A Level
Geography

Guidance Pack

A-level Geography Guidance Pack

Contents

Introduction and purpose

This guidance pack updates some of the information in the 'Getting Started' teacher guidance booklet published in 2007–8 when Edexcel's GCE Geography 2008 specification was launched.

This update is necessary because the January examination series will no longer be available from September 2013. This means that:

- AS candidates who begin their course in September 2013 will sit both AS examinations, for Units 1 and 2, in May 2014

- A2 candidates who began their AS course in September 2012 will sit both A2 examinations, for Units 3 and 4, in June 2014.

No other changes to the specification unit content, or assessment, have been made. However, centres will need to consider:

- the order of teaching of units at AS and A2 – we have provided updated year planners to help you consider this on pages 4–8

- when to complete the fieldwork for Unit 2 – we have made some suggestions to help you consider this on page 9

- how to approach working on the Advance Information for Units 3 and 4 at the same time – we have provided some updated guidance, based on the Sample Assessment Materials (SAMs) for Unit 3, plus collated advice from past Examiner Reports relating to Units 3 and 4, on pages 10–22.

Assessment overview

AS (Year 12) – two units

Unit 1 **Global Challenges**	• 1 hour 30 minute written examination including a colour Resource Booklet.	**60% of the total AS marks** **30% of the total GCE marks**
Unit 2 **Geographical Investigations**	• 1 hour 15 minute written examination including a colour Resource Booklet. • Fieldwork and research skills form part of this examination.	**40% of the total AS marks** **20% of the total GCE marks**

A2 (Year 13) - two further units

Unit 3 **Contested Planet**	• 2 hour 30 minute written examination including pre-released synoptic resources (4 weeks in advance) and a colour Resource Booklet in the examination. • Part 1 of the examination will cover five of the six Unit 3 topics. • Part 2 will cover the sixth topic in a synoptic context, i.e. pulling together aspects of the other five topics and linking to other parts of the whole course.	**60% of the total A2 marks** **30% of the total GCE marks**
Unit 4 **Geographical Research**	• 1 hour 30 minute examination including pre-released research focus material (4 weeks in advance). • One question on chosen option.	**40% of the total A2 marks** **20% of the total GCE marks**

Changes to exam availability

From September 2013, there will no longer be an AS or A2 exam available in January. Exam availability for the AS and A2 units will be as follows.

AS	Unit 1 Global Challenges	Summer only (May)
	Unit 2 Geographical Investigations	Summer only (May)
A2	Unit 3 Contested Planet	Summer only (June)
	Unit 4 Geographical Research	Summer only (June)

Course planner

The following course planner covers the content of the whole specification and is based on four to five hours of teaching per week.

Please note that from September 2013:

- all examinations will be taken at the end of Year 12 or Year 13

- there will be no January examinations

- the content and assessment for this specification have not been changed

- **all six topics in Unit 3 Contested Planet** should be taught

- content from Topic 6 may be integrated into other topics in Unit 3 such as Topic 1 Energy Security, Topic 2 Water Conflicts and Topic 3 Bridging the Development Gap.

One-teacher course planner

The following two-year course planner is for **one teacher**. If the course is being taught by **two teachers**, there is an alternative model on page 8.

Term/week	Unit/topic	Detailed content
Autumn term, Year 12		
Week 1	Unit 1 World at Risk	1.1 Global hazards
Week 2	Unit 1 World at Risk	1.2 Global hazard trends
Week 3	Unit 1 World at Risk	1.3 Global hazard patterns
Week 4	Unit 1 World at Risk	1.4 Climate change and its causes
Week 5	Unit 1 World at Risk	1.5 The impacts of global warming
Week 6	Unit 1 World at Risk	1.6 Coping with climate change
Week 7	Unit 1 World at Risk	1.7 The challenges of global hazards for the future
Week 8	Unit 1 World at Risk consolidation and assessment week	
Half-term		
Week 9	Unit 1 Going Global	2.1 Globalisation
Week 10	Unit 1 Going Global	2.2 Global groupings
Week 11	Unit 1 Going Global	2.3 Global networks
Week 12	Unit 1 Going Global	2.4 Roots
Week 13	Unit 1 Going Global	2.5 On the move
Week 14	Unit 1 Going Global	2.6 World cities
Week 15	Unit 1 Going Global	2.7 Global challenges for the future

