

Cookies on GOV.UK

We use some essential cookies to make this website work.

We'd like to set additional cookies to understand how you use GOV.UK, remember your settings and improve government services.

We also use cookies set by other sites to help us deliver content from their services.

[Accept additional cookies](#)

[Reject additional cookies](#)

[View cookies](#)

 **GOV.UK**

▼ Menu



[Home](#) > [Education, training and skills](#) > [Inspections and performance of education providers](#)
> [Subject report series: geography](#)



Research and analysis

Getting our bearings: geography subject report

Published 19 September 2023

Contents

[Context](#)

[Main findings](#)

[Discussion of findings](#)

[Recommendations](#)

[Geography in primary schools](#)

[Geography in secondary schools](#)

[Appendix](#)

Context

In recent years, much has been written about the nature and purpose of geography education. School leaders and teachers often find themselves pulled in different directions as they try to achieve a wide range of conflicting aims.^{[[footnote 1](#)]}

Geography's subject association, the Geographical Association (GA), cites Alistair Bonnett in its attempt to answer the question 'What is Geography?'

'Professor Alistair Bonnett describes geography as 'the world discipline', an unwieldy yet utterly necessary and very human project to seek order and meaning in the diversity and complexity of the world.'^{[[footnote 2](#)]}

At its best, a geography curriculum helps pupils to get to grips with this 'unwieldy' discipline. It equips them with the knowledge they need to make sense of the world's complexity and diversity. As the subject body, the Royal Geographical Society (with the Institute of British Geographers) (RGS-IBG), explains, geography 'makes a vital contribution to our knowledge of the rapidly changing environmental and social challenges facing us and how we should tackle them.'^{[[footnote 3](#)]} A geography education has never been so relevant.

This report explores common strengths and weaknesses in the geography education we have seen in schools across the country. It recommends ways for school and curriculum leaders to build on successes and address common issues for the benefit of pupils. Its findings should also be of use to policymakers and others working in the education sector. The report builds on our geography research review, published in 2021.^{[[footnote 4](#)]} It is split into findings in primary schools and those in secondary schools. These include evidence from Reception classes and sixth forms. Each of these sections explores the following topics:

- curriculum

- pedagogy
- assessment
- impact
- the way schools are organised

We evaluate schools against the criteria in the school inspection handbooks. Inspectors will not use findings from this report as a 'checklist' when they are inspecting schools. We know that there are many different ways that schools can put together and teach a high-quality geography curriculum.

Geography forms part of the English Baccalaureate (EBacc), and its uptake at GCSE has increased steadily over the last decade.^[footnote 5] Students are also increasingly opting to continue their geographical studies at A level.^[footnote 6] There have also been changes in the diversity of those opting to study geography. The RGS has found that the '...increase in entries came predominantly from groups who had been less likely to take geography GCSE previously – notably, disadvantaged pupils, Black, Asian and minority ethnic students, and those with lower prior attainment'.^[footnote 7] Meanwhile, the 2021 reforms to the early years foundation stage (EYFS) added more geographical content to this phase, particularly in the specific area of 'understanding the world'.

However, there are also significant pressures on geography education. Initial teacher education (ITE) providers are struggling to attract the number of geography teachers needed to ensure that secondary schools can find specialist teachers for their classes.^[footnote 8] Most primary trainees spent limited amounts of time learning how to teach geography during their training.^[footnote 9] Historically, primary schools have dedicated little time to geography. Our report suggests that this is still too often the case.^[footnote 10] In some secondary schools, exam specifications have become a de facto curriculum. This results in a curriculum that does not match the breadth and ambition that geography is capable of.

Alongside these pressures, the COVID-19 pandemic has posed particular problems for the way geography is planned and taught, especially around the use of fieldwork. GCSE and A-level exam boards temporarily removed the requirement to carry out fieldwork at the height of the pandemic. Much fieldwork at other phases stopped as well. This report considers the impact of COVID-19 on fieldwork, but primarily discusses what was, and is now, typical in schools.

Main findings

There have been many recent improvements to the geography curriculum in most schools. Leaders have rewritten curriculum plans so that they better identify exactly what should be taught and how pupils' knowledge and capabilities should build over the course of a topic. They have also made changes to ensure that the content of the geography taught is more ambitious and better represents the distinctive nature of the subject.

Although leaders had planned their curriculum so that pupils built their knowledge within each topic, in many schools there was little sense of knowledge building across topics. Each topic usually sat in isolation. The exception was in key stage 3, where leaders had often planned how the knowledge learned in one topic would be used in later topics.

Changes in the EYFS have led to much more geographical content being introduced to younger children. This was particularly true of geographical vocabulary. However, the key stage 1 curriculum does not always go much beyond what pupils have already learned by the end of Reception.

The curriculum in some schools did not match the scope and ambition of the national curriculum. Most often, this was because the aims of the national curriculum had been overlooked or because place and/or geographical skills were not being taught.

In almost all schools, all pupils were working towards the same curriculum goals. This included pupils with special educational needs and/or disabilities

(SEND). However, in a minority of cases, tasks were differentiated. Pupils with SEND worked towards different curriculum goals, which narrowed the curriculum that they learned. At times, this was appropriate for these pupils, but in most cases it was an unintended consequence of the way tasks had been designed.

Schools varied widely in the amount of time given to the study of geography, particularly primary schools. In both primary and secondary schools, more time allocated to the subject made it more likely that pupils would achieve ambitious curriculum goals.

In some primary schools, the rationale for decisions about what to teach and when was unclear. This was usually when leaders' decisions about geography were led by considerations in other subjects, such as the timing of historical topics or class texts. When schools combined history and geography into a topic, history usually took precedence, and little geography was taught.

Many leaders, in both primary and secondary schools, had started to include geographical enquiry questions in each topic. This was where lessons within a topic built towards pupils being able to answer a question. This had the greatest positive impact when the topic had been designed around the question. It was much less successful when the question was added to the topic retrospectively.

In schools where leaders had identified the component knowledge (the individual elements that support the learning of more complex ideas) that they wanted pupils to learn in each topic, teachers were able to assess pupils' progress through the curriculum more accurately. However, in some schools, limited formative assessment was taking place, even when leaders

believed that this was happening regularly.

Summative assessment was used well in most secondary schools. In primary schools, teachers were often asked to make summative judgements about pupils' progress. However, these were not always underpinned by assessments that gave a sufficient or accurate picture of pupils' knowledge and skills.

In key stage 4, and to an extent key stage 5, exam specifications were usually used as a de facto curriculum. Leaders had not taken the same deliberate approach to curriculum design as they had at key stage 3. As a result, the curriculum in key stage 3 was sometimes more ambitious than the curriculum in key stage 4.

The subject of 'Place' was often poorly planned in the curriculum. Many schools tried to cover too many places, using each one to typify just one issue or phenomenon. At times, the resources used gave an outdated and inaccurate representation of places. This led to pupils learning 'single stories' about each place. Other schools reduced places to disconnected lists of facts. Few schools taught place through regional studies, other than in key stage 3. As a result, pupils often developed misconceptions about places or only learned simplistic knowledge about them.

Fieldwork was underdeveloped in almost all schools, as the curriculum did not consider how pupils would make progress in their ability to carry out fieldwork over time. Although COVID-19 had an impact on the number of field trips and visits taking place, fieldwork had rarely been a strong feature of the curriculum before the pandemic. Leaders had not considered how fieldwork should be taught or how pupils would learn more about how geographers carry out their work.

