

GCSE geography

Review of standards 1996–2001

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Introduction

Changes in GCSE level examinations in geography between 1996 and 2001 were influenced by:

- the GCSE national subject criteria for geography in force from 1985 until August 1996
- the introduction of the revised GCSE criteria for geography for syllabuses from September 1996
- the introduction from September 1996 of regulations for GCSE which required tiering for all geography syllabuses.

Syllabuses in 1996 and 2001 conformed to the requirements of the 1985 and 1996 subject criteria respectively.

A major change from September 1996 was the requirement that all syllabuses should use two tiers of assessment targeted at a foundation tier (grades G–C) and a higher tier (grades D–A*) and that schemes of assessment should provide opportunities to write in extended prose.

Between them, the syllabuses in this study attracted about 32.6 per cent of the candidates who took GCSE geography in 2001.

Examination demand

Materials available

The reviewers examined the syllabuses, question papers and mark schemes of the five awarding bodies for 1996 and 2001. The syllabuses included in the review are specified at Appendix A.

Assessment objectives

The change to the national criteria between the 1996 and 2001 examinations resulted in the redesign of syllabuses to ensure a balance in the coverage of physical, human and environmental geography, and to develop assessment strategies to implement the required tiering. This resulted in changes to the nature and accessibility of assessment tasks.

In the 1996 examinations the national subject criteria required the distribution of assessment objectives to be:

- recall 20–40 per cent
- skills, understanding and application 20–40 per cent
- practical skills 20-40 per cent.

For the 2001 examinations the new criteria had narrower ranges and were regrouped as:

- knowledge 30-40 per cent
- understanding and application 30-40 per cent
- skills and techniques 30–40 per cent.

In addition, the syllabus coverage of physical, human and environmental geography was required to be 'balanced'.

In 2001 as in 1996 candidates, were required to complete a geographical investigation which was supported by fieldwork. In both years there was a minimum requirement for internal assessment of 20 per cent, but a maximum of 25 per cent was imposed for the 2001 assessments.

Rationale

In both 1996 and 2001 the awarding bodies differed in their stated philosophies, but all had aims which were based closely on the relevant national criteria. The syllabuses had different approaches including emphases on issues, systems, patterns, themes, the relationship between physical and human environments, and people-environment issues. OCR (Avery Hill), in 1996, was the most clearly issues-based syllabus, while WJEC in both years was very widely based, covering systems and environmental interrelationships as well as an issues approach. CCEA included an emphasis on 'respect for other peoples and cultures'.

In general there were fewer obvious differences between specifications in 2001 than in 1996, though the reviewers commented that the rationale of the syllabuses in both years was often neither well articulated nor clearly evident in the question papers. In some instances rather grandiose statements were not matched by the more mundane assessment instruments.

Syllabus content

In 1996 a major characteristic of the syllabuses was their emphasis on human geography, with minimal coverage of physical geography. All syllabuses defined content on population, settlement and at least one aspect of economic geography. Some, through options, offered additional less familiar human topics. For example, OCR (Avery Hill) offered options in 'Inequalities in urban areas' and 'Quality of life'. Edexcel options included units on 'Leisure' and 'Human welfare'. Physical geography usually focused on natural hazards (particularly flooding) and tectonic activity. In some syllabuses (Edexcel, OCR (Avery Hill) and AQA) physical geography, particularly atmospheric studies, could be avoided almost entirely via narrow content, option routes and choice of coursework topic.

The reviewers considered that for most syllabuses, in 2001, there was an improved balance between physical and human content with a greater requirement to study physical processes. However some awarding bodies, particularly AQA, still provided option routes that could avoid the more challenging aspects of physical geography. Between 1996 and 2001 there was a general trend towards a greater emphasis on environmental geography at the same time as a reduction in the emphasis on geographical 'pattern'. In some respects the CCEA syllabus had a narrower content base, as it drew heavily on a smaller range of examples with a Northern Ireland focus. The reviewers considered that by 2001 the syllabuses were all very similar, concentrating on a small range of mainstream popular topics.