Christmas break followed by Spring term		
Week 16	Unit 1 Going Global consolidation and assessment week	
Week 17	Unit 2 Extreme Weather or Crowded Coasts	1.1 Extreme weather watch or 2.1 Competition for coasts
Week 18	Unit 2 Extreme Weather or Crowded Coasts	1.2 Extreme impacts or 2.2 Coping with the pressure
Week 19	Unit 2 Extreme Weather or Crowded Coasts	1.3 Increasing risks or 2.3 Increasing risks
Week 20	Unit 2 Extreme Weather or Crowded Coasts	1.4 Managing extreme weather or 2.4 Coastal management
Week 21	Unit 2 Extreme Weather or Crowded Coasts	Fieldwork
Half-term		
Week 22	Unit 2 (physical option) consolidation and assessment week	Analysis of fieldwork and research and exam practice
Week 23	Unit 2 Unequal Spaces or Rebranding Places	3.1 Recognising inequality or 4.1 Time to rebrand
Week 24	Unit 2 Unequal Spaces or Rebranding Places	3.2 Inequality for whom? or 4.2 Rebranding strategies
Week 25	Unit 2 Unequal Spaces or Rebranding Places	3.3 Managing rural inequalities or 4.3 Managing rural rebranding
Week 26	Unit 2 Unequal Spaces or Rebranding Places	3.4 Managing urban inequalities or 4.4 Managing urban rebranding
Easter break followed by Summer term		
Week 27	Unit 2 Unequal Spaces or Rebranding Places	Fieldwork
Week 28	Unit 2 (human option) consolidation and assessment week	Analysis of fieldwork and research and exam practice
Week 29	Revision	
Week 30	Revision	
Week 31	AS Examinations Unit 1	
Week 32	AS Examinations Unit 2	

Half-term followed by start of the A2 course		
Week 33	AS examinations	
Week 34	Unit 3 Energy Security	1.1 Energy supply, demand and security
Week 35	Unit 3 Energy Security	1.2 Impacts of energy security
Week 36	Unit 3 Energy Security	1.3 Energy security and the future
Week 37	Unit 3 Water Conflicts	2.1 The geography of water supply
Week 38	Unit 3 Water Conflicts	2.2 The risks of water insecurity
Summer break, end of Year 12		
Autumn term, Year 13		
Week 1	Unit 3 Introduction to Year 13/Water Conflicts (continued)	2.2 The risks of water insecurity
Week 2	Unit 3 Water Conflicts	2.3 Water conflicts and the future
Week 3	Unit 3 Water Conflicts consolidation and assessment week	
Week 4	Unit 3 Biodiversity under Threat	3.1 Defining biodiversity
Week 5	Unit 3 Biodiversity under Threat	3.2 Biodiversity threats
Week 6	Unit 3 Biodiversity under Threat	3.3 Managing biodiversity
Week 7	Unit 3 Biodiversity under Threat consolidation and assessment week	
Week 8	Unit 3 Superpower Geographies	4.1 Superpower geographies
Half-term		
Week 9	Unit 3 Superpower Geographies	4.2 The role of superpowers
Week 10	Unit 3 Superpower Geographies	4.3 Superpower futures
Week 11	Unit 3 Superpower Geographies consolidation and assessment week	
Week 12	Unit 3 Bridging the Development Gap	5.1 The causes of the 'development gap'
Week 13	Unit 3 Bridging the Development Gap	5.2 The consequences of the 'development gap'
Week 14	Unit 3 Bridging the Development Gap	5.3 Reducing the 'development gap'
Week 15	Unit 3 Bridging the Development Gap consolidation and assessment week	

Christmas break followed by Spring term		
Week 16	Unit 3 The Technological Fix?	6.1 The geography of technology
Week 17	Unit 3 The Technological Fix?	6.2 Technology and development
Week 18	Unit 3 The Technological Fix?	6.3 Technology, environment and the future
Week 19	Unit 3 The Technological Fix? consolidation and assessment week	
Week 20	Unit 4 Geographical Research	Enquiry Question 1
Week 21	Unit 4 Geographical Research	Enquiry Question 1
Half-term		
Week 22	Unit 4 Geographical Research	Enquiry Question 2
Week 23	Unit 4 Geographical Research	Enquiry Question 2
Week 24	Unit 4 Geographical Research	Enquiry Question 3
Week 25	Unit 4 Geographical Research	Enquiry Question 3
Week 26	Unit 4 Geographical Research	Enquiry Question 4
Week 27	Unit 4 Geographical Research	Enquiry Question 4
Easter break followed by Summer term		
Week 28	Unit 4 Geographical Research	Additional research and consolidation
Week 29	Unit 4 Geographical Research	Examination practice
Week 30	Revision	Working on Units 3 and 4 pre-release
Week 31	Revision	Working on Units 3 and 4 pre-release
Week 32	Revision	Working on Units 3 and 4 pre-release
Half-term followed by A2 examinations		

Two-teacher course planner

If the course is being taught by **two teachers**, then the alternative model below could be followed, by using half of the time in a week for each teacher.

