Department for Education

Geography

GCSE subject content

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Contents

The content for geography GCSEs

Introduction

1. The GCSE subject content sets out the knowledge, understanding and skills common to all GCSE specifications in a given subject. Together with the assessment objectives it provides the framework within which awarding organisations create the detail of their specifications, so ensuring progression from key stage 3 national curriculum requirements and the possibilities for development into A level.

Subject aims and learning outcomes

2. GCSE specifications for the discipline of geography should provide the opportunity for students to understand more about the world, the challenges it faces and their place within it. The GCSE course will deepen understanding of geographical processes, illuminate the impact of change and of complex people-environment interactions, highlight the dynamic links and interrelationships between places and environments at different scales, and develop students' competence in using a wide range of geographical investigative skills and approaches. Geography enables young people to become globally and environmentally informed and thoughtful, enquiring citizens.

3. GCSE specifications in geography should enable students to build on their key stage 3 knowledge and skills to:

- develop and extend their knowledge of locations, places, environments and processes, and of different scales including global; and of social, political and cultural contexts (know geographical material)
- gain understanding of the interactions between people and environments, change in places and processes over space and time, and the interrelationship between geographical phenomena at different scales and in different contexts (think like a geographer)
- develop and extend their competence in a range of skills including those used in fieldwork, in using maps and Geographical Information Systems (GIS) and in researching secondary evidence, including digital sources; and develop their competence in applying sound enquiry and investigative approaches to questions and hypotheses (study like a geographer)
- apply geographical knowledge, understanding, skills and approaches appropriately and creatively to real world contexts, including fieldwork, and to contemporary situations and issues; and develop well-evidenced arguments drawing on their geographical knowledge and understanding (applying geography).

Progression statement

4. When designing specifications, awarding organisations should note the following ways in which curriculum emphases should progress from KS3 and ensure that specifications facilitate this:

- broadening and deepening understanding of locational contexts, including greater awareness of the importance of scale and the concept of global
- a greater emphasis given to process studies that lead to an understanding of change
- a greater stress on the multivariate nature of 'human-physical' relationships and interactions
- a stronger focus on forming generalisations and/or abstractions, including some awareness of theoretical perspectives and of the subject's conceptual frameworks
- an increased involvement of students in planning and undertaking independent enquiry in which skills and knowledge are applied to investigate geographical questions
- enhancing competence in a range of intellectual and communication skills, including the formulation of arguments, that include elements of synthesis and evaluation of material

Subject content

5. GCSE specifications in geography should reflect the aims and learning outcomes outlined above, and should include the knowledge, understanding and skills listed below, giving due consideration to the assessment objectives. The essential subject content outlined here provides the framework for developing a coherent study at GCSE.

6. This content sets out the range of content for GCSE specifications in geography but is not meant to imply a specific geographical approach or a set sequence of study. Nor do the content headings necessarily imply headings for the specification. Awarding organisations are free to develop, combine and cross-reference each part of the content in any way that is appropriate to their specification. Awarding organisations are free to decide the overall balance and representation of approaches such as place-based, thematic, people-environment and issues-based geography, although the requirement for study of the geography of the UK means that some place-based study must be included (see p.6). Awarding organisations may use any flexibility to vary depth, breadth or context within the specified topics, as long as the rigour and challenge of the specification is maintained.

Scope of study

7. GCSE specifications in geography should require students to extend their Locational Knowledge (1) and to develop competence in Maps, Fieldwork and Geographical Skills (2) as they study the content of the following four areas of geography: Place: processes and relationships (3); Physical geography: processes and change (4); People and environment: processes and interactions (5); Human geography: processes and change (6).

1. Locational knowledge

8. Locational knowledge and contextual knowledge of the world's continents, countries, regions and their physical, environmental and human features should be developed across the whole specification and should include:[1]

- appreciation of different spatial, cultural and political contexts
- recognition of important links and inter-relationships between places and environments at a range of scales from local to global
- contextual knowledge of any countries from which case studies and exemplars are chosen. It is required that exemplars and case studies relate to at least two countries other than the UK

2. Maps, fieldwork and geographical skills

9. GCSE specifications should require students to develop and demonstrate the following skills throughout their study of the specifications as a whole**.**

Maps

10. The use of a range of maps, atlases, Ordnance Survey maps, satellite imagery and other graphic and digital material[2] including the use of Geographical Information Systems (GIS), to obtain, illustrate, analyse and evaluate geographical information. To include making maps and sketches to present and interpret geographical information.

