Geography

GCSE 2012

Geography B

Schemes of Work and Lesson Plans

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www.ocr.org.uk/gcse2012

OCR

Introduction

Background

Following re-accreditation from Ofqual, a revised specification is available here for first teaching from September 2012.

In order to help you plan effectively for the implementation of the new specification we have produced these Schemes of Work and Sample Lesson Plans for Geography B. These Support Materials are designed for guidance only and play a secondary role to the Specification.

Our Ethos

OCR involves teachers in the development of new support materials to capture current teaching practices tailored to our new specifications. These support materials are designed to inspire teachers and facilitate different ideas and teaching practices.

Each Scheme of Work and set of sample Lesson Plans is provided in Word format – so that you can use it as a foundation to build upon and amend the content to suit your teaching style and students' needs.

The Scheme of Work and sample Lesson plans provide examples of how to teach this unit and the teaching hours are suggestions only. Some or all of it may be applicable to your teaching.

The Specification is the document on which assessment is based and specifies what content and skills need to be covered in delivering the course. At all times, therefore, this Support Material booklet should be read in conjunction with the Specification. If clarification on a particular point is sought then that clarification should be found in the Specification itself.

Theme 3 - Natural Hazards

Suggested teaching time: 30 hours

TOPIC OUTLINE	SUGGESTED TEACHING AND HOMEWORK ACTIVITIES	SUGGESTED RESOURCES	POINTS TO NOTE
1. The Global Distribution of Natural Hazards - an Introduction	• General discussion - what is a **Natural Hazard** • Locate known examples on a world map (include all those offered, even those outside the specification, eg forest fires) • Focus down to the 4 hazards in the specification (**earthquake, volcano, tropical storm and drought**) • Research and map the global distribution of earthquakes and volcanoes on one outline map • Research and map the global distribution of tropical storms and drought zones on a second map • What patterns are revealed?	• Press cuttings from the previous year • http://www.earthobservatory.nasa.gov/NaturalHazards/ • www.nerc.ac.uk • World outline maps	• Forward planning is required to maximise the use of press cuttings to stimulate the initial debate • The websites suggested cover a wide range of natural hazards, beyond those in the specification

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2. How tectonic processes cause earthquakes and volcanoes	• Research assignment. Half the class (see below) is assigned to research into the **physical processes** that cause earthquakes and volcanoes • The mode of presentation could be a PowerPoint presentation or a Photo Story - The best presentation is selected to be shown to the rest of the group. Each student retains a copy of this work	• http://www.s-cool.co.uk/a-level/geography/natural-hazards is an excellent web based resource • A bank of digital photographs and diagrams should be made available to students to enable them to use in the PowerPoint or Photo Story	• To maximise the geographical input and output, the students should already be competent in the use and application of PowerPoint and or Photo Story. This avoids IT dominating the learning experience • Microsoft Photo Story 3 is free to download, with full instructions for use
3. How climatic conditions cause the formation of tropical storms and droughts	• Research assignment. Half the class (see above) is assigned to research into the physical processes that cause tropical storms and droughts • The mode of presentation could be a PowerPoint presentation or a Photo Story - The best presentation is selected to be shown to the rest of the group. Each student retains a copy of this work	• http://www.s-cool.co.uk/a-level/geography/natural-hazards is an excellent web based resource • A bank of digital photographs and diagrams should be made available to students to enable them to use in the PowerPoint or Photo Story	• This website is interactive it contains helpful diagrammatic animations • A bank of photographs/diagrams saved on the department website saves a huge amount of research
4. The global distribution of selected case studies.	• Mapping activity. Students map the location of the pre-determined case studies which will follow in this unit of work • Each located case study should be accompanied by a brief **"cause and effect"** text box. One sentence - cause, one sentence - effect	• Blank outline maps with one text box completed for illustrative purposes	• Microsoft Photo Story 3 is free to download, with full instructions for use

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5. Natural Hazards have a significant impact on people and their quality of life.	• Students design an impact table (one sheet of A4 paper per hazard), to summarise the impact of the 4 natural hazards on people • The impact table should be based on: Nevada del Ruiz, Columbia (Volcano - LEDC) Northridge, California (Earthquake - MEDC) Myanmar (Cyclone Nargis - LEDC) Australia (Drought in the Murray/Darling - MEDC)	• The BBC News website provides an outstanding resource for this exercise. Students should use the Hazard as the search word followed by "BBC News" • Alternatively use the case studies in the partner text book produced by Pearson Education	• Clear, concise information on these named hazards is available. Each web page has many useful hyperlinks and other documentation. A wealth of digital pictures and video files are available
	• The impact table should encompass the same "cells": **Environmental Impacts** and **People Impacts** form the column headings, **Primary and Secondary Impacts** form the Rows • Students produce sequence cards for one of the events listed above. They challenge a partner (who worked on one of the alternatives) to sequence the cards in a logical order	• Impact Table with prepared cells on A4 paper • Exemplar pack of sequence cards (perhaps on the wild fire hazard) to illustrate sequence of events	• Students will need to be introduced to the notion of Primary and Secondary impacts • The partner text book produced by Pearson Education offers clear advice relating to Primary and Secondary Impact
6. Earthquake **or** Volcano: A comparative case study across LEDCs and MEDCs	• Students devise a broadsheet news article where a reporter visits a contrasting location (LEDC/MEDC) to one of the above. They report on the impact of the earthquake event or the volcanic eruption. Maps and photographs to be included	• http://www.gatm.org.uk/ or use search words Geography at the Movies • Exemplar template to provide a scaffold for students to work within	• Video clips from "Geography at the Movies" have been produced by teachers for teachers