	Teacher 1	Teacher 2
Unit 1	World at Risk (14 x ½ weeks)	Going Global (14 x ½ weeks)
Unit 2	Physical option (10 x ½ weeks)	Human option (10 x ½ weeks)
Unit 3	3 Topics (24 x ½ weeks)	3 Topics (24 x ½ weeks)

For Unit 4 there are several possibilities with two teachers, as below.

	Teacher 1	Teacher 2
All students study one option	Delivers the content in 50% of the lesson time.	Provides, guides and monitors student research in the other 50% of lesson time. This teacher could also focus on research and exam skills.
Students choose from one of two options	In this model, students divide into two groups based on which option they would prefer to study, e.g. Tectonic Activity and Hazards or Cold Environments – Landscapes and Change. As an example, let us say there are 4 x 1 hour lessons in each week. Teacher 1 delivers two taught one-hour lessons to the Tectonic Activity group, while the Cold Environments students sign in/out and either work in the classroom on their own research, or use a learning resources centre or similar. Teacher 2 delivers Cold Environments in the remaining 2 x 1 hour lessons, and similarly monitors the Tectonic Activity group while they research.	

When to deliver Unit 2 fieldwork

With a January exam available, many centres completed their Unit 2 fieldwork in the Autumn term and sat the exam in January. With **no January exam available from September 2013** centres may wish to decide when best to complete the essential fieldwork for Unit 2. There many options and issues to be considered, and those outlined below are provided only to inform centre planning and decision making.

Unit 2 fieldwork in September, as part of the introduction to GCE Geography	
Advantages: • Fieldwork visits are a good way to build group coherence • Makes for an interesting and potentially fun start to GCE Geography • Possibility of good weather	Disadvantages: • The 'gap' between fieldwork and the exam is long (although this could be overcome during revision time) • Organisational difficulties so early in the first term • Students may lack the conceptual underpinning, having studied very little of the course
Unit 2 fieldwork in October or November	
Advantages: • Allows time to teach/study the content and concepts of Unit 2 and do some research prior to the field visits • Some possibility of good weather • Field centres, if used, may be less busy	Disadvantages: • The 'gap' between fieldwork and the exam is relatively long • Days are getting shorter
Unit 2 fieldwork in March or April	
Advantages: • Closer to exams, so possibly fresher in students' minds • Research and teaching could have been carried out prior to the fieldwork	Disadvantages: • Field study centres, if used, are likely to be busy • Other subject teachers may object if students are out of centre as exams approach

The following would be some more general considerations.

• Fieldwork and research are best carried out at the same time as the unit is being taught.

• The fieldwork may be better carried out towards the end of the teaching of the topic, having allowed some time for research and when content and ideas have been delivered.

• Guidance is for at least two days of fieldwork, e.g. one day on Crowded Coasts and one day on Rebranding Places, although additional time is desirable.

Dealing with the Advance Information (pre-release) for Units 3 and 4

There will be **no January examination opportunity in 2014**. This means that both Unit 3 and Unit 4 will be sat by A2 students in June 2014.

The Advance Information for both units will be released, as in the past, in early May. For many centres, dealing with both sets of Advance Information at the same time will be business as usual but for some it will be a change. Centres may wish to consider the following points.

- Where two teachers share a group, one teacher could deal with Unit 3 and one with Unit 4.

- With only one teacher, care will need to be taken to set aside specific lessons to deal with each pre-release, to avoid confusion.

- To support weaker students, it could be wise to colour-code (using paper of two different colours) handouts, resources, research materials, homework tasks etc. to make linking these to either Unit 3 or Unit 4 as easy as possible.

- It is advisable to spend **four to six hours** in class on the Advance Information for each of Units 3 and 4.

Further guidance on dealing with the Advance Information for Units 3 and 4 in class is provided below. This guidance makes reference to the SAMs and Principal Examiner Reports, both of which can be found at http://www.edexcel.com/quals/gce/gce08/geography/Pages/default.aspx

Unit 3 Advance Information: strategies for the classroom

The teaching and learning strategies suggested below are based on the SAMs Advance Information, which focuses on issues surrounding GM crops in Latin America. The Unit 3 Advance Information Resource Booklet from the SAMs can be found at
http://www.edexcel.com/quals/gce/gce08/geography/Pages/default.aspx
(Sample Assessment Materials pages 111–116).