Options

Syllabuses in both 1996 and 2001 differed in the amount of choice offered either through option routes or choice of questions on the examination paper. Reviewers considered syllabuses in which options permitted a narrow study of content without ensuring increased depth to be potentially less demanding. One syllabus (AQA) in both 1996 and 2001 was considered by the reviewers to have such characteristics. By contrast, in 2001 both OCR and CCEA offered no option routes and all questions were compulsory. In general, however, it was considered that syllabuses were broadly similar in their balance of breadth and depth of content.

Scheme of assessment

There were greater differences between awarding bodies in 1996 than in 2001 in terms of weighting of components, time allowance and type of assessment. For example in 1996 Edexcel included a multiple choice optically marked examination, CCEA's package included a very demanding optional higher paper and the OCR syllabus used a variety of assessments, including a portfolio of school-based assessment, coursework and a decision-making exercise, and involved 40 per cent internal assessment. By 2001, in response to the requirements of the new subject

criteria, coverage of assessment objectives, time allowances and type of assessment in the different syllabuses had become very similar. The usual assessment package in 2001 consisted of two written examination papers of approximately 3 hours and a coursework personal enquiry. However, these changes were considered not to have resulted in any obvious change in demand over time.

Question papers

Question papers in both 1996 and 2001 consisted mainly of structured short questions using visual resources as stimulus materials. In 2001 most examination papers also included a final question with a higher mark tariff, providing an opportunity for extended writing on a case study or issue. For skills papers and questions, a great variety of interesting materials was used for both stimulus and response purposes, though this did sometimes lead to differences in demand between awarding bodies. WJEC candidates had a lot of materials to manage, including a resource booklet and an atlas to cross-reference with the question paper. By comparison, other awarding bodies (such as CCEA) provided more simplistic materials in black and white which offered less challenge for the more able. In 1996 there were differences between syllabuses in the wording of questions, some being particularly challenging for lower-ability candidates (eg Edexcel, AQA Paper 2).

In both 1996 and 2001, the awarding bodies had individual house styles which had the capacity to facilitate or hinder accessibility for candidates. Some papers (OCR's in particular) were very clear and well laid out whereas others (eg WJEC's) had complex rubrics and layout. Mark schemes also varied in their sophistication but by 2001 most awarding bodies had developed similar 'levels of response' to marking approaches. Only one 'point' marking scheme remained (OCR).

Tiering

In 1996, only two of the syllabuses reviewed were tiered (WJEC and CCEA). In 2001 all were tiered, using strategies of varying sophistication. Tiering strategies improved accessibility for the less able candidates, though their effectiveness varied, with some strategies successfully supporting better geography (AQA) while others were less well developed (Edexcel). CCEA had redesigned their higher-tier papers to be more accessible for the whole A to D cohort.

Overall, reviewers considered that the introduction of tiering had improved accessibility for the full range of candidates and that the demand in all syllabuses was now 'about right at both tiers'. However, there was evidence that for candidates at the overlap grades of C/D the assessment experience differed between the foundation- and higher-tier routes and between syllabuses. The questions at foundation and higher tiers often presented very different challenges through the relative complexity of their vocabulary and sentence construction. There were other differences, including the use of a printed structured booklet at foundation tier as opposed to lined paper with unlimited space at the higher tier (OCR), and a choice of questions at the higher tier but not at the foundation tier (OCR, WJEC).

In respect of the demand of the question papers, the reviewers considered that with the introduction of new subject criteria and redesign of the assessments awarding bodies had addressed those elements of their assessments which in 1996 pointed to some differences in demand. They concluded that whilst there were differences of style and content between awarding bodies, there were by 2001 no significant differences in demand.

Coursework

A direct comparison of the demands of and performance in coursework from different syllabuses was difficult. In line with the subject criteria in both 1996 and 2001, syllabuses required coursework based on an aspect of the syllabus which involved the use of both primary and secondary data. However, some awarding bodies required two pieces of work, others only one, while the weightings and emphasis on primary or secondary data varied. Crucially, the assessment criteria

also differed between syllabuses, in structure, wording, and marks allocated. Awarding bodies also interpreted criteria differently.

The reviewers considered that there was no rationale for this variation in coursework assessment criteria, which had different mark allocations for planning, presentation, analysis, and evaluation, and that this variation did not support the transparency of comparisons between syllabuses. Additionally it was not possible to determine the extent or impact of teacher direction in the completion of tasks, or the authenticity of work as being by the candidate as opposed to a group of candidates or other third parties. The review of grade boundary performance also noted that performance in the coursework component was invariably a key factor in determining a candidate's overall grade.