In some secondary schools, pupils did not carry out fieldwork in key stage 3. In primary schools, field trips had often replaced geographical fieldwork. Fieldwork at key stages 4 and 5 rarely went beyond the minimum requirements of the exam boards.

Disciplinary knowledge (the knowledge of how geographical knowledge is formed, debated and contested) was a weaker area of curriculum thinking in both primary and secondary schools. Where it was stronger, leaders had identified geographical concepts that underpinned the curriculum and used them in their planning. This allowed them to decide what to teach about each topic and gave a stronger sense of purpose. However, few leaders had considered these underpinning geographical concepts.

Procedural knowledge (the knowledge of how to use geographical skills) was rarely planned for in the same way as substantive knowledge (established facts about the world). Leaders had not identified when to teach different aspects of procedural knowledge or how pupils would have the opportunity to practise using it to become more skilled in applying it. Geographic information systems (GIS) were not on most secondary schools' curriculums, despite being part of the national curriculum at this phase.

Pupils were sometimes given too much information and not enough time to apply it. This was especially true when time for geography was very limited, particularly at key stage 4. Often, there was a culture of covering material rather than of learning. At other times, pupils were moved too quickly to activities that they did not yet have the knowledge to complete.

In most primary and secondary school lessons, teachers had the subject knowledge necessary to be able to teach effectively. In most cases, they could use this knowledge to plan for, spot and address misconceptions, as well as to provide rich examples and anecdotes to help bring abstract ideas to life. However, many lessons in secondary schools were taught by non-specialists who often struggled to do this.

Support for non-specialists in secondary schools was often ineffective. Centralised resources with detailed notes for the teacher helped but worked best when the subject lead had time to work through them with the non-specialist. This time was rarely available.

Teachers of all phases received very little subject-specific continuing professional development (CPD). The areas where there was the greatest need for this were planning effective fieldwork, using GIS and teaching procedural knowledge.

Discussion of findings

In 1997, Bill Marsden warned that the geography was being taken out of geography education in schools and replaced with cross-curricular approaches that downplayed the importance of subject content.^{[\[footnote 11\]](#)} Our previous subject report, in 2011, found that these concerns were still evident in England's schools. That report found that geography in primary schools was being lost in cross-curricular 'topic' approaches that emphasised generic skills rather than geographical knowledge. It also noted that geography was particularly weak in secondary schools at key stage 3. Pupils sometimes received very little specific geography education, and the curriculum lacked challenge. These issues were further highlighted in our 2015 report, 'Key stage 3: the wasted years'. This showed that schools' curriculums for key stage 3 rarely built on what pupils already knew and often lacked challenge.^{[\[footnote 12\]](#)}

This report finds that there have been substantial improvements in those areas over the last few years. Almost all primary schools visited had distinct geography lessons, and leaders had thought carefully about what they wanted pupils to learn in each one. In many primary schools, pupils were knowledgeable about geography and could use this knowledge to complete challenging geographical work. Likewise, the improvements at key stage 3 were notable. In fact, the curriculum at key stage 3 was often more ambitious than at key stage 4. In key stage 3, leaders had not just considered exactly what geography pupils should learn, and to what end. They had also considered how this knowledge would build over time so that pupils gained an increasingly complex and nuanced understanding of places, processes and geographical issues.

The 2011 report also raised concerns about pupils being taken out of geography lessons and missing out on studying this subject. In most of the schools we visited, all pupils, including those with SEND, follow the same curriculum as their peers. Sometimes teachers make precise adaptations to the curriculum that pupils will follow to take into account differences in what they know. Differentiated activities are sometimes used well. When done well, these differentiated activities are carefully planned to allow pupils to meet the same lesson goals in different ways. However, too often they involve pupils choosing from an array of activities. This has the unintended consequence of pupils learning very different things, with no plan to then address the gaps in knowledge that develop as a result.

Despite many improvements, there is clearly more work to be done in a number of areas. One concern is that leaders' more developed curriculum thinking often ends at key stage 3. In key stage 4, and to an extent key stage 5, the exam specifications are treated as a curriculum rather than a list of prescribed content. Very little thought has gone into how this content could be sequenced or combined and built on. There has also been very little consideration of how to choose places for study in these upper key stages, beyond relying on whatever happens to be in the textbooks selected. Time pressure in geography exam classes is too often leading to a culture of covering content rather than of learning.

In key stages 1 to 3, the content of the national curriculum for geography is the bedrock for leaders' decisions about what to include in their own curriculum. Every school visited, whether an academy or not, chose to follow the national curriculum. However, 2 issues are apparent.

First, despite what school leaders asserted, in a large number of schools, aspects of the national curriculum were not covered. These tended to be around the way place was approached (many schools missed any kind of regional study), or they missed out fieldwork and GIS.

A second issue is that the national curriculum only gives broad topic headings for what is to be covered, such as 'rivers' or 'economic activity'. It does not specify what should be taught about these topics. Some more guidance on what to cover is given in the aims of the subject's national curriculum. However, school leaders often overlook these, and they only give a very broad sense of what should be achieved. Leaders could look at the key and organising concepts that sit behind the content that is taught and use them to guide their decisions. These include concepts like place or earth systems and scale or interconnection. However, curriculum planning in the vast majority of schools we visited failed to take account of such concepts.

In many areas of the curriculum, pupils' knowledge of geography is strong. In most schools, this is particularly the case with knowledge about location and knowledge of human, physical and environmental geography. Knowledge about place is more variable. Some schools include a large number of places across their curriculum. But these are not returned to in different contexts, and pupils only know about them in the context of one 'single story'.^[footnote 13] This is especially true of places in Africa, which are too often only taught about through a lens of economic development. Sometimes the resources that teachers have selected present an outdated and inaccurate view of the places being studied. At other times, pupils' knowledge of places is little more than a list of disconnected facts. This often happens when pupils are expected to find out information for themselves, with little explicit teaching on how to organise this information into a coherent geographical understanding of the place.

The weakest form of geographical knowledge in almost all schools is procedural knowledge. Leaders rarely consider how to plan a curriculum for procedural knowledge in the same way as they do for substantive knowledge. For example, they may consider when best to teach pupils substantive knowledge about how water acts in a meander, but do not consider when best to teach pupils about choropleth maps. Pupils are also given few opportunities to develop their skills in using this procedural knowledge, as they do not return to it and practise it until fluent.

Another area that is underdeveloped in many schools is the approach to fieldwork. This extends beyond the challenges that were presented by the COVID-19 pandemic. In primary schools, fieldwork is often conflated with field trips. Pupils may go out of school on a visit, but they are rarely learning how to carry out geographical work when they do so. In secondary schools, pupils rarely do fieldwork beyond the requirements of the exam boards. Schools simplify this fieldwork as much as they can so that pupils can give prepared answers in the exam about the fieldwork they have undertaken. Fieldwork is entirely absent in some schools at key stage 3. Very few schools approach fieldwork as a body of knowledge that needs to be taught. Pupils are rarely taught how geographers collect, present and analyse data and how

they then reach conclusions and evaluate their work. This is leaving pupils ill equipped for the non-examined assessment at A level and for higher education.

