

Approaches for Teaching and Learning for Geography

Geography is the discipline which seeks to explain the character of places and the distribution of features and events as they occur and change the surface of the earth. Geography is concerned with human – environment interactions in the context of specific places and locations. In addition to its central concern with space and place, it is characterised by a breadth of study, a range of methodologies, a willingness to synthesise work from other disciplines and an interest in the future of people – environment relationships.

Geography often starts with the following questions:

- Where is it?
- What is it like?
- Why is it there?
- When did it happen and how does it change?
- What impacts does it have?
- How should it be managed for the mutual benefit of humanity and the natural environment?

Finding answers to these questions requires investigation of the location, situation, interaction, spatial distribution and differentiation of features. Explanations of current situations come from both historical and contemporary sources. Trends can be identified which indicate possible future developments.

Some of the central concepts of geographical studies are location and distribution, place, people-environment relationships, spatial interaction, and regions.

The teaching objectives of geography can best be achieved through a range of approaches.

Learning through fieldwork

Fieldwork provides opportunities for the first-hand investigation of people in their environment and as such awakens students to a diversity of environments and cultures, in their local area and beyond. It teaches students to collect, analyse and present data, sharpening their observations, measuring, recording and evaluation skills. As such, fieldwork has important contributions to make geography real and enjoyable and as a result every geography student should be entitled to have a reasonable amount of exposure to fieldwork experience through the geography course. Fieldwork should not be limited to visits and guided tours, whereby students are involved only in passive activities such as listening, observing and note-taking. Fieldwork should be enquiry-based in-line with the aims and objectives of this curriculum. It should involve students in identification of an issue or problem in a specific area, collect, present and analyse data and finally identify possible solutions or strategies.

Learning through maps

Maps in the form of paper, digital images and globes are an important tool for geographers and enable us to record, display and analyse information about people and environments. Teachers should ensure that their students are able to master a reasonable level of mapping skills and integrate such skills into the learning and teaching of geographical issues in the curriculum. Understanding and using maps involve the simultaneous use of a number of concepts and skills including aerial perspective, proportion, map language and arrangement. Students should be given the opportunity to develop their map literacy so that they can use maps to find out about and interpret the world around them in a critical informed way. In an enquiry based approach students should have access to a wide range of maps including large wall maps, atlases, globes, maps on CD-ROMs and other electronic media, including *Google Map* and *Google Earth* as well as a wide range of Ordnance Survey maps at various scales.

Learning through information technology

Information and Communications technology whether it is a personal computer, an interactive whiteboard, or a mobile phone influences how students make sense of their world today and at the same time offers a range of tools to support their geographical understanding. Specific programs such as Google Earth can improve spatial thinking and electronic media and the internet enable students to gain up-to-date information and access to a vast range of images, videos, data and other sources which can greatly enrich geographical understanding. By the use of IT teachers have the power to make lessons livelier and enjoyable thus enhancing students' learning motivation. Geography teachers should provide adequate opportunities for their students to apply IT in their enquiry-based approach to the teaching of the subject. This is because IT:

- provides a range of information sources to enhance geographical understanding
- supports the development of a body of geographical knowledge
- provides images of people, places and environments
- helps students develop their ideas using ICT tools to amend and refine their work and enhance its quality and accuracy
- helps students exchange and share information, both directly and through electronic media
- provides students with the ability to review, modify and evaluate their work, reflecting critically on its quality as it progresses
- contributes to pupils' awareness of the impact of information systems on the changing world
- contributes substantially to the development of a range of ICT capabilities, especially in regards to data handling, use of communication technologies and information sources and modeling
- develops the students' skills in the following ICT toolkit namely word processor; spreadsheet; presentation software; desktop publishing (DTP) software; internet browser/e-mail; electronic atlas; electronic encyclopedia; geographic information system (GIS); automatic datalogging weather station; digital camera.

The units presented in the curriculum provide opportunities for using ICT and over the whole course a full range of approaches will be used to develop students' ICT capability and enhance the quality of their geography experience.

Learning through the use of resources

A good geographical enquiry usually involves the use and analysis of a rich variety of resources including worksheets, textbooks, maps, models, computer software, interactive games, the internet, newspaper resources, weather instruments, specific items (rock samples and tools) and many others. Very often such resources arouse students' motivation and engage them in active learning situations that meet their varied needs. Besides this, such an extensive range of resources enhance students' learning experiences and are seen by many as a key attraction of the subject. Ideally geography should be taught in a special room allotted for the purpose which includes:

- adequate space for students preferably equipped with desks with flat surfaces for practical work especially map work
- spacious environment for the storage and effective use of resources including, maps, books, charts, apparatus, posters and handouts
- various kinds of wall maps including those of the Maltese Islands, Mediterranean, Europe and the World
- globes, including political, relief and activity globes that can be marked and cleaned
- meteorological and fieldwork instruments
- computers with internet access
- interactive whiteboard
- water supply for use in simple experiments and model making.

Students should be encouraged also to handle and use such resources during breaks or when geography related extra-curricular activities are being organised in school.

Learning through the use of games and simulations

The philosophy underlying the use of games and simulations is in close harmony with enquiry-based approach to the teaching of geography. Role playing and simulation call for:

- powers of analysis and synthesis
- an ability to think ahead from an exciting situation
- anticipating the probable actions of opponents
- foresee the consequences of alternatives
- to evaluate the pros and cons of alternative courses of action one might take.

The peculiar appeal of all these approaches is the radical way in which they alter the learning environment. Students move from the audience to the stage. Hence, students become active learners acquiring geographical concepts and knowledge in a challenging and authentic way.