Understand the main theme

Resist the temptation to get students to begin analysing the figures and text immediately. Take some time to help them understand the main theme, in this case *What are GM crops?* For other past exams this might have been *What is nuclear power?* or *What is biodiversity?*

This is easily overlooked, but misunderstanding at this stage will be problematic later. GM crops are a challenging topic for the following reasons:

- they are often confused with Green Revolution crops

- some basic scientific background on how GM is developed is needed

- there are many GM 'myths' and half-truths, as well as genuine concerns.

Do not assume candidates immediately understand the broad topic that the resources are based on. Perhaps the Biology teacher could give a 15-minute 'GM primer' to your Geographers.

Key terminology

Start a glossary of key terminology. Some key terms are emboldened but others may need clarification too. On the second page of the SAMs Unit 3 Resource Booklet this could include terms such as *transgenic*, *resistance*, *patented*, *precautionary principle.*

Regional background

The region, in this case Latin America, may be familiar to candidates but it may not. Consider the region's broad geography, as outlined below.

Historical geography	Contemporary geopolitics
Colonial background, settlement history and ethnicities, long-term regional antagonisms and disputes	Membership of IGOs, regional blocs, recent political disputes and relationships, internal political systems
Economic development	**Social conditions**
Levels of development indicated by GDP per capita, HDI, economic sectors; major development differences, e.g. urban/rural	Development differences based on gender/religion, inequality, housing conditions, environmental health issues, demographics

This is an ideal point to set some research-based homework. Split the class into pairs/small groups to research countries and produce an A5 factsheet on each. Websites and other resources can help:

- socio-economic data tables in the back of most atlases to compare countries in the region

- Wikipedia's country pages provide some useful, condensed political and historical background

- online databases such as World Bank data http://data.worldbank.org/ and the CIA World Factbook https://www.cia.gov/library/publications/the-world-factbook/.

In the case of Brazil and Argentina, it is worth recognising that both countries are fiercely independent, often run by 'populist' and charismatic leaders, in need of exports but riven by social divisions. This could help explain the rapid adoption of GM and the fact that it appears to have produced clear winners and losers.

Figures

All of the figures in the Resource Booklet need to be carefully analysed. Some suggestions for the figures in the SAMs Resource Booklet are as follows:

- **Figure 2:** a line graph, so analyse the **trend** (GM crop area grew rapidly in industrial countries, then slowed – but in developing countries it is growing rapidly)

- **Figure 3:** a world map, so analyse the **pattern** (GM is widespread in the Americas, but barely touches Africa; in Europe there are big variations). Ask questions of the figures, e.g. *Why does GM have this global pattern?*

- **Figure 5:** this is a more difficult figure, as it is a stacked area graph (in 2006 cotton has a very small acreage of 2 million, not 59 million); rough percentages for 1981, 1996 and 2006 could be worked out to help analyse the data

- **Figure 9:** this is a more detailed area map for part of Argentina. The areas on the map could be researched in more depth using atlases, Google Earth and other resources

- **Figure 13:** a complex graph with a named source, which could be researched in more detail. Some candidates would benefit from writing an explanation of what this graph shows for Argentina, Brazil and Paraguay.

Themes: players, actions and futures

There are three synoptic themes (see page 51 of the specification) that cut across all six topics in Unit 3. These need to be considered in relation to the resources. Sometimes questions address one or more of these themes directly, sometimes more indirectly.

Players	Actions	Futures
The role, views and values of individuals, pressure groups and political movements, governments, business and international agencies.	Local, national and international scale actions; contrasts between neo-liberal market-led approaches, socialist and grassroots models: sustainable development.	'Business as usual' models, sustainable futures and more radical approaches involving concepts such as 'green growth'.

Players: the players should be listed from the resources and discussed. If any are unfamiliar, these can be researched (see the websites in the Resource Booklet and use others). Use the Views at the end of the Resource Booklet carefully, and draw up views analysis tables such as the one below.

	Player (and type)	For GM	Against GM	Basis for view	Agreement/conflict
View 1	FAO (IGO)	✓		Similar to other types of farming	Similar to NCB, conflicts with GS
View 2	FAO (individual)	Neutral		Conflicting views of players	Leans toward NCB view
View 3	Greenpeace (global pressure group)		✓	Questionable benefits; herbicide use	Agrees with WWF, conflicts with views of TNCs in Resource Booklet
View 4	ISAAA (NFP)	✓		Poverty reduction	Directly conflicts with GS
View 5	NCB (think tank)	✓		Benefits outweigh costs but research needed	Similar standpoint to FAO
View 6	WWF (global pressure group)		✓	Environment, soil erosion, deforestation	Agrees with Greenpeace
View 7	GS (local NGO)		✓	Social/equality concerns, jobs	Directly conflicts with ISAAA

Actions: look for evidence of actions at different scales and by different players in the resources.