These areas where the curriculum is weak, and therefore pupils' knowledge is weak, are also those least well served by CPD. In most schools, there is very little subject-specific CPD. In secondary schools, some departments have sessions led by the subject lead, but these leaders sometimes have gaps in their own knowledge of areas such as fieldwork, GIS and procedural knowledge. Some more subject-specific CPD is offered when schools are part of a multi-academy trust. However, those leading this CPD are not always aware of the gaps in the school's curriculum or are still not offering support in these areas. Schools rarely turn to their subject association (the GA) or their subject body (the RGS) for guidance. Most of the CPD in schools focuses on more generic areas of teaching and learning, particularly on support for pupils with SEND and teaching approaches drawn from cognitive science. Geography teachers are usually positive about this CPD, and its impact can be seen in their lessons through the pedagogy used. However, generic CPD alone does not equip teachers with all the knowledge they need to teach geography effectively.

Most geography lessons include elements of retrieval practice, where pupils are expected to recall what they have learned. In schools where this is strongest, pupils recall knowledge until they are fluent in it and then, later in the lesson, apply this knowledge in a new context. This helps them to make connections between lessons and between topics. Teachers also use formative assessment in lessons to check for understanding. They are increasingly using technology to set quizzes that can identify and address pupils' misconceptions, give pupils automatic feedback and give teachers information they can use to help plan subsequent lessons. The quality of summative assessments is more varied. Where practice is most effective, leaders plan assessments to combine shorter questions that check that pupils have gained the component knowledge they will need, along with longer questions that check their ability to apply this knowledge to novel situations. In some primary schools, teachers are being asked to make summative judgements about how pupils are progressing in geography, without any meaningful assessment to help form these judgements. This raises a question about whether making these judgements has any value.

Most geography lessons are taught well. At their best, teachers have the subject knowledge to provide explanations containing examples and anecdotes that help bring places, processes and geographical issues to life. In many lessons, pupils are given geographical information (such as graphs, pictures, texts and maps), and are taught how to make sense of them and draw conclusions from them. They are then given opportunities to complete activities in which they apply what they have been

taught to answer distinctly geographical questions.

There are 2 significant barriers to these high-quality lessons taking place. The first is staffing. Many secondary schools are struggling to recruit specialist geography teachers. In most secondary schools, at least some lessons are taught by non-specialists. In a few schools, the majority of key stage 3 lessons are taught by non-specialists. These teachers are often not supported well enough to teach geography. They are not able to provide the same kind of rich explanations as their specialist colleagues, and are less able to identify and address misconceptions. This is particularly an issue in primary schools, where teachers often miss pupils' misconceptions and sometimes even pass them on to the pupils in their class.

The second barrier is time. In primary schools that give very little time to geography, teachers are more likely to teach the subject in superficial ways. The curriculum still attempts to cover all the content of the national curriculum in distinct blocks, but this does not give pupils time to apply what they are being taught. A similar issue occurs in secondary schools, especially at key stage 4. Here, the high-quality approaches taken at key stage 3 are often replaced with an attempt to cover material as quickly as possible. There is no time for pupils to reflect on what they have been taught or to make connections to other parts of the subject. In both cases, this is having an impact on what pupils know and can do.

Overall, this report finds that geography education is in a better place than at the time of previous reports. Pupils are now likely to be taught a geography curriculum in which the subject takes centre stage. In most schools, leaders have identified what should be taught and when it should be taught, and they are increasingly considering the best way to teach it so that pupils learn it and can apply it in the future. However, there is still too much variability in the quality of geography education that pupils receive, and some areas of the curriculum are being neglected. Fortunately, the changes to the schools' geography curriculums that have taken place over recent years should mean that there is a strong foundation on which to build further.

Recommendations

Curriculum



Schools should:

- Consider how pupils will build on knowledge, not only within a topic but over a series of topics, so that they can apply what they have learned in different scenarios.
- At the secondary phase, give the same level of thought to the curriculum at key stages 4 and 5 as is given at other key stages. Leaders should consider how to sequence the content of exam specifications in a way that allows pupils to develop a fuller understanding of the subject over time. For example, they could consider the way that places are taught in different contexts over the curriculum, or look at geographical concepts that run across topics.
- Make sure that pupils learn about places in an appropriately nuanced and complex way. They should encounter the same places at different times and in different contexts, or look at a place through a range of geographical lenses. Pupils should have some opportunities for regional as well as thematic studies.
- Plan procedural knowledge into their curriculum in the same way as they do substantive knowledge, so that pupils make progress in their ability to use different geographical skills. In secondary schools, this should include the use of GIS.
- Teach pupils about fieldwork. Pupils should know how to collect, present and analyse data, and how to reach and evaluate conclusions based on this data. Some of this should include first-hand experience of collecting data. Pupils should get better at carrying out fieldwork over time. This will make sure that pupils who continue to A level are better prepared for geographical investigation, as they will have experienced a wider range of fieldwork techniques in different settings.
- Make sure that there is a planned transition between key stages. Teachers should plan their respective curriculums to support effective transition from EYFS into key stage 1, key stage 1 into key stage 2 and key stage 2 into key stage 3, so that content is not repeated across key stages.

Pedagogy and assessment

Schools should:

- Identify likely misconceptions in each topic and plan how they will be identified and addressed, especially to support non-specialist and less experienced colleagues.
- Make sure that pupils have opportunities to apply what they have been taught. Conversely, make sure that they have been taught and have learned securely the knowledge and skills they are being asked to apply. Teachers should be aware of the problems caused by an approach that encourages them to cover content quickly when it does not lead to pupils learning it securely.
- Consider the prior knowledge that pupils need in order to engage in classroom activities. Teachers should avoid asking pupils to guess their way towards answers for which they do not have the necessary knowledge or to research a subject independently when they do not know how to make sense of what they find.
- Ensure that, if teachers are being asked to make some form of summative judgement about what a pupil knows or can do, this judgment is based on reliable and accurate assessment.
- Plan assessments that check both that pupils have learned component knowledge and that they can apply it. Assessments should check pupils' procedural knowledge as well as their substantive knowledge.

Systems at subject and school level

Schools should:

- Ensure that the time given to geography matches the leaders' ambitions for their curriculum. This does not necessarily mean giving geography more curriculum time. It could mean using existing time more productively and making sure that time allocated for geography is not being used to teach other subjects.
- Support subject leaders in gaining a deeper understanding of geography's curriculum concepts and how these help to shape a school's curriculum.
- Support non-specialist teachers in how best to explain complex geographical ideas and how to identify and address misconceptions.
- Provide the time, resources and necessary CPD for fieldwork to take place.

Other organisations

Organisations (such as ITE providers, exam boards and subject associations/bodies) and policy makers should:

- offer subject-specific CPD in areas such as using GIS, planning and carrying out fieldwork and teaching procedural knowledge
- make sure that primary ITE trainees are given enough time to explore common misconceptions in geographical topics
- provide guidance on how schools can approach exam specifications in ways that help pupils to develop geographical thinking
- support subject leaders in developing an understanding of geographical concepts and the role they play in the curriculum
- consider how to align the content with the aims of the national curriculum

Geography in primary schools

There have been significant positive changes in the way primary schools are approaching geography education since the publication of the last Ofsted subject

report. In all the schools visited, pupils benefitted from distinct geography lessons, even when placed within a wider topic or thematic approach. Leaders were increasingly considering the specifics of what they wanted pupils to learn from their geography lessons and how this knowledge could be best sequenced to help their pupils make sense of it.

Curriculum

Summary of the research review relevant to curriculum

Geography is a broad-ranging subject. Therefore, leaders have to carefully select what content to include when designing a geography curriculum, so that pupils learn the full scope of the subject. Although the national curriculum sets out broad areas of geography that are to be taught, it does not provide details of the specific content.

Geography is a subject that incorporates as much from the natural sciences as the social sciences. Because of this, the structure of the geography curriculum is complex. However, these 2 strands rarely exist in isolation. Indeed, one of the strengths of geography is that it brings them together. Geography must have a curriculum that respects both discourses and the interplay between them.