Summary

Taking into account the subject content, the question papers and the coursework requirements, the overall demand was seen as being almost identical in 1996 and 2001. Although in general there were only very minor differences between the awarding bodies, reviewers considered that because of particular characteristics such as option choice, accessibility of questions and demand of coursework; Edexcel and WJEC specifications were at the slightly more demanding end of the spectrum, with CCEA slightly less demanding.

On the evidence available, the reviewers were of the opinion that:

- 1. Between 1996 and 2001 syllabuses became more professional in their design with improved information about rationale, content, and tiering to conform to national subject criteria. This has supported sounder assessment and comparability.
- 2. In 2001 the syllabuses were more similar than in 1996. The introduction of new national subject criteria prompted adjustments to specific aspects of particular syllabuses rather than major changes for all syllabuses. For example:
- syllabuses with the least physical geography content in 1996 introduced a structure to ensure that more physical geography was taught and examined
- examination papers which had not been easily accessible in 1996 to lower-ability candidates became appropriately more accessible, especially in the foundation tier.
- 3. In 2001 the content was more balanced but often narrower. There was some increase in physical geography, but, in the main, the emphasis of all syllabuses remained human geography.
- 4. In 2001 assessment schemes were more similar across awarding bodies than in 1996. The norm was two written examinations of approximately 3 hours plus a coursework project. Question styles were very similar and examination papers usually also had a question requiring an extended response based on a case study or issue.
- 5. In 2001 all examinations were tiered. There was some variability in the sophistication of the tiering strategies, but tiering had improved accessibility for the lower ability candidates.
- 6. In both 1996 and 2001 there were differences between awarding bodies in the assessment criteria and demand of coursework.

Conclusion

Reviewers considered that although there were differences of style between the syllabus content, examination papers and coursework of different syllabuses, the overall assessment packages were of very similar demand in both 1996 and 2001. Accreditation of syllabuses against subject criteria and assessment regulations by QCA had brought about a convergence and resulted in greater uniformity by 2001. Overall in 2001 there were no significant differences in demand between the syllabuses.

In spite of the greater uniformity of syllabuses, the reviewers considered that the resulting assessments could present, in practice, slight differences in demands and experience of geography for candidates, particularly when:

- a large number of options encouraged a narrow geographical experience without compensatory depth
- the demand of an examination was increased by all questions being compulsory
- the routes via foundation or higher tier to a C or D grade were not comparable
- coursework requirements were different.

Standards of performance at grades A, C and F

Materials available

A team of reviewers carried out a comparison between four awarding bodies. The performance of 350 candidates in 2001 was reviewed at the A/B, C/D and F/G boundaries. The candidates had been assessed by two written papers and an individual study or personal enquiry marked by internal assessment and externally moderated. In total 1,050 pieces of work were examined. At the C/D boundary, scripts were compared at the higher and foundation tiers and across tiers. A more limited comparison of three awarding bodies was carried out across the two review years of 1996 and 2001. Details of the scripts reviewed can be found at Appendix B.

Standards expected at grades A, C and F

The standards of performance at the lower boundaries of grades A, C and F were reviewed against benchmark grade descriptors developed from the GCSE geography subject criteria which were first used for teaching in September 1996. The descriptors were adjusted to identify the key characteristics which might be expected of a candidate's performance at the A/B, C/D and F/G grade boundaries and can be found at Appendix C.

Analysis of outcomes

In the 2001 examinations, the reviewers' opinion was that there was very little discernible difference in the candidate performance of the different awarding bodies. Importantly, no judgement concluded that a candidate performance was significantly below the performance descriptors. Some slight differences between awarding bodies were identified at particular grade boundaries. For example, at the F/G grade boundary overall performance on the CCEA scripts was slightly better. At the A/B boundary it was slightly better on WJEC scripts. At the C/D boundary, on both the higher and foundation tier, performance was slightly better on OCR scripts.

Performance at the grade A/B boundary

Candidates were able to make valid use of geographical terminology, demonstrate knowledge of place through the use of case studies and employ sophisticated organisation and techniques in coursework. Some candidates showed an ability to extend answers and demonstrated in-depth understanding and depth of argument. However this was a variable quality affected by the format of the assessment and the space provided to develop answers. Syllabuses which gave more space (such as WJEC) allowed A-grade candidates not only to show understanding but to further develop their answers.