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	• The best article produced in the class is selected by the teacher. All the students in the group write an editorial where the editor reflects on why the impact of the event appears to be disproportional on the LEDC/MEDC location		• Pre viewing is recommended to ensure that the resource is used to the optimum level
7. Tropical Storm **or** Drought: Comparative case studies across LEDCs and MEDCs 8. The level of economic development of the place affected by the hazard influences the severity of the impact	• Students devise a broadsheet news article where a reporter visits a contrasting location (LEDC/MEDC) to one of the above. They report on the impact of the tropical storm event or the extended drought. Maps and photographs to be included • The best article produced in the class is selected by the teacher. All the students in the group write an editorial where the editor reflects on why the impact of the event appears to be **disproportional** on the LEDC/MEDC location • Class debate: Students argue for or against the motion that "it is inevitable that LEDC locations suffer more when natural hazards occur"	• http://www.gatm.org.uk/ or use search words Geography at the Movies • Exemplar template to provide a scaffold for students to work within • To stimulate the debate, role cards may be used to ensure that **a range of views** are explored	• Outcomes will be enhanced if the broadsheet template is differentiated (structure/sequence/signalled content)

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	• A decision making exercise where students explore the merits of donating charitable funds to aid a **short term relief** programme as against a **long term recovery** programme following an earthquake or a volcanic eruption • For either the earthquake hazard or the cyclonic hazard, students select ten items to hold in a **survival kit**. They should justify their selected items within the context of living in the USA • Switching to an LEDC context, which items in the survival kit are unlikely to be available? Working in pairs, each student has to remove five items from their partners U.S. survival kit which are unlikely to be available in the LEDC context	• The partner text book produced by Pearson Education includes a decision making exercise where students are given a dilemma. Should they donate funds to the long term recovery programme following the 2005 earthquake in Pakistan or to the 2008 Sichuan emergency relief fund? • To stimulate the debate, role cards may be used to ensure that a range of views are explored	• Differentiated materials for the decision making exercise are available on the supporting CR from Pearson Education
	• Class debate (the teacher selects one of the hazards): It is the role of government to reduce the impact of the hazard by banning any future building or development within the hazard area		

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9. Why do people continue to live and work in areas prone to hazards?	• A sorting exercise for each of the 4 hazards where 20 statements (5 for each hazard) are created to explain why people live and work in the hazard zone. Students sort the cards to match the hazard • Students script an interview with a resident of one selected hazard zone to ascertain why they choose to live in the area	• Cards need to be prepared in advance. Ideally different sets of cards will be available to aid differentiation • Audio tapes or software such as Crazy Talk	• "Crazy Talk" is widely available it allows students to bring characters (photographs) to life to show empathy for the situation
10. Reducing the Impact of Hazards	• Research project. The 2 climatic hazards are covered across the group/class. Each student opts into researching one of the hazards. They create a spider diagram to show how the impact of the hazard can be reduced through technology, including building techniques; forward planning, education; prediction; evacuation planning; and aid programmes	• http://www.s-cool.co.uk/a-level/geography/natural-hazards/revise-it/managing-hazards is an excellent web based resource on hazard management	• This website is interactive it contains helpful diagrammatic animations

OCR Geography GCSE B

A Decision Making Exercise: Charitable support for short term emergency relief aid or long term recovery programmes

OCR recognises that the teaching of this qualification above will vary greatly from school to school and from teacher to teacher. With that in mind this lesson plan is offered as a possible approach but will be subject to modifications by the individual teacher.

Lesson length is assumed to be **one hour**.

Learning Objectives for the Lesson

Objective 1	Students to further develop their **knowledge and understanding** of the impact of earthquakes.
Objective 2	Students to **apply their wider knowledge** of earthquake relief and recovery programmes to two new case studies.
Objective 3	Students to **evaluate** the relative merits of one type of aid over another.

Recap of Previous Experience and Prior Knowledge

The students have already undertaken a research assignment on the cause and effect of the 1994 earthquake in Northridge California. The context of relief and recovery was based in an MEDC context. The students would understand the primary and secondary effects of the earthquake, they would have an appreciation of the short-term emergency relief programme and the long-term recovery programme.

Content

Time	Content
5 minutes	Warm up activity to assess prior knowledge of general concepts of relief and recovery through the use of digital photographs from the California event. Teacher to clarify where understanding is not clear.
15 minutes	• Use maps and news articles (BBC news website) to provide background information for a class discussion on the Pakistan earthquake 2005. • Tease out the issues relating to the fact that this is an LEDC context. • Illicit an understanding of the challenges brought about by the hostile physical environment (terrain and weather).
20 minutes	• Students produce a sequence diagram to show how the aid programme moved from emergency relief in 2005 to long-term recovery in 2008. • For each step of the sequence, the students explain what is required and why a sequence from relief to recovery occurs.

Time	Content
10 minutes	• Half the class given a “relief” card, half given a “recovery “card. The cards contain information on one very specific aspect of relief (eg rescue dogs, tented cities, field hospitals etc.) and recovery (eg rebuilding bridges, schools, start-up funds for new businesses etc). • Selected students expand on the information on their card. Why is such action required at each stage?

Consolidation

Time	Content
5 minutes	Teacher emphasises the need for earthquake relief to be a long-term commitment, particularly in an LEDC context. What aspects of the long-term programme should the students support with the £500 charity fund that has been collected? What are the relative merits of one aid project over another?
5 minutes to setup the follow up and for homework	• Using a projector, display a breaking news story; a huge earthquake hits Sichuan in China. Should the £500 destined for the Pakistan recovery fund now be channelled towards the appeal fund for emergency aid in China? • Students to prepare a statement ready to launch the next lesson.