Scope and ambition

Summary of the research review relevant to ambition

Teachers and leaders consider the breadth of the body of knowledge that pupils should learn, how to organise the subject and the interrelationship between locational knowledge, place knowledge, and knowledge of human and physical processes and geographical skills. A high-quality geography curriculum gives each form of knowledge due consideration.

1. Although all schools reported that they covered the scope of the national curriculum, in a minority of schools this was not the case. When schools missed areas of the national curriculum, this tended to be because of the choice of places that they studied. A few schools did not cover a region in a European country, and more did not cover a specific region of the UK. These schools had not replaced these studies with something of comparable breadth or ambition.
2. All schools taught the aspects of human and physical geography specified in the national curriculum. However, there were significant differences between schools in the depth of coverage. Some schools dedicated whole topics to looking at natural resources. In others, natural resources occurred once, in the context of one place being studied. Where this was the case, the 'coverage' of natural resources did not align with the aims of the national curriculum, such as pupils knowing how natural resources affect the interdependence of places and other processes, and how they lead to changes over time. To develop secure knowledge of this concept, pupils need to encounter it at different points in the curriculum. For example, in one school, pupils learned about the nature of resources in one topic, focusing on local uses. They then learned about these resources in the different regions they studied. A later topic explored how the way resources are used affects the regions they had studied, and then the global impact of their use.
3. One of the biggest limiting factors to the scope and ambition of the geography curriculum in primary schools was the time given to the subject. There was huge variation in this. Some schools had as little as one hour a week for half the year, amounting to around 18 hours. Others had as much as 2 hours a week throughout the year, amounting to around 72 hours. Most fell in the middle of these extremes.
4. Schools that spent very limited time on geography often had ambitious curriculum goals that were not met. They tended to cover topics as a checklist of information, and pupils had no time to apply what they had learned to geographical questions. However, simply increasing the time spent on the subject did not automatically improve the quality of the curriculum. Some schools that spent more time on geography approached it in the same way. In most schools where there was more time for geography, the curriculum better matched leaders' ambitions.
5. Many schools went beyond the national curriculum, regardless of time. This, again, was often in the area of place knowledge. Many schools chose to cover countries or regions in Africa, and some also covered countries in Asia and Australasia. This was particularly true of schools that had taken a regional approach to sequencing the curriculum (see ['Sequencing'](#)).
6. When schools went beyond the scope of the primary national curriculum, there

was little thought about the impact this would have on transition between primary and secondary school. For example, leaders did not consider how the content pupils learned about African and Asian regions related to the national curriculum content for key stage 3. This can lead to teachers in key stage 3 spending time repeating content that some pupils in their class have covered in key stage 2. Given the variation in what was covered in primary schools, and the depth in which it was covered, it was difficult for leaders in secondary schools to build on pupils' geographical knowledge.

7. One area in which many schools were ambitious in their curriculum aims was the language they wanted pupils to be able to use. Teachers introduced pupils to complex ideas such as urbanisation, mechanisation and deposition. Many pupils were able to use such terms in discussions about what they had learned. In schools where the curriculum was strongest, leaders could show how these terms had been introduced and when they would be revisited in different contexts to deepen pupils' knowledge over time. In a minority of cases, pupils were introduced to ambitious vocabulary but were then moved on before they had a chance to make sense of it.

Selecting what to teach

Summary of the research review relevant to selecting what to teach

Leaders need to identify both the content (substantive knowledge) to be taught and the knowledge of relationships that enables pupils to understand how ideas are connected (disciplinary knowledge). Pupils' combined appreciation of both substantive and disciplinary knowledge can be described as geographical understanding.

8. Every primary school visited said that they used the national curriculum to identify what to teach. Schools tended to use the overarching topic headings in the national curriculum. For example, many schools had topics on 'settlement' and 'rivers'. One frustration expressed by leaders was that the national curriculum provided no information on what to teach about rivers or about settlements. Leaders rarely looked at the aims of the national curriculum, or at guidance from subject associations, to help them choose what to teach about those topics.

9. In some schools, the geography curriculum lacked coherence, as there was no

geographical rationale for the selection of content to teach. One reason for this is that many of them based their decisions on what to teach in geography on what was happening in other subjects. For example, some schools selected places to study in geography because these places occurred in the history curriculum, or they chose topics because of their relevance to a class text that pupils were reading. The result of this was that pupils' geographical knowledge was not connected and became little more than isolated facts about a range of places or topics.

10. A minority of schools made some decisions about what to teach based on their pupils' backgrounds or interests. At times, this included looking at places that represented pupils' countries of origin. On other occasions, it reflected contemporary issues that leaders identified as being of particular interest to pupils, such as the use and disposal of plastic. However, in almost all cases, leaders recognised that they needed to take pupils beyond their existing experiences or interests. It was unusual to see schools adapting material in response to emerging interests or world events. This was especially true when the curriculum was already well planned and structured, as leaders recognised that altering what was taught in one moment would affect the curriculum later on. In some schools, teachers focused more on encouraging pupils to behave in certain ways, or hold certain beliefs, about contemporary issues and world events than they did on teaching them the geography that would help them to understand them fully.

11. In schools where curriculum thinking was strongest, leaders had a clear rationale for deciding on the places to be studied. Some followed the national curriculum's direction to study a region of the United Kingdom, a region in a European country, and a region in North or South America. However, most did not identify a region. Instead, they taught about the entire continent or a country. This meant that pupils missed the important geographical ideas that arise from considering and comparing the characteristics of regions. For example, they could not identify how commonalities in physical or human geography unified an area and how these may result in common advantages or disadvantages to those who live there.

12. In some schools, what pupils learned about places they studied was narrow, resulting in them knowing only a 'single story'. For example, in some schools knowledge about the country of Brazil was reduced to nothing more than informal housing and deforestation. Some leaders were aware of this danger and took steps to avoid this reductive approach. In some cases, they made sure that they introduced the same place on multiple occasions over key stage 2, looking at it through different geographical lenses. For example, in one school pupils learned about Brazil's biomes in Year 3 and returned later in the year to consider its resources. In Year 4, they looked at the impact of the Amazon River on its settlements. In schools where geography was taught in a similar way, pupils

developed a richer sense of place.

13. In some schools, leaders had not considered what to teach in terms of geographical skills, in particular skills relating to fieldwork. Leaders in some schools confused fieldwork with field trips or visits. Fieldwork tended to be seen as an activity to be done rather than as an opportunity to teach a body of procedural knowledge or to teach pupils how geographers approach their work. Leaders rarely gave much thought to which geographical skills needed to be taught, when to teach them or how pupils would practise them to the point of fluency.

Geographical concepts

Summary of the research review relevant to geographical concepts

Concepts are important in geography because they draw out the links between processes and ideas. While there is no definitive list of these concepts, the GA's curriculum framework identifies 4 commonly agreed key concepts: space, place, earth systems and environment. It also identifies 5 organising concepts: time, scale, diversity, interconnection and interpretation. [\[footnote 14\]](#) To develop their understanding of each of these concepts, pupils need to learn the range of relevant knowledge and skills. It is critical to break down the content of the curriculum into component parts (or chunks) so that pupils can first understand these in their own right. The components can then be combined, so that pupils gain a fuller appreciation of geographical concepts.