- Growth in GM crops, in many cases, is a **market-led** development, with the TNCs who develop the seed and associated products (such as herbicide) essentially motivated by profit.

- For farmers in Latin America, GM represents a move into a more market economy, based on exports, larger farms and specialisation.

- GM is not purely market driven as government has to approve (or not) its use.

- NGOs and environmental pressure groups have led a **grassroots campaign** against GM, locally and globally, which has been partly successful in countries like the UK.

- Many of the Views argue that GM is potentially beneficial, but needs to be made **sustainable** – such as Views 1, 2 and 5.

Futures: this theme can be approached in several ways.

- Continued expansion of GM in Latin America following a similar path to that travelled so far might be seen as the '**business as usual**' future, but consideration needs to be given to whether or not further expansion of GM is, or could be, made more **sustainable**.

- Greenpeace, WWF and others might feel that GM should be banned (the **radical** option).

- Sometimes **options** are given at the end of the resources, e.g. in the January 2011 and January 2013 Resource Booklet. If this is the case, these need to be considered carefully – are they **radical**, **sustainable** or '**business as usual**' and what would be the **impacts/consequences** of each?

Synoptic opportunities and links

Synopticity is crucial to higher-level achievement and is referred to in the mark schemes for Levels 3 and 4, as in the following example from the SAMs question 6b.

Level 4	16-18	Carefully structured. A balanced assessment which makes full use of the resources and synoptic linkages, to provide a genuine assessment; makes evidenced judgements. Descriptive language is well employed and precise. Explanations are always clear. Geographical terminology is used with accuracy. Grammar, punctuation and spelling errors are very rare.

Synopticity can be demonstrated in a large number of ways, but it does need to be considered in advance. Essentially it can be thought of as **broadening** and **deepening**, i.e. going *beyond* the Resource Booklet to make links with wider geographical issues, themes and places – and providing *additional depth* to issues, examples and themes raised in the booklet. Some suggestions include the following.

Unit 3 context Link the resources to the content of the Unit 3 topic they are based upon.	**Global themes** Look for links to globally significant issues such as climate change, food security, population growth, resource depletion.	**Unit 1 links** Look for links to Unit 1, such as global warming, migration, globalisation.
Parallel examples Consider other examples from around the world which are similar to, or contrast with, those in the Resource Booklet.	**Parallel regions** Look at a region with a similar level of development and look for similarities and differences.	**Models and theories** Consider any models or theories that link to the themes in the Resource Booklet.

- **Unit 3 context:** the GM crop resources link very strongly to section 6.2 in the specification, Technology and development, as well as to other parts of Topic 6 The Technological Fix? Beyond this there are obvious links to Topic 3 Biodiversity under Threat (deforestation for land for GM crops) and Topic 5 Bridging the Development Gap (GM as an economic development tool).
- **Global themes:** there is a clear link to the global issue of food security and the degree to which GM is part of the solution or part of the problem.
- **Unit 1 links:** the role of TNCs in GM links to the Unit 1 content, as does the theme of climate change and the extent to which GM could be a solution for farmers in a changing climate, or climate change poses a threat to GM's progress.

The three types of synopticity above can very easily be approached in the pre-release phase by getting candidates, in pairs or groups, to produce **spider diagrams/mind maps** to map the links within Unit 3 to Unit 1 and beyond.

- **Parallel examples:** Green Revolution crops are a very obvious parallel example, as is organic farming. Both could be briefly mentioned in questions 6b and 6c as contrasting with GM. The impacts of GR crops in India (social polarisation) could usefully be used to reinforce an argument in question 6c.
- **Parallel regions:** Latin America is similar in terms of development level to East Asia, where GM has made similar (somewhat less) progress; research into GM in China would be an obvious path to pursue.
- **Models and theories:** the sustainability quadrant or stool provides a useful conceptual model that can be directly applied to question 6c and used as a structure; the economic, social and environmental issues in the resources very much signpost sustainability as a key theme.

Lastly, the **websites**, which are always included at the end of the Resource Booklet, offer opportunities for **synoptic research**. Candidates should use these, and other, websites to research some of the issues in more detail. Ideally, ask candidates to make notes about the content of websites, rather than printing huge volumes of material that can never possibly be used.