Coursework at grade A had a clear geographical dimension and developed analysis and evaluation, though there were some differences between candidates. Some demonstrated more detailed understanding and individual development (OCR), others clearer descriptive detail (CCEA). Candidates' locational work and sense of place were sometimes disappointing. Case studies were too often rote-learnt and showed lack of application to the question set. Few candidates were able to draw on their fieldwork project to support relevant questions in the

examination, suggesting that coursework is not being integrated into learning experiences across the syllabus.

Performance at the grade C/D boundary

Candidates achieved their grade by different combinations of strengths. There was variation between candidates, between tiers and between syllabuses. The assessment opportunities offered by the tiering strategies of the different examination syllabuses had an impact, particularly for foundation tier candidates, and there were more gaps in responses when papers were less effectively tiered. In general, candidates on the foundation tier showed understanding of the questions but had limited development and made fewer linkages. Those gaining a C via the higher tier wrote more fluently and used terminology more precisely. A characteristic common to both tiers was the competent use of geographical skills and evidence of understanding in short-answer responses dealing with stimulus materials.

There was more similarity between the tiers in performance in coursework than in the examination papers. Typically, candidates started coursework well and included sound description with routine presentation of data at the beginning of the project, but lacked effective analysis, conclusions and evaluation to complete the work. The work could usually be matched to the grade descriptors, often because it had been highly planned and managed by the teacher. In the case of many of the scripts reviewed, the fieldwork personal enquiry had raised a candidate's overall performance above the threshold for grade C by compensating for weaker performance in the written examination. Overall, there was evidence that candidates' performance at the higher tier was better than at the foundation tier. Where a foundation tier candidate had the better performance it was invariably a result of the quality of the coursework rather than the written examinations.

Performance at the grade F/G boundary

Candidate performance matched the descriptors very closely. Candidates demonstrated limited knowledge of some geography and sporadic understanding, and could perform simple skills tasks. Answers usually consisted of brief statements. The ability to use stimulus materials was limited. At this level much depended on coursework, which provided a clear opportunity to demonstrate simple understanding and data manipulation. In most cases the coursework played a significant part in the candidate achieving grade F.

Candidates of different awarding bodies arrived at their grade by slightly different routes, often because of the impact of the different opportunities provided by the examination papers. Examination papers with clear layout and use of language and effectively differentiated questions enabled candidates to demonstrate more successfully what they knew and could do (OCR, AQA). Some provided more opportunity to demonstrate an understanding of issues and values (WJEC). Less successful examination papers resulted in candidates leaving more questions unattempted (Edexcel). The coursework of CCEA candidates was considered by the reviewers invariably to demonstrate better understanding and some interpretation.

Comparison of performance in 1996 and 2001

A limited review of performance over time was carried out considering scripts from Edexcel, CCEA and WJEC. In a clear majority of cases, reviewers considered performance was better in 2001, although this was not so evident in work from Edexcel.

Summary

On the script evidence available, the reviewers were of the opinion that:

- 1. There was little difference in the candidate performance between the different awarding bodies.
- 2. The performance of candidates at the A/B and F/G grade boundaries matched the benchmark grade descriptors.

- 3. At the C/D boundary, characteristics were more variable. There were differences between the performance of foundation- and higher-tier candidates.
- 4. The coursework mark made an important contribution to the overall grade, particularly for foundation-tier candidates.
- 5. Much coursework appeared to have been highly managed by teachers.
- 6. Candidate performance was affected by differences in examination papers, particularly in space provided for writing, the complexity of rubrics and the clarity of the question wording.
- 7. Answers to guestions about place were often rote-learnt and stereotyped.
- 8. Performance was slightly better in 2001 than in 1996.

Overall conclusions

- 1. Syllabuses and assessment styles are more similar across awarding bodies in 2001 than in 1996. As a result of regulatory developments, there has been a convergence of formats and levels of demand and therefore greater comparability.
- 2. The sophistication of examination paper design, the implementation of tiering strategies and the nature of marking schemes year on year are now the main factors affecting comparability of opportunity for candidates following different syllabuses.
- 3. Coursework has a significant impact on grade outcomes.
- 4. Coursework requirements, execution and marking are not always comparable.
- 5. Response to regulatory developments appears to have resulted in syllabuses offering a relatively narrow (in some cases very narrow) range of safe mainstream topics. There is an absence of content covering new dimensions of geography, which could offer more exciting challenges for the full ability range.