14. Very few leaders in primary schools had thought about the role of geographical concepts in their curriculum. In some schools, it was possible to see the important concepts in their curriculum. However, even then, leaders had not planned how pupils would make progress in terms of understanding these concepts. The only organising concept to be discussed in the schools visited was that of scale. In most cases, the organising concepts were absent from the curriculum.

15. Most schools had identified the component knowledge that they wanted their pupils to learn about each individual topic. Some schools had considered how to build this knowledge over time to give pupils a deeper appreciation of the subject.

However, in other schools each topic had become little more than a list of vocabulary to be learned, with no sense of how it came together or how to apply it to geographical questions. The lack of geographical concepts had removed the rationale for studying the substantive content. An understanding of concepts would help leaders who are responsible for curriculum planning to decide what to teach about the topics in their curriculum. For example, when looking at resources, pupils might learn about the changes to the way a particular resource has been distributed around the world. This builds their understanding of the role of space and time in geography.

Sequencing the curriculum

Summary of the research review relevant to sequencing

Sequencing geographical content is complex. When considering the curriculum as the progression model (by which we mean that progress can be defined as knowing more as pupils move through the curriculum), leaders need to identify precisely what pupils need to know and to sequence it clearly. There needs to be a plan that sets out how pupils' knowledge will build over time in the subject. In a topic-based or cross-subject approach, the clarity of the curriculum goals can be lost. Potentially, one subject can dominate at the expense of the others. This is especially the case if a teacher's subject knowledge is stronger in one subject than others.

16. One strength we saw in many of the schools visited was the sequencing within individual topics. Here, it was possible to see the way knowledge was building over time. Pupils were encouraged to recall and build on what they had learned in the preceding lessons. In some schools, this culminated in pupils using what they had learned during that topic to answer complex and authentic geographical questions.

17. However, it was rare for pupils to build on knowledge from previous topics and to use what they had learned in what they were studying next. Each topic stood in isolation, and pupils were not developing synoptic understanding (the way in which knowledge from different parts of the discipline is brought together) that is fundamental to the discipline of geography.

18. Contrary to what we had found in previous geography subject reports, very few

schools took a cross-curricular topic approach. In most schools, pupils had lessons that were clearly identified as geography lessons, and they knew they were studying geography at this time. However, the sequencing of the curriculum was still often dominated by cross-curricular considerations. Many schools continued to order geography topics to align with the history curriculum. For example, pupils learned about Africa in geography because they were studying the ancient Egyptians in history.

19. Where cross-curricular links were well planned, they were useful, as they added historical knowledge to the study of a region and contemporary regional knowledge to the study of a place in history. However, too often planning did not align in this way. Studying the whole continent of Africa was not well supported by having studied the ancient Egyptian civilisation a term before. It also resulted in the necessary prior geographical knowledge becoming an afterthought. There are many things that pupils should know before studying a region, other than its history, such as climate, biomes, trade and settlements. These things should help to determine when the region is studied.

20. Most schools took a combination of thematic and regional approaches to sequencing the curriculum. They studied the topics presented in the national curriculum as human and physical geography, usually taking half a term on each. After this, they studied some topics that were designed to cover the places of the national curriculum. In a minority of schools where this was done well, leaders had carefully considered how pupils would build on their knowledge from one topic to the next. For example, pupils considered the importance of natural resources; then, in their next topic on volcanoes, they looked at the resources that could be gained from living in a volcanic area. This in turn was built on when looking at the region of southern Italy. However, this approach of building knowledge over time was rare.

21. In a few schools, pupils looked at one place each year and covered some of the human and physical geography when looking at this place. For example, pupils studied the Amazonian region of South America and, when doing so, looked at the rivers, settlements and biomes there. At its best, this allows for pupils to see abstract processes in place. However, it sometimes led to the processes and themes being taught in superficial ways. For example, pupils in one school were able to describe the settlements in parts of Brazil, but they did not learn why settlements had these characteristics. This was because they had not compared them with settlements in other parts of the world.

22. Most school leaders had thought carefully about how to build on the knowledge that children develop in the EYFS. Leaders considered the geographical awareness that pupils were building through activities like mapping their learning space and the

school grounds. They also considered the vocabulary that pupils were developing to describe concepts like near and far, as well as features like rivers and mountains. However, sometimes the work children did in key stage 1 simply repeated what they already knew. This was because the key stage 1 national curriculum does not go beyond the work that children had already done in Reception classes.

Disciplinary knowledge

Summary of the research review relevant to disciplinary knowledge

Disciplinary knowledge should be organised in the curriculum so that pupils learn how geographers question and explain the world. Sometimes this is described as 'thinking like a geographer'. This approach adds rigour to the programme of study.

23. Very few leaders had considered the role of disciplinary knowledge in the curriculum. In most schools, pupils could not articulate what it means to do geography. They did not know how geographical knowledge was created or how it is revised and changed.

24. When leaders had thought about disciplinary knowledge, we saw some stronger practice in how geography was taught. In these cases, pupils were taught about the complexity of the world and of contemporary issues. They were less likely to be taught single stories about a place (see [‘Sequencing the curriculum’](#), above) or that there were simple solutions to geographical issues. This is because they were being taught the subject in a distinctly geographical way, whereby they layered different forms of geographical knowledge over time.

25. Geographical models (theoretical representations of how the world behaves) were not used in the primary schools visited. These models could have been a useful way of introducing pupils to disciplinary knowledge. They would have allowed pupils to see how theories emerge to explain patterns, and then how they change over time as more is known. This could be as simple as a theoretical model showing how a river is likely to change as it moves downstream, and pupils learning how geographers reached these conclusions.

26. Another way that some schools attempted to teach disciplinary thinking was to

plan topics around geographical enquiry questions. These are overarching questions that should link together a series of lessons. Examples include questions like ‘Why are some places more at risk from earthquakes than others?’ or ‘What impact will deforestation have on Brazil?’ When this was done well, pupils were taught the stages of geographical enquiry. They worked through them towards answering the enquiry question over a carefully planned series of lessons.

27. Many schools that used enquiry questions for topics did not use them well. In these cases, the work that pupils did bore little relation to the enquiry question. Pupils did not have the opportunity, or the ability, to go on and answer it. In these schools, teachers had added the enquiry question to a topic as an afterthought, rather than build the topic around the enquiry question from the start.

The use of fieldwork

Summary of the research review relevant to planning fieldwork

Through observing, collecting data for themselves, analysing it and describing their findings, pupils learn how to notice and record the environment around them. One benefit of this is that they become immersed in relevant thinking, and so key geographical knowledge sticks in their memory. Fieldwork also provides opportunities to draw together different forms of geographical knowledge. To be able to explain what they have observed, pupils must draw on their knowledge of human and physical processes, as well as knowledge about location.

28. In the schools visited, the opportunities for fieldwork had been curtailed by the COVID-19 pandemic. Many reported that they had not put back the fieldwork that had been in place before the pandemic, but that they had plans to do so in the coming year.

29. In many schools, field trips had been conflated with fieldwork. Leaders believed that pupils were doing fieldwork, as they went out of school. However, they were often not doing any geographical work in the places they visited. They were not learning how to observe, measure, record and present geographical information about these places. There was no geographical question that they were seeking to answer through the visit, or geographical skill that leaders wanted them to develop.

30. Schools that did fieldwork often had not thought about progression in what pupils were learning. There was no sense that pupils should be getting better at carrying out fieldwork over time, or what the end points for fieldwork should be. Essentially, fieldwork sat outside the geography curriculum and was considered more in terms of wider development. While any benefits to wider development are welcome, there still need to be opportunities to learn about geography through fieldwork and to learn about the practice of fieldwork itself.