Any additional material, not in the Resource Booklet, will be credited as synoptic as long as it:

- is relevant to the question
- is accurate and sourced (such as information from a website)
- adds to the quality of the answer.

Questions and skills

Usually there are three sub-questions in Section B, as in the SAMs, totalling 40 marks. The questions below are taken from the SAMs for Unit 3. The exact mark allocation between questions 6a, 6b and 6c does change in each exam series.

6. (a) Explain the factors that have led to Latin America's rapid adoption of GM farming technology.

(10)

(b) Assess the human and environmental impacts of GM farming in Latin America.

(18)

(c) To what extent does GM technology provide a technological fix that is economically sustainable?

(12)

Although the questions differ in each examination, there are some common themes.

- Question 6a is often a broad 'scene-setting' question which requires an explanation of the issue or key factors/reasons that have contributed to an existing situation.
- Questions 6b and 6c usually demand higher-order thinking skills such as assessment and evaluation.
- Question 6b often focuses on prevailing issues and problems and their impacts.
- Question 6c often looks to the future in some way, sometimes by considering the suitability of different options in terms of management and the impacts on different people.

In order to access the upper levels of the mark scheme, candidates need to be aware of the demands of the mark scheme. This is especially the case for questions using command words such as *assess*, *to what extent*, *discuss* and *evaluate*. These questions tend to be marked in four levels and have a tariff of 12+ marks (see the SAMs example above, questions 6b and 6c). These mark schemes can be usefully visualised in the following way.

Level 1	Level 2	Level 3	Level 4
As candidates move up the levels in the mark scheme, the balance of skills demonstrated in their answers changes significantly.			
Answers rely, with varying accuracy and appropriateness, on the Resource Booklet to describe the situation, with some partial explanations.	Some aspects of the issue/situation are explained, and descriptive material supports this. No attempt is made to move beyond the Resource Booklet.	Descriptive material is used selectively, and explanations are clear; evaluation begins but may be implied; some basic synoptic information is used, not fully appropriately.	Description is selective and explanations are concise and applied to the question, which supports evaluative judgements in a synoptic context.

Unit 3 Feedback from past Examiner Reports

The Contested Planet examinations from 2010 to 2013 allow some commonly occurring issues that restrict performance on Unit 3 Section B to be identified. For further details, please read the Principal Examiner Reports referred to above.

- Briefly **planning** answers to all three sub-questions (6a, 6b, 6c) at the start is a good idea. This is because the three sub-questions form a linked sequence. Under pressure in the exam, candidates can wrongly interpret quite different questions as being similar (and write very similar answers). Planning minimises the risk of this happening.

- Some candidates have a weak appreciation of the **basic geography of the region** the resources are set in, e.g. its level of economic development, languages, physical features etc. This can undermine the quality of answers.

- **Timing** can be an issue, with question 6c often suffering. Using a mock exam reduces the likelihood of this happening. A mock could be used as part of revision for another Unit 3 topic, e.g. the January 2011 North America Energy Security exam materials are a very useful 'stand alone' case study of energy security issues.

- Skill in interpreting a wide variety of geographical data forms part of the assessment of Unit 3 Section B. In order to demonstrate this, candidates must carefully select and accurately use information in the resources, and **refer to it directly** (by figure number etc.) in their answers.

- When candidates are presented with **options**, they often struggle to make clear, firm **judgements**. The skill of justifying a choice is underdeveloped. Candidates should be confident in accepting one option and rejecting others, as long as they use evidence and have cogent reasons. If options are part of the exercise, mark schemes *never* indicate that one option is preferred to others.

- The **Views** which appear on the last page of the Resource Booklet are frequently under-used and sometimes misunderstood.

- **Pre-judging** the questions, and over-preparing for assumed questions, is always a mistake.

- **Synoptic links** and ideas are often not included and this restricts achievement.

- Some synopticity is **false or forced**; this most often happens when a case study is 'shoe-horned' into an answer in an inappropriate and usually far too detailed way.

- Candidates often do not fully appreciate the different meanings of **key words** such as *social*, *economic*, *environmental* and *political*.

Unit 4 Advance Information: strategies for the classroom

The purpose of the Advance Information

The purpose of the Advance Information (research focus) is to allow students to focus their final research and revision on particular areas of the option they have researched. It is very important to recognise that:

- the research focus is not provided so that candidates and teachers can 'guess' the question – this approach often leads to candidates answering a pre-prepared question rather than the actual question they are faced with when they open the examination paper
- the research focus usually straddles several specification enquiry questions, not just one.
- the research focus may relate to several specification bullet points across several enquiry questions, rather than all the bullet points in one enquiry question
- the research focus is provided in the form of two bullet points, a 'Research' bullet and an 'Explore' bullet.

