

Pupils' perceptions of geography a literature review

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Background

Between 1988 and 2004 the average number of entries for GCSE geography was 270,000 but has fluctuated between a high of 305 000 in 1988 to a low of 227 832 in 2004. There has been a steady and significant fall since 1996 when numbers reached 302 298. Similar patterns have occurred at A-level where numbers have fallen from a high of 46 680 in 1992 to a low in 2004 of 34 215. Overall the pattern therefore is that while geography remains one of the most popular subjects at both GCSE and A-level, indeed amongst the top non-core subjects, there has been a steady decline in the numbers opting for it over time.

So why aren't students selecting geography?

There is only limited research evidence but this review

- analyses patterns of entry and
- considers possible reasons for the changes.

CHANGES IN ENTRY PATTERNS

1) Patterns of entry at GCSE for all subjects

- Entries for GCSE have steadily increased
- Entries were slightly higher for girls than boys in 2004 (51%-49%)
- Students generally take more subjects now than they did in 1984
- The average number of GCSEs varies in different schools (most are within the range 8.5 and 9.5 per pupil)
- The core (English, Mathematics, Science, Design-Technology) has seen a steady increase in numbers.
- Other subjects that have gained are Business Studies, Drama, Media/Film/TV studies, Music, PE, Religious Studies and GNVQs.
- IT has increased substantially. Until 2002 this was mostly through GCSE. Since then the increase has been in GNVQ ICT.
- Geography and history have declined overall since 1984, although the variations (both up and down) have been greater for geography
- History has increased slightly in the last three years.
- Gender differences were more pronounced in the 1980s but still occur now. Girls opt for arts and humanities while boys opt for sciences and technology.

(Pratt et al, 1984; Stables, 1996; Bell, 2001; Weeden, 2002, 2005; Grimble and Mansell, 2004)

2) Patterns of entry at GCSE for geography

- The trend is undeniably downwards (a drop of 30% since 1996).
- Geography is still one of the most popular subjects (8th in 2004) but the margin with other subjects has narrowed.
- There is a gender imbalance with more boys (56%) taking geography (2004 data).

- Girls overall perform better than boys in geography
- Performance in Geography (measured by numbers getting top grades) is better than in the core subjects possibly suggesting that the entry cohort is weighted towards higher attainers.
- National figures disguise differences between local authorities and schools since:
 - entries for geography are variable (as low as 0% and as high as over 80% in individual schools)
 - entries within any school fluctuate over time.
 - In one LEA there was an overall downwards trend over a five year period (2000-2004) but one third of schools had increased geography numbers

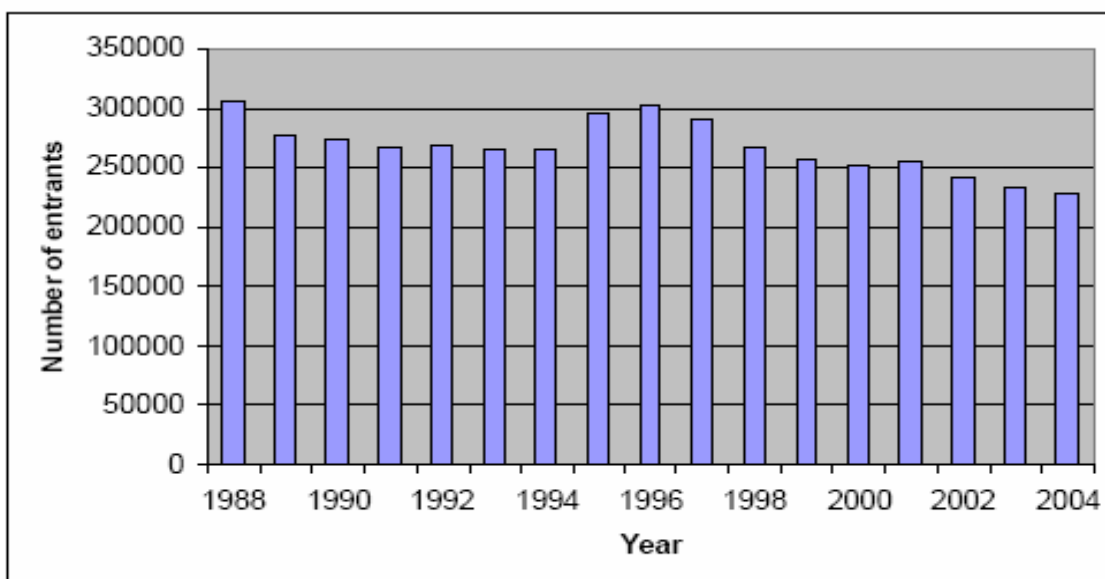


Figure 13; The changing popularity of Geography at GCSE since 1988.