31. In schools where fieldwork was done well, it was built into the curriculum. Pupils were taught in class how fieldwork was done and were then given regular opportunities to carry out elements of it. This did not always involve going out of school. Pupils sometimes collected data from within their classroom or school grounds. On other occasions, pupils were given the fieldwork data, because the curriculum was focusing on another element of the fieldwork process rather than data-gathering.

32. Leaders and teachers raised fieldwork as an area in which they would value more support and guidance. They were often unsure how best to take advantage of fieldwork opportunities on their own school site or what they should be trying to achieve by carrying out fieldwork.

Impact

What pupils know and remember

Summary of the research review relevant to what pupils know and remember

To ensure that information moves from pupils' working memory to long-term memory, content can be broken into small chunks of material. This reduces cognitive load and gives pupils the opportunity to connect related ideas. As a result, pupils become more fluent and learn more. It also strengthens the schema that pupils are building, as they see how new knowledge relates to what they have already learned.

33. What pupils learned was largely down to the quality of the curriculum. In schools where the geography curriculum was well considered, and where geography was given enough curriculum time, pupils tended to have a more secure knowledge of the subject. This was particularly true of pupils' knowledge about geographical processes and the human and physical themes in the national curriculum. For pupils to know about the way rivers act or how settlements change over time, they need to have been taught about these things.

34. The strongest area of knowledge in most schools was locational knowledge. Most pupils could describe the locations of the places they had studied and describe the locations of continents and oceans. In many schools, pupils knew what made a good description of location. They could use compass directions and lines of latitude. However, many pupils also reverted to 'above' and 'below' for north and south or struggled to differentiate between describing a place and describing a location.

35. Place knowledge was often an area of weakness. Pupils struggled to give more than a list of disconnected facts about a place they had studied and could not answer questions about the place using what they had learned. Pupils' knowledge about places also often lacked nuance. They would describe places as 'poor and dirty' and make other sweeping generalisations about the places they had studied. This was often a reflection of how those places had been taught, but this was not always the case. Sometimes pupils talked about learning geography from television programmes or from their parents. In some cases, this included misconceptions about places. It was clear that these misconceptions had not been picked up and addressed in school.

36. Pupils' procedural knowledge, and their fluency or skill in using it, was very varied. In schools where leaders had planned how pupils would make progress in learning these geographical skills, pupils were able to demonstrate their competence. For example, some pupils could explain why geographers use different ways of presenting data, or how to use maps in different ways. However, in many schools, pupils had very little knowledge of this aspect of the subject. This was often because they were introduced to something once, but then given no time to practise it again.

Misconceptions

Summary of the research review relevant to the dangers of misconceptions

The role of the teacher is to tackle misconceptions (or errors) so that pupils can properly understand the phenomena that they are studying. To do so, it is essential that teachers' knowledge is secure. Understanding pupils' misconceptions, however ill-conceived they may be, is useful in establishing how best to teach pupils to correct errors in their thinking.

37. Pupils had often learned misconceptions about geography. This was a problem for 2 main reasons. The first is that it affected the way pupils saw the world and its people. Some pupils had misconceptions that an entire continent was one poor country, or that certain urban areas, and the people in them, were 'dirty'. A second problem is that some misconceptions make it difficult to learn new things. For example, some pupils believed that rivers started at the sea, which affected their understanding of the way rivers change from source to mouth. Others believed that it is dry on the equator, which affected their understanding of biomes and pressure systems.

38. In many schools, there were occasions when misconceptions were passed on to pupils by their teachers. Sometimes this was because of the teacher's own lack of subject knowledge; at other times, it was because the teacher was not aware of the implications of what they were saying. Some of these misconceptions were procedural, such as using 'above' to mean north. Others were about attitudes, such as talking about everyone in a particular city being 'dirty', as they all lived in informal settlements.

39. Some teachers were very alert to misconceptions when looking at pupils' work or listening to their responses to questions. In a few schools, teachers had adapted lessons to take account of the misconceptions that pupils had revealed through formative assessment (see ['The use of assessment'](#)). For example, in one school, teachers gave the pupils quizzes at the end of a topic. They used this information to adjust plans for the next topic to help close any gaps in knowledge. In another school, pupils completed a short task on using 6-figure grid references. The teacher used this to identify why pupils were struggling and responded to it in the next lesson.

40. One frustration expressed by some teachers was the difficulty in knowing what misconceptions were likely in geography. While more experienced teachers could draw on things that had arisen in previous years, early career teachers often did not know what misconceptions to plan for.

41. Some leaders were very aware of possible misconceptions and had taken them

into account when planning the curriculum. In schools where this was done well, it included identifying likely misconceptions on the schemes of work and tackling them directly in lesson plans.

Pedagogy

Summary of the research review relevant to pedagogy

In high-quality geography education, teachers are clear about the rationale for the teaching approaches they adopt and why they are successful. Teachers think carefully about how pupils can learn geographical content most effectively so that they are able to reach ambitious curriculum goals.

42. Schools used a variety of teaching methods, but there were many commonalities. In most schools, lessons started by reviewing what had been taught previously. There was then usually some form of teacher input, sometimes supported by resources such as video clips, text extracts, or geographical data in the forms of maps, pictures and graphs. Teachers often explained this to the class and asked questions. Pupils were then usually given a task to complete based on the information that had been presented.

43. In some schools, where practice was strongest, the task that pupils went on to do was geographical in nature; they were answering geographical questions. However, in other schools, the task focused more on creating something, such as a story or diary entry. In these cases, the geography was often lost in the structure of the task. For example, in one school, pupils writing a story about journeying down a river focused on what people in the boat were doing, rather than on the changes that took place to the river, which was intended to be the focus of the lesson.

44. In some schools, the balance between pupils being introduced to new information and then doing something with the information was not effective. At one extreme, pupils would be given, or left to find for themselves, a lot of information about an issue, and then had no time to do anything with it. At the other extreme, pupils were asked to complete a task without having been taught the knowledge they needed first. For example, in some lessons, pupils were asked to research a place and put together a presentation about it. However, they did not know enough about the place to make sense of what they were reading and could not differentiate

between relevant and irrelevant information. In both cases, this led to a shallow appreciation of the subject.

45. In most schools, teachers felt confident in teaching geography. This was often because they were given teaching resources by the subject lead, and these resources included detailed teaching notes to help with their explanations. In other schools, this information was provided by commercial schemes that leaders had purchased. Teachers also valued opportunities for joint planning. Many teachers said that they spoke to their peers if they believed they would struggle to explain a geographical concept. This was usually their main source of support for teaching geography.

46. In some schools, there were weaknesses in teachers' explanations. In most cases, this was because the teacher had not identified the component knowledge that pupils would need before they could make sense of what was being explained. For example, in one school, pupils were taught about the impact of tropical storms, when they did not have a firm grasp of what one was. As a result, the pupils were left confused. At other times, the teacher's explanation focused on how to complete a task when the pupils did not have the subject knowledge to complete it well.

47. In most schools, leaders and teachers recognised that pupils get better at geography by building on what they already know. Pupils were often asked to recall previous learning, for example in the form of a quiz or a short task, at the start of a lesson. In schools that did this well, teachers used this previous learning in the lesson and referred to it directly. In other schools, however, the rationale for the quiz was not clear.