Unpicking the 'Research' and 'Explore' bullets

The first task when the research focus is given to candidates is to identify which areas of the specification the two bullets relate to. This might best be done as a group activity.

- Give candidates a copy of the specification for the whole option (Enquiry Questions 1–4 for your chosen option) and a copy of their research focus.
- In groups of two to four, get students to match the research focus with the specification, by matching key words and phrases and thinking about the sorts of ideas and concepts that could be relevant. Students can use highlighters to do this.
- Compare the different results/views of the groups and come to a consensus about which areas of the specification the research focus relates to. Note that some links might be very obvious and strong, whereas others might be weaker (but still relevant).

Although this might seem like a time-consuming activity, it is useful to collate different views. There can be a danger that, if one student, or a single teacher, decides which areas of the specification the research focus relates to, some links are missed.

The 'Explore' bullet focuses on concepts, themes and ideas whereas the 'Research' bullet focuses on examples, places and case studies that should be included in the final research and preparation. It is important to give the same degree of importance to both bullets. For the 'Research' bullet look out for place information, such as:

- 'contrasting locations'
- 'range of locations'
- 'a range of scales and locations'.

This could indicate a need to include developed vs developing world, urban vs rural or local, national and global contrasts.

Look carefully at the key words in the research focus and bear in mind that:

- some words/phrases can appear more prominent that others, leading to concentration on one aspect of the research focus at the expense of others
- it is possible to get 'hung up' on the meaning of some words and concentrate on these, again at the expense of other important parts of the research focus
- words towards the end of the 'Research' bullet can get ignored

- there is sometimes a tendency to focus more on the 'Explore' bullet than the 'Research' bullet

- some words can be wrongly interpreted in a negative-only way, e.g. *impacts*, *challenges*, *effects*, *consequences.*

Filling in gaps

Having considered the research focus and the specification, candidates need to decide which material they have, from lessons and their own research, that is relevant.

- Spend some time organising material in students' files; this could be traffic-lighted as green, amber and red (very relevant, relevant, less relevant).
- During this process gaps can be identified.
- Pay particular attention to place and scale contrast to make sure the required range is present.
- In some options there can be a 'false range' problem. For example, if a student has three examples of earthquakes on destructive plate margins in LEDCs, because these are in different locations they may appear to be 'a range' but in fact illustrate very similar issues. This can also be a problem with disease types in Option 5, for instance.
- Additional research can be carried out to fill in any gaps.

Good-quality answers in the exam often contain a mixture of detailed cases studies and smaller examples. The detailed case studies provide the required depth, whereas the smaller examples provide range and contrast. Bear this is mind when preparing for the exam.

Possible questions and planning

The research focus, inevitably, leads to speculation about what the actual question might be. Consider the following points.

- 'Guessing' the question frequently leads candidates astray and in the exam they often write an answer to a pre-prepared question, which can severely restrict their marks.
- Alternatively, try to generate a large range of questions.
- Put students into groups of two to four and ask them to come up with a question.
- Use past questions to show the formats questions are often in, and the command words used.
- You could give different command words to different groups, to use in their questions (*explain*, *assess*, *discuss*, *evaluate*, *to what extent* etc.).
- Aim to produce a 'question wall', with a lot of possible questions, on A3 sheets of paper.
- Some of these can be planned as a group activity; this is likely to be more effective at making students think about the meaning of questions and different approaches to the answers than trying to nail down one question which then proves to be incorrect.

The Unit 4 generic mark scheme

Students should be introduced to the published generic mark scheme early in the teaching of Unit 4. The generic mark scheme for Unit 4 can be found at http://www.edexcel.com/migrationdocuments/GCE%20New%20GCE/unit-4-generic-mk-scheme-updated-Nov-09.pdf. Ideally, mark practice reports using this mark scheme and provide feedback on each of its five sections. You could use a blank grid on A4 paper and write feedback on this, rather than (or in addition to) writing on the student's work.

This is important because the Unit 4 mark scheme is different from the extended writing levels mark schemes in Units 1–3. In these units, all of a candidate's extended response is read and a mark awarded based on the whole piece of writing (a level is decided on first, then the specific mark in the level).

For Unit 4, marks are awarded for five different parts of the report, i.e. there are specific marks for the introduction, analysis, conclusion etc. Candidates must understand this. Bear in mind that:

- the report is marked out of 70
- the marks available for the introduction, analysis and conclusion total 25 (10 + 15), or 35% of the 70 marks
- there are specific marks for QWC (10).