Source (Grimble and Mansell, 2004)

Geography appears to be most successful in maintaining or increasing numbers in:

- more 'academic' schools
- schools with 'strong' geography departments

(Westaway and Rawling, 2001; Dowgill, 1999; Weeden, 2002, 2005; Grimble and Mansell, 2004)

3. Patterns of entry for A-level

- The trend in geography is downwards with a drop of 27% in entries between 1992 and 2004
- Geography is the 9th most popular subject at A-level and the 11th at AS level
- There is a gender imbalance with more boys (55%) taking geography (2004 data)
- Girls perform better (57.6% gain an A grade compared to 45.5% boys)

- Performance has improved with more higher grades and fewer failures
- Subjects that have increased in popularity between 1990 and 2005 include English, Media studies; Psychology; Business Studies and ICT.

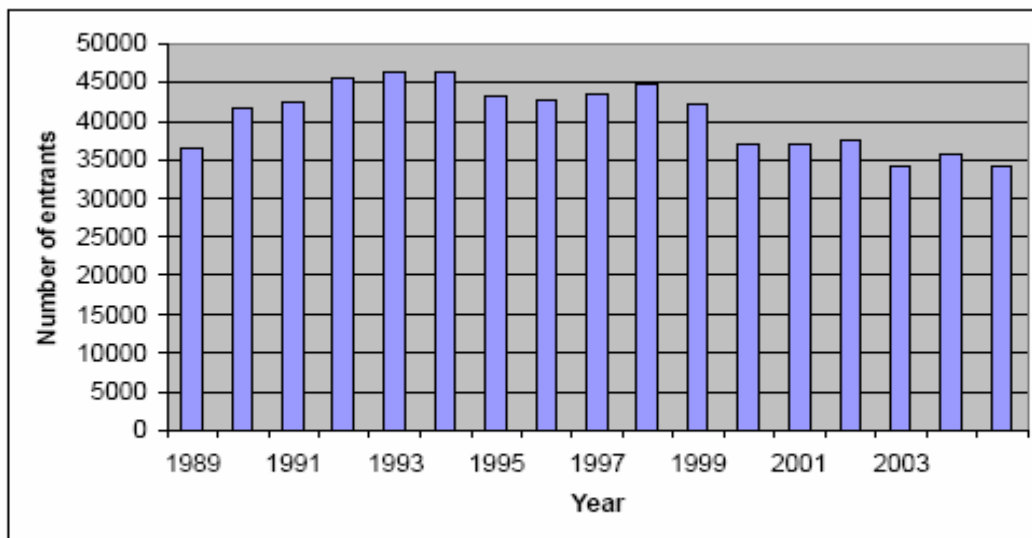


Figure 14; The changing popularity of Geography at A level since 1989.

(Source Grimble and Mansell, 2004)

(Westaway and Rawling, 2001; Dowgill, 1999; Weeden, 2002, 2005; Grimble and Mansell, 2004)

4. Key variables

A number of key variables have been identified but not researched in detail.

These include:

- type and location of school
- gender, age, ethnicity, social and economic factors
- ability
- quality of teaching

(Weeden, 2002, 2005)

REASONS FOR THE CHANGES

There has been little research on the reasons for the decline in numbers but suggested reasons include

- pupils' perceptions of the subject and the way it is taught
- factors that influence their decision making
- structural changes to the whole curriculum.

Pupils' perceptions of the subject and the way it is taught

The research literature on pupils' perceptions of subjects and their reasons for choosing subjects is limited, especially for geography. The research suggests that the learning process and the quality of the teaching are far more influential than subject content in making geography interesting. It also suggests that pupils' conceptions of geography are unclear.

Pupils' preferred activities included:

- watching videos, fieldtrips drawing maps and diagrams, map/atlas work, project work discussion, practical work, making posters, having variety in the methods and approaches

Pupils' disliked activities included

- writing ('working through endless booklets and worksheets'), atlas/mapwork, copying, bookwork, tests, homework, big projects (too long) and drawing maps and diagrams. Pupils did not like being passive recipients of knowledge and 'technical terminology' through copying terms and definitions, particularly in certain physical geography topics.

Teachers suggest that geography is successful in competing with other subjects when it is relevant, topical, up to date, reflects the cutting edge of geography, is fun and interesting. The value of fieldwork is emphasised.

Geography is less successful where the pupils' experience of geography lacks progression or variety and pupils find it uninteresting or irrelevant.

The impact of teacher enthusiasm, approach and quality on entries has not been researched.