Appendix A: Details of syllabuses used in the syllabus review

| Year | Awarding body and syllabus | | | | | | | | |
|------|----------------------------|------|-----------------------|-------------------------------------|-------------|--|--|--|--|
| 1996 | AQA SEG A 1,163 | CCEA | Edexcel A 1,300 | OCR MEG E Avery Hill 1,579 | WJEC 159 | | | | |
| 2001 | AQA SEG A 2,000 | CCEA | Edexcel A 1,310 | OCR MEG A 1,586 | WJEC 159 | | | | |

Appendix B: Details of scripts used in the script review

| CCEA | | Edexcel | | OCR | | WJEC | |
|------|------|---------|------|------|------|------|------|
| 1996 | 2001 | 1996 | 2001 | 1996 | 2001 | 1996 | 2001 |
| А | А | А | А | | А | А | А |
| C(H) | C(H) | С | C(H) | | C(H) | C(H) | C(H) |
| C(F) | C(F) | F | C(F) | | C(F) | C(F) | C(F) |
| F | F | | F | | F | F | F |

Appendix C: Performance descriptors used in the script review

The standards of performance at the lower boundaries of grades A, C and F were reviewed against benchmark grade descriptors developed from the GCSE geography subject criteria which were first used for teaching in September 1996. The descriptors were adjusted to identify the key characteristics which might be expected of a candidate's performance at the A/B, C/D and F/G grade boundaries.

Grade A

Candidates recall accurately detailed information about places, environments and themes, across all scales, as required by the specification, and show detailed knowledge of location and geographical terminology.

Candidates thoroughly understand geographical ideas from the specification content, and apply their understanding to analyses of unfamiliar contexts. They understand thoroughly the way in which a wide range of physical and human processes interact to influence the development of geographical patterns, the geographical characteristics of particular places and environments, and their interdependence. They understand interrelationships between people and the environment, and how considerations of sustainable development affect the planning and management of environments and resources. They understand the significance and effects of attitudes and values of those involved in geographical issues and in decision-making about the use and management of environments.

Candidates undertake geographical enquiry, identifying relevant geographical questions, implementing effective sequences of investigation, collecting a range of appropriate evidence from a variety of primary and secondary sources, effectively using relevant skills and techniques, drawing selectively on geographical ideas to interpret evidence, reaching substantiated conclusions, clearly and effectively communicating outcomes, and critically evaluating the validity and limitations of the evidence and conclusions.

Grade C

Candidates recall accurately information about places and themes, at a range of scales, as required by the specification, and show knowledge of location and geographical terminology.

Candidates understand geographical ideas as specified from the specification content in a variety of physical and human contexts. They understand a range of physical and human processes and their contribution to the development of geographical patterns, the geographical characteristics of particular places and environments, and their interdependence. They understand interrelationships between people and the environment and appreciate that considerations of sustainable development affect the planning and management of environments and resources. They may demonstrate awareness of the effects of attitudes and values of those involved in geographical issues and in decision-making about the use and management of environments.

Candidates undertake geographical enquiry, identifying questions or issues, suggesting appropriate sequences of investigation, collecting appropriate evidence from a variety of primary and secondary sources, using a range of appropriate skills and techniques, reaching plausible conclusions, communicating outcomes, and appreciating some of the limitations of evidence and conclusions.

Grade F

Candidates recall basic information about places, environments and themes, at more than one scale, as required by the specification, and show an elementary level of knowledge of location and geographical terminology.

Candidates understand some simple geographical ideas from the specification content in a particular context. They understand some simple physical and human processes and recognise that they contribute to the development of geographical patterns and the geographical characteristics of places and environments. They understand some simple interrelationships between people and the environment and the idea of sustainable development. They show some awareness of the attitudes and values of people involved in geographical issues and in decision-making about the use and management of environments.

Candidates undertake geographical enquiry, collecting and recording geographical evidence from primary and secondary sources, drawing simple maps and diagrams, communicating information and outcomes by brief statements, and recognising some of the limitations of the evidence.