societies use land and water in a great variety of ways. This helps to create many more types of environment. A useful distinction can be made between urban environments, with their concentrations of housing, industry, commerce and administration; rural environments, in which large parts are usually dominated by farming; and 'wilderness areas', which are very sparsely populated, if populated at all. Some types of environment are more vulnerable to human impact than others, in the sense that they are less able to recover from damage. These include marginal land in tundra and semi-arid environments, easily eroded upland areas, and tropical forests. The human impact on a particular environment may be a consequence of decisions and behaviour at places which are located far from the area of impact.

Quality of environments

Qualities are attributed to environments as a consequence of the values held by individuals, groups or societies. The qualities can relate to:

- the capacity of environments to support human life (the most basic of requirements)
- the suitability or potential productivity of different environments for particular purposes (e.g. farming)
- the satisfaction, pleasure or excitement offered by an environment (e.g. for leisure activities).

The value placed on a particular environment is likely to be influenced by the availability of other environments with comparable attractions. Conflicting values and activities can lead to environmental issues.

Environmental hazards

These are events closely associated with environmental conditions, which present a severe threat to homes and other structures, economic activities, and lives. The phrase is often restricted to natural processes, although the level of risk which they carry is often influenced by human activities.

Environmental hazards are present in a wide variety of forms, ranging from tectonic (e.g. earthquakes, volcanic eruptions, tsunamis) to meteorological and climatic (e.g. gales, snow blizzards, hurricanes, tornadoes, droughts, fog, hail, heat waves, torrential rain), hydrological (e.g. river floods), geomorphic (e.g. landslides, collapse of cliffs) and biological (e.g. natural pests and epidemics).

Environmental hazards which can be produced or greatly facilitated by human activities include pollution, fire, soil erosion and the spread of diseases. Hazard events vary greatly in their intensity, scale (with respect to space and time), frequency and regularity.

Some places are much more vulnerable to hazards than are other places; while different communities vary in how effectively they can respond to hazards.

Resources

Resources are selected elements or attributes of environments which are perceived as being of use or of value to satisfy human needs, improve the quality of life, or achieve particular economic, social or political goals. Their evaluation depends not only on the importance which individuals, groups and societies attach to them, but also on people having the means to exploit and develop them effectively. Initially, the term was applied mainly to natural resources, but now it is often used to include human resources (related to the number and capabilities of the human beings available for particular activities) and cultural resources (products of human endeavour used to support present-day activities, such as the historic remains which attract visitors, and the infrastructures necessary for economic development and the growth of settlements).

Another important distinction is that between renewable and non-renewable resources. While the former can regenerate naturally or provide new replacements within a human timespan, supplies of the latter are, for practicable purposes, finite. However, overuse or misuse of resources can result in the exhaustion or destruction of sources of supply. Those features of environments which are identified as resources, and the values attached to them, change over time, not least as a consequence of changing opportunities, expectations and demands associated with new knowledge and techniques.

Sustainability

The concept of sustainability relates to an idealised condition in which physical and human processes operate in ways which maintain the quality of environments and the availability of resources. It represents a radical shift in thinking, both in economic assumptions and in political agendas, from an emphasis on economic growth towards approaches which aim to take account of the impact of such growth on environments, together with a concern that current practices should not deprive future generations of opportunities to improve the quality of their lives. Global warming adds urgency to the challenge of tackling the serious threats posed for many environments.

However, while the idea appears to attract much support, including claims of support from many governments, it has proved difficult to translate this into effective strategies. Many commentators have asserted that the idea is ambiguous and contentious, not least because of the tension embedded in the notion of 'sustainable development'.

Environmental and resource management

Such management is concerned with the practical steps that organisations can take to protect or conserve environments and resources, and to promote sustainable development. This requires appropriate policies, strategies, decisions and actions. However, organisations vary greatly in their responsibilities, assumptions and priorities; in the knowledge which they can draw upon; and in the power (e.g. political or economic) which they can exercise to achieve their goals. Nevertheless, students could be helped to investigate which organisations have the authority to manage a particular environment or resource, how they tackle this challenge, and with what success.'