Fieldwork

11. Different approaches to fieldwork undertaken in at least two contrasting environments. Fieldwork overall should include exploration of physical and human processes and the interactions between them and should involve the collection of primary

[1] It is not required that these bullet points are all addressed in each of the four areas of geography (3, 4, 5, 6 below), only that they are all addressed across the specification as a whole.

[2] For the purposes of examinations, this material may be ready prepared GIS material, for example from screen shots or copies of maps derived from prepared GIS. It need not be GIS material prepared by students.

physical and human data (but these requirements need not all be addressed in each piece of fieldwork).

Use of data

12. ‘Data’ should include both qualitative and quantitative data and data from both primary and secondary sources: fieldwork data; GIS material; written and digital sources; visual and graphical sources; and numerical and statistical information. Using data should include its collection, interpretation and analysis, including the application of appropriate quantitative and statistical techniques (a list of required skills and techniques is given in the Appendix); it also includes the effective presentation, communication and evaluation of material.

Formulating enquiry and argument

13. The ability to identify questions and sequences of enquiry to write descriptively, analytically and critically, to communicate their ideas effectively, to develop an extended written argument, and to draw well-evidenced and informed conclusions about geographical questions and issues.

3. Place: processes and relationships

14. Geography of the UK – Knowledge and understanding of the UK’s geography, both in overview and with some in depth study, to include its physical and human landscapes, environmental challenges, changing economy and society, the importance of cultural and political factors, and its relationships with the wider world. Much of this may be achieved by study in combination with other physical, human and environmental study topics, but students must also study the UK as a country and draw across physical and human characteristics to summarise significant geographical features and issues.

4. Physical geography: processes and change

15. Geomorphic processes and landscape – How geomorphic processes at different scales, operating in combination with geology, climate and human activity have influenced and continue to influence the landscapes of the UK. This should include detailed reference to at least two different and distinctive physical landscapes in the UK.

16. Changing weather and climate – The causes, consequences of and responses to extreme weather conditions and natural weather hazards, recognising their changing distribution in time and space and drawing on an understanding of the global circulation of the atmosphere. The spatial and temporal characteristics, of climatic change and evidence for different causes, including human activity, from the beginning of the Quaternary period (2.6 million years ago) to the present day.

5. People and environment: processes and interactions

17. Global ecosystems and biodiversity – An overview of the distribution and characteristics of large scale natural global ecosystems. For two selected ecosystems, draw out the interdependence of climate, soil, water, plants, animals and humans; the processes and interactions that operate within them at different scales; and issues related to biodiversity and to their sustainable use and management.

18. Resources and their management – An overview of how humans use, modify and change ecosystems and environments in order to obtain food, energy and water resources. Detailed study of one of either food, energy or water, recognising the changing characteristics and distribution of demand and supply, past and present impacts of human intervention, and issues related to their sustainable use and management at a variety of scales.

6. Human geography: processes and change

19. Cities and urban society – An overview of the causes and effects of rapid urbanisation and contrasting urban trends in different parts of the world with varying characteristics of economic and social development. For at least one major city in an economically advanced country,[3] and one major city in a poorer country or recently emerging economy, examine ways of life and contemporary challenges arising from and influencing urban change. Both city studies should be set within the context of their region, country and the wider world, including an understanding of the causes and impacts of national and international migration on the growth and character of these cities.

20. Global economic development issues – The causes and consequences of uneven development at global level as the background for considering the changing context of population, economy and society and of technological and political development in at least one poorer country or one that is within a newly emerging economy. Country study should include examination of the wider political, social and environmental context within which the country is placed, the changing nature of industry and investment, and the characteristics of international trade, aid and geo-political relationships with respect to that country.