48. In a minority of schools, leaders had thought carefully about how to teach geography in a distinctive way. At its best, this involved pupils being taught the processes of geographical enquiry. They were introduced to geographical questions, and presented with data (in its widest sense, including images, maps and people's testimonies as well as graphs and charts). They then used this data to reach conclusions. However, in some schools, enquiry meant that pupils would find things out for themselves. This usually resulted in pupils searching on the internet for information about a place, and then copying what they had found into a table or other document. Very little was then done with what they had found, and their knowledge of geography was weaker than that of pupils in schools where a different approach was taken.

Assessment

The use of assessment

Summary of the research review relevant to the use of assessment

Class teachers should use assessments that are designed to check that the intended curriculum has been covered and that identify how secure pupils' knowledge is. Research has found that this kind of assessment flags any areas that may need further teaching and highlights any misconceptions that pupils have. Equally, it identifies aspects that pupils quickly grasp.

49. Summative assessment was rarely seen in geography. When it did take place, it usually involved the subject leader, or a commercial scheme, identifying what pupils should know and be able to do and turning this into statements. Teachers were then asked to say whether pupils knew or could do these things. However, the statements were often unclear about precisely what pupils needed to know. For example, one statement read, 'They can explain how landforms on a river are created', without saying which landforms or the depth of explanation that was required. Teachers were unable to make any meaningful judgements about whether pupils had learned the curriculum as intended, because the intention was not well defined.

50. When teachers were asked to make a summative judgement about what a pupil knew or could do, they often based it on work in the pupil's books from throughout the term. However, this work was often heavily supported and did not accurately show what the pupil could do or what they knew. Many teachers also tried to base their judgements on pupils' contributions to class discussions over the term. However, they often acknowledged that judgements based on these were inaccurate.

51. Formative assessment was used much more widely. Leaders in most schools said that teachers knew what pupils had and had not learned, because they were constantly checking for this in lessons. In many cases, this was true. Teachers often used questioning, quizzes and exit tickets (a very short task at the end of the lesson that is collected and checked by the teacher) to check what pupils knew.

52. In some schools, leaders' assertions about how learning was assessed did not

match what was happening in the classroom. Questioning in class often relied on pupils volunteering an answer. The understanding of the rest of the class was not checked. Leaders sometime asserted that learning would be checked through quizzes. However, in many of these cases the quizzes could not effectively check on this because leaders were not clear on what should have been learned.

53. In some schools, teachers had thought carefully about the mix of tasks that pupils would complete and how to use these to check what pupils had learned. Where practice was strongest, this involved both short responses, to check pupils' component knowledge, and longer tasks that allowed them to apply what they had learned to answer geographical questions. In some schools, assessment only focused on either short questions, which did not allow teachers to see whether pupils could apply the knowledge, or longer questions, which did not identify specific gaps.

54. One strength seen in many schools was in the response to assessment. When teachers identified gaps in learning, they adjusted their plans for future lessons so that pupils could work on those things further. In most cases, the teacher set a starter task that focused on correcting previous mistakes or misconceptions. This was more likely to happen in schools that had sufficient curriculum time for geography.

55. Leaders sometimes said that they adjusted curriculum plans for future years based on what assessment was telling them. However, this rarely happened in practice.

Subject-specific feedback

Summary of the research review relevant to feedback

In a systematic review of assessment in geography education, formative assessment (or assessment for learning) was found to have a significant impact on pupils' outcomes, their motivation and their autonomy in learning. Students who understood assessment criteria – focusing on the knowledge to be drawn on – were better at explaining what 'quality' meant and could interpret teachers' feedback to improve their scores.

56. Pupils rarely received subject-specific feedback. When teachers gave feedback, it was almost always on presentation or literacy. Verbal feedback was the most common form of feedback, but this was still rare. Pupils were often praised for answers even when the answer was incorrect. Sometimes they were told that an answer was wrong without any further explanation of why it was wrong.

57. In schools where feedback was better used, pupils were given models of high-quality answers and asked to compare them with their own work so that they could make corrections. At other times, pupils were asked to comment on a verbal answer given by another pupil and to say why it was a good answer or how it could be improved. When this worked, it was because the pupils had enough subject knowledge to reflect on the answer. Sometimes, teachers challenged the pupils' answers. They asked, 'Why is that not a good geographical answer?' Again, where this was successful, pupils had been taught what makes a good geographical answer and why.

58. In these cases, where feedback was stronger, pupils were more confident about what makes a good answer in geography. They also had a stronger sense of what it means to get better at geography and what they needed to do to improve. However, this was rare.

Leadership and resources

Curriculum time

Summary of the research review relevant to time spent on geography

Pupils need to learn a broad range of geographical knowledge. It is important that enough time is allocated to geography to allow them to gain this knowledge. A school that does not allocate enough time is likely to be narrowing the curriculum.

59. As discussed above, the amount of curriculum time dedicated to geography varied enormously. A small number of schools taught geography for only half the year and for only one hour a week, amounting to around 18 hours a year. Other

schools taught geography every week of the year, and for 2 hours a week, amounting to around 72 hours a year.

60. There was a relationship between the amount of time pupils spent studying geography and the quality of the curriculum they were taught, especially at both the extreme ends of time spent. However, more time did not always result in a better curriculum. Some schools had increased the amount of time pupils spent studying the subject, but they had not planned how this time would be used. As a result, teachers simply spent longer on activities that pupils would have completed anyway, and there was no appreciable impact on learning.

61. In a few schools, leaders dramatically overestimated the amount of geography that was being taught. This happened in schools where geography was taught as part of a larger cross-curricular 'topic' area. Here, history usually dominated the curriculum. Geography was used to provide little more than the location where events took place.

62. In most schools, geography was taught in what were recognisably distinct geography lessons. Here, where practice was particularly strong, teachers referred to other subjects and what their class had learned in them. They encouraged pupils to make links to this learning. Many leaders talked about how they planned this into the curriculum, but it was rare to see more than the occasional verbal reference to these other subjects. Pupils did not then use that wider prior knowledge in their work.

63. In some schools, a long time elapsed between geography topics. Leaders did not consider how pupils would retain what they had been taught over this time. This was, in part, because each topic was viewed in isolation. Pupils were rarely expected to recall and build on what they had learned in previous topics.

Resources

Summary of the research review relevant to selecting resources

Access to high-quality, up-to-date resources is important in implementing the geography curriculum. The national curriculum sets out some resources that pupils should become more proficient in using through their schooling. These include different types of maps, including topographical as well as topological maps, maps at various scales, and both digital maps and maps in hard copy.

They also include atlases, globes, aerial and satellite imagery, and GIS.

64. Subject leaders in almost all schools said that they had the resources they needed to teach geography well. However, many leaders were not aware of what other resources might be available to help pupils learn geography. For example, leaders did not know what equipment might support with teaching pupils to carry out fieldwork. They were unaware of digital packages that would have helped them to teach GIS if they chose to do so in this phase. Physical copies of maps were rarely used in lessons unless they were being used to map skills. These maps, and skills, were rarely applied to other parts of the curriculum.

65. We did not see textbooks in any of the schools visited. Instead, leaders and individual teachers gathered learning materials from a range of online sources. Some of these were from commercial packages and websites, but others were shared on social media or with colleagues in other schools. Occasionally there were central resources shared between schools in a multi-academy trust, but this was rare. Teachers in many schools reported that they spent a lot of time finding the resources that they needed.

66. A few schools made effective use of digital technology to help pupils learn geography. For example, in one school pupils used GIS software to layer sets of data on to maps of different areas. This helped them to understand why tourists were attracted to some areas and not others.