The content base of the subject came in for little criticism although at KS4 students enjoyed learning new aspects of subject content rather than studying a previous topic in more depth.

Preferred content included

- finding out about the world / other countries / cultures and hazards / disasters.

Disliked content was

- physical geography and weather

Analysis of British geography textbooks between 1907 and 1993 identified significant changes in the subject from

- a mix of place knowledge, physical science and social studies to
- a sense of place, the globe and the environment.

There is some evidence that pupils perceive geography (and history) as harder than other subjects because of:

- workload (coursework and homework);
- the opportunity to express and justify opinions. However these aspects also made the subject enjoyable and interesting.

(Adey and Biddulph, 2001; Biddulph and Adey, 2003, 2004; Lord and Harland, 2000; Lord 2001, 2002, 2003; Colley and Comber, 2003; Norman and Harrison, 2004; Zhang and Foskett, 200; Lam and Lai, 2003; Frazer, 2005)

The factors that influence pupil's decision making

This literature suggests key factors influencing choice are

- liking for the subject
- perceived usefulness / importance of the subject
- ability / success in the subject
- advice from parents, peers or teachers
- 'good' teaching
- the relationship with the teacher
- perceived difficulty of the subject

These factors may vary across the 'ability' spectrum.

There are three possible models of pupil choice. These are:

1. Structuralist where institutional, economic or cultural factors constrain pupil choice
2. Economic – where pupils rationally assess the potential returns
3. Pragmatic rationality – rationality is limited by the pupil's experiences

However most 14 and 16 year olds

- make unrealistic connections between subject choice and careers
- are unclear about future careers
- have very fluid and naive ideas about careers

Teachers reported numbers were influenced by

- structural whole school factors.
- the quality of the teaching in the department.

(Stables, 1996; Stables and Wilkeley, 1997; Payne, 2003; Weeden 2002,2005, Adey and Biddulph, 2001; Biddulph and Adey, 2003,2004; Stott et al, 1997; Frazer, 2005, Baynham, 2005)

Structural changes to the curriculum

Structural changes to the curriculum occur as a result of changes in government or school policy. The main changes have been alterations to the core curriculum, a broadening of the curriculum and increased emphasis on vocational qualifications. Changes to option choice structures may have a significant influence on the numbers taking a subject.

Option choice arrangements vary considerably between schools and significant changes have occurred to option systems in the last ten years.

Schools have responded to policy changes by:

- changing (emphasising) the 'core' curriculum (Maths, English, Science, Technology)
- introducing a wider range of 'academic' and 'vocational' subjects
- introducing a number of 'routes' to which pupils may be assigned
- the removal of a 'humanities' option block

A number of case studies have been reported where geography numbers have been affected by these changes. Teachers have also reported on strategies to counter these trends.

(Stables, 1996; Grimwade, 1997; Dowgill, 1997; Westaway and Rawling, 2001; Weeden, 2002, 2005; Grimble and Mansell, 2004)

Possible research areas

1. A clearer understanding of the patterns of uptake of the subject within the whole curriculum, including trends over time. This should include a more detailed analysis of the key variables that influence the numbers taking the subject
 - Do certain ethnic or social groups value geography less?
 - Why is there a gender imbalance?
 - Is there an ability imbalance?
 - What impact does location or type of school have?
 - In what ways do option choice systems influence numbers?
2. Case studies of successful departments to identify contributing factors such as:
 - Curriculum content
 - Planning and organisation
 - Teaching and learning
 - Marketing
 - Relationship between pupil and teacher
 - The effect of coursework
3. Further research into the development of pupils' knowledge and understanding of geography and its key concepts. Development of our understanding of what makes geography 'useful' in the eyes of pupils so that it can be marketed better. This might include research into what is retained by students and adults after they finish studying geography.

THE LITERATURE

The literature in this area is limited, particularly for geography. Literature reviews have been undertaken by Lord and Harland and Payne for the DfES. These give a thorough overview of the literature and the methodologies employed.

The geography research has been relatively small scale, mostly unfunded or on very small budgets. The main data collection methods have been questionnaires, interviews and published national / LEA data. Where trends and patterns have been analysed (Bell, 2001; Grimble and Mansell, 2004; Weeden, 2002, 2005; Westaway and Rawling, 2001) the data sets have been larger but omit the richer detail possible from individual case studies.

Most studies have been with schools local to the researcher. Adey and Biddulph (2001, 2003,2004) used questionnaires and interviews with ten schools. Frazer used questionnaires from thirteen schools. Individual case studies (Stott et al, 1997; Dowgill, 1999, Baynham, 2005) provide unique stories and give additional detail.

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