[3] A UK city may be taken as this case study city– see requirements for Geography of the UK p.7- or a different and additional city study may be chosen here.

Assessment of fieldwork

21. *Geographical fieldwork* may be defined as the experience of understanding and applying specific geographical knowledge, understanding and skills to a particular and real out-of-classroom context. In undertaking fieldwork, students practise a range of skills, gain new geographical insights and begin to appreciate different perspectives on the world around them. Fieldwork is crucial to the strong role envisaged for geography in the revised and more challenging curriculum at all levels and so must be undertaken as part of the specification (see Maps, Fieldwork and Geographical Skills, page 5).

22. The scheme of assessment must include an identifiable element or elements assessing fieldwork. This must include assessment of students' own experiences of fieldwork covering at least two (but not all) of the bullet points below, as well as including assessment of fieldwork in unfamiliar contexts which may be based on exemplar data. Fieldwork will be assessed through examination only. It will comprise 15% of the total assessment weighting (of which 5% is allocated to skills and 10% allocated to application).

23. The following areas of knowledge, skills and understanding should be assessed through the fieldwork assessment.

i. understanding of the kinds of question capable of being investigated through fieldwork and an understanding of the geographical enquiry processes appropriate to investigate these
ii. understanding of the range of techniques and methods used in fieldwork, including observation and different kinds of measurement
iii. processing and presenting fieldwork data in various ways including maps, graphs and diagrams
iv. analysing and explaining data collected in the field using knowledge of relevant geographical case studies and theories
v. drawing evidenced conclusions and summaries from fieldwork transcripts and data
vi. reflecting critically on fieldwork data, methods used, conclusions drawn and knowledge gained

Note that (i), (ii) and (iii) will draw heavily on AO4 (skills) whilst (iv), (v) and (vi) will draw predominantly on AO3 (application).

24. Since fieldwork is an essential aspect of geography which ensures that young people are given the opportunity to consolidate and extend their achievement by relating learning to real experiences of the world, specifications must require that fieldwork is carried out, outside the classroom and school grounds, on at least two occasions (see ‘Fieldwork’ p.5). Awarding organisations must require evidence of this in the form of a written statement from centres, providing at least the date, location, numbers of students

participating, the main issues/questions investigated during fieldwork, and the relationship of the fieldwork to the specification content.

Appendix: Use of mathematics and statistics in geography

The list below outlines the range and extent of mathematical and statistical techniques considered appropriate to geography GCSE. The following should all be covered in any specification. Examples in italics are to aid understanding and suggest range, and these are not compulsory.

Cartographic skills

- use and understand gradient, contour and spot height on OS maps and other isoline maps (eg *weather charts, ocean bathymetric charts*)
- interpret cross sections and transects
- use and understand coordinates, scale and distance
- describe and interpret geo-spatial data presented in a GIS framework (eg *analysis of flood hazard using the interactive maps on the Environment Agency website*)

Graphical skills

- select and construct appropriate graphs and charts to present data, using appropriate scales and including bar charts, pie charts, pictograms, line charts, histograms with equal class intervals
- interpret and extract information from different types of graphs and charts including any of the above and others relevant to the topic (e.g. *triangular graphs, radial graphs, wind rose diagrams, proportional symbols*)
- interpret population pyramids, choropleth maps and flow-line maps

Numerical skills

- demonstrate an understanding of number, area and scale and the quantitative relationships between units
- design fieldwork data collection sheets and collect data with an understanding of accuracy, sample size and procedures, control groups and reliability
- understand and correctly use proportion and ratio, magnitude and frequency (e.g. *1:200 flood; and logarithmic scales such as the Richter scale, in orders of magnitude*)
- draw informed conclusions from numerical data

Statistical skills

- use appropriate measures of central tendency, spread and cumulative frequency (median, mean, range, quartiles and inter-quartile range, mode and modal class)
- calculate percentage increase or decrease and understand the use of percentiles
- describe relationships in bivariate data: sketch trend lines through scatter plots; draw estimated lines of best fit; make predictions; interpolate and extrapolate trends
- be able to identify weaknesses in selective statistical presentation of data

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