67. Other schools used digital technology less effectively. This was often when pupils were asked to research a place and put together a fact file of information. However, pupils did not know what geographical questions to ask about these places, and then did not do anything with the information they had gathered. This led to them learning a series of disconnected facts about places they studied.

Supporting fieldwork

Summary of the research review relevant to how leaders support fieldwork

Sending pupils off site requires a significant investment of curriculum time. However, fieldwork is a core part of the geography curriculum, and pupils need to practise their geographical skills regularly and in different environments. For

some purposes, this is possible on the school site, which is less time consuming. For most, it involves visiting other locations.

68. Leaders in most schools spoke positively about supporting fieldwork to take place. There was a clear sense of pride in the opportunities they provided for pupils to go off site. However, as discussed above, much of what took place that was identified as 'fieldwork' could better be described as a field trip or visit.

69. There was often little practical support for fieldwork to take place. It was a welcome sign that leaders recognised the importance of fieldwork in geography. However, this did not translate into the support that teachers needed. Teachers in most schools required help to plan effective fieldwork opportunities, and this help was not provided. Teachers in many schools expressed confusion about what they were trying to achieve through fieldwork.

70. Leaders did not provide the curriculum time necessary for pupils to learn about, and learn from, the fieldwork that they did. Pupils had often learned very little from their work outside the classroom. They could remember having gone on a visit but not what that visit had taught them. This was most typical in schools where progression in fieldwork had not been considered.

Professional development

Summary of the research review relevant to professional development

If good geographical subject knowledge is a prerequisite for good teaching, then subject-specific training becomes critical. Teachers need to have the knowledge to plan and revise the geography curriculum successfully and to consider their own teaching and its impact on pupils' learning.

As geography is a dynamic subject, it is essential that teachers keep their subject knowledge up to date and engage in discussions about the nature of the subject and pedagogy.

71. Very few primary schools had access to a subject specialist. In schools where they did, this was usually provided at academy trust level. Subject leads sometimes

had an A level in geography or had been chosen as lead due to a particular interest in the subject. In most cases, the choice was based on availability rather than aptitude or preference.

72. Most schools provided very little subject-specific CPD. Schools that had made widespread changes to the curriculum often spent time explaining the changes and pointing to the resources that teachers had available. However, little thought was given to the subject knowledge that teachers would need to teach the new curriculum well.

73. In a few schools, trust-wide support was available through subject networks. When these network meetings took place, subject leaders reported that they were very helpful, especially in quality assuring their curriculum and ensuring that their curriculum provided a suitable level of challenge. They also used them as a chance to share ideas on fieldwork. In these schools, the networks had a positive impact on the curriculum.

74. Many teachers reported that CPD in other areas of teaching and learning had supported them in teaching geography. For example, some had received training on how to support pupils with SEND or on effective questioning.

75. Very few schools that were visited, and very few teachers who worked in them, were members of geography subject associations/bodies. Some leaders reported occasionally using their materials or training, but they could not point to specific examples of when they had done this.

76. Leaders identified many areas as needing subject-specific support, especially curriculum development, subject-specific pedagogy and the use of fieldwork. However, they were unlikely to go to subject associations or bodies to find this support. They were more likely to go to either external consultants or national non-subject-specific bodies.

77. Leaders who were members of subject associations and bodies reported finding them useful. This was especially true when they were redesigning their curriculum or looking at examples of strong practice in geography education.

Geography in secondary schools

The improvements in geography education in secondary schools since the previous Ofsted subject report have been significant. This is especially true in key stage 3, a

key stage which was previously highlighted as being of particular concern for this subject. In almost all the schools visited, leaders had made changes to the curriculum to ensure that knowledge was better sequenced over time, and that it built towards answering more challenging geographical questions. Another notable improvement was that geography was being taught to all pupils and teachers were increasingly knowledgeable about how to adapt lessons to meet differing needs.

Curriculum

Summary of the research review relevant to curriculum

Geography is a broad-ranging subject. Therefore, leaders have to carefully select what content to include when designing a geography curriculum, so that pupils learn about the full scope of the subject. Although the national curriculum sets out broad areas of geography that are to be taught, it does not provide details on the specific content.

Geography is a subject that incorporates as much from the natural sciences as the social sciences. Because of this, the structure of the geography curriculum is complex. However, these 2 strands rarely exist in isolation. Indeed, one of the strengths of geography is that it brings them together. Geography must have a curriculum that respects both discourses and the interplay between them.

Scope and ambition

Summary of the research review relevant to ambition

Teachers and leaders can consider the breadth of the body of knowledge that pupils should learn, how to organise the subject and the interrelationship between locational knowledge, place knowledge, knowledge of human and physical processes and geographical skills. A high-quality geography curriculum gives each form of knowledge due consideration.

78. The scope of schools' curriculums was largely dictated by the national curriculum in key stage 3 and then exam specifications in key stages 4 and 5. Every school visited, whether an academy or not, said that they intended to cover the national curriculum for geography in key stage 3. In most cases, this was through covering the substantive content of the national curriculum. Most schools did this by having distinct, usually half-termly, blocks that covered a named aspect of the subject, such as 'glaciation', 'population and urbanisation' or 'the Middle East'.

79. In schools where curriculum thinking was stronger, leaders had considered the substantive content of the national curriculum and its aims. This helped them to formulate a clearer ambition for the different topics being studied. They could plan a unit on glaciation with an aim of exploring how it changes a landscape over time and how processes of glaciation interact with those of population and urbanisation. However, in some schools the aim of each topic was less clearly defined. This was where geography became less ambitious.

80. There were 2 main limiting factors to the scope and ambition of the geography curriculum. The first was the time given to each key stage. Most schools gave 3 or 4 hours a fortnight to geography at key stage 3, and most did so over 3 years. This gave sufficient time for leaders to have planned a curriculum that was ambitious in the way it layered up knowledge, so that pupils could return to what they learned previously and consider it in different contexts.

81. In schools where time for geography was more limited, for example to 2 hours a fortnight and/or a 2-year key stage 3, the curriculum was usually less ambitious and more limited in scope. Each topic was more likely to be considered in isolation and with less clearly defined geographical goals.

82. However, a few schools with limited time in key stage 3 still created a highly ambitious curriculum. In these cases, they ensured that they built on what pupils had learned in key stage 2, rather than repeating it. They also had a very clear plan that set out how pupils' knowledge would build across key stages 3 to 5. In schools where this curriculum thinking was strongest, leaders planned how to combine different aspects of geography into one topic. For example, they built in knowledge about rocks, weathering and soils when studying glaciation and coastal environments, and then wove in knowledge about the impact that climate change was likely to have on this.

83. A second limiting factor to the scope and ambition of the geography curriculum was the way that schools approached exam specifications, particularly in key stage 4. In many schools, the exam specification had become the de facto curriculum. In the weakest examples, the school's curriculum involved little more than working

through the textbook a few pages at a time until all the content specified for the exam had been covered. This approach ignored the synoptic nature of the subject and lacked ambition in terms of developing pupils' knowledge of the discipline of geography. Leaders and teachers often said that time constraints and the amount of content to be covered led to this approach. However, in other schools, careful planning of the curriculum enabled teachers to take a more effective approach to teaching the discipline of geography. In these cases, textbooks were still often used but in a way that allowed pupils to make links between different aspects of the subject.

84. In a few schools where curriculum thinking was more developed, leaders had considered the needs of the exam specifications but then built their own curriculum around them. For example, they considered how to combine aspects of diverse topics like hot deserts, water management and then urban challenges. This helped pupils to gain a more secure knowledge of the subject and to apply what they had learned in different contexts.

85. In