One way to reinforce this, during the pre-release phase, is to plan some reports as a group activity and make sure the introduction and conclusion are planned, as well as the main body of the report.

If students struggle to get to grips with the lengthy generic mark scheme, they might wish to consider the 'cheeseburger' model below as an *aide memoire*.

←The final conclusion

←The 'extras' such as a methodology, accurate references, diagrams

←The main analysis sections, with the cheese representing ongoing evaluation

←The introduction

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Unit 4 Feedback from past Examiner Reports

The Researching Geography examinations from 2010 to 2013 allow some commonly occurring issues that restrict performance on Unit 4 to be identified. For further details, please read the Principal Examiner Reports referred to above. The comments below are organised by section of the generic mark scheme.

Introducing, defining and focusing on the question

- Avoid making this section over-long and very descriptive; the majority of candidates write 1½ to 2 sides at most.
- Some introductions suffer from too much general background, e.g. on plate tectonics and types of plate margin, and fail to focus on the question.
- Introductions broken down into headed sub-sections (e.g. definitions, focus, framework) tend to lack coherence.
- Introductions which set out how the question is going to be answered, i.e. provide a 'direction' and perhaps state what the argument/answer is going to be, tend to be the most coherent.
- It is useful to mention the main case studies and examples that are to be used, and briefly justify this (this often addresses issues of scale and contrasting locations within the question).
- Models and theories often provide a useful framework for a whole report, and these can be usefully introduced at the start (but should be referred to again in the analysis and conclusion).

Researching and methodology

- A range of material and research sources need to be used, and this must be a genuine range not a 'false' one (see above).
- Candidates need to include a methodology, containing their sources; most candidates place this after the introduction.
- The methodology could be in the form of a table, a paragraph or extended footnotes – no particular format is preferred.
- The methodology should comment on issues such as research source range, accuracy, bias, age and reliability.
- Care should be taken not to write a methodology in the form of a very long, complex table – the methodology is only one part of the mark scheme for this section and the exam is only 1½ hours in length.
- Candidates should be wary of using many older case studies and examples without justification, as the mark scheme refers to 'topical evidence'.
- The inclusion of theory/concepts is an important part of this section on the mark scheme.
- Factual accuracy is important.

Analysis, application and understanding

- The main body of the report should be sub-divided into sub-sections, using headings.
- There is no need for complex sub-heading numbering systems such as 2.1.2, 2.1.3 etc.
- Conceptual sub-headings (economic, social, environmental) work better than sub-headings based on case studies (Haiti 2010, Mt Pinatubo 1991, Sendai 2011) – the latter tend to lead

to very descriptive, non-comparative reports which have a 'and the next case study is' structure.

- Diagrams should be used selectively, be accurate and be referred to in the text.
- Candidates need to go through a double process of case study selection: first, they need to answer the question '*Does this case study help answer the question?*' If the answer is 'Yes', then they should ask, secondly, '*What information from the case study is relevant to this question?*' Failure to be selective in this way tends to lead to an 'everything I know about X' answer.
- Reference back to the question should be made often, to ensure it is still being answered and that evidence used is being applied to the question.
- It is better to compare and contrast examples and case studies than to describe them.

Conclusions and evaluation

- Ongoing evaluation is important.
- This could consist of short, summative paragraphs at the end of different sections of the analysis.
- Use of sub-headings such as 'Summary' or even 'Ongoing evaluation' is acceptable and may help candidates structure their reports.
- Enough time needs to be left to formulate a proper conclusion, i.e. 15 minutes.
- Although in no way a hard-and-fast rule, most good conclusions are three-quarters of a side long; a conclusion of four to five lines is unlikely to score high marks.
- Candidates should refer directly to the question in a conclusion.
- A weakness of many conclusions is that very little of the evidence used in the report is referred to/recalled; case studies and examples, as well as concepts and models, need to be recalled.

Quality of written communication and sourcing

- Sub-sections (i.e. a report, not an essay) must be used.
- The structure of the report needs to be logical (this is one reason why, in the introduction, it is useful to set out the 'direction' of the report).
- Throughout the report, sources should be stated either in brackets or as footnotes.
- Harvard style referencing is not required, but sources should consist of a title, author and date if referring to a textbook, journal or article.
- Bibliographies are normally superfluous if referencing has been included in the main body of the report; the exception is when references are indicated by numbers in the text and are linked to a numbered bibliography given at the end.
- Terminology must be used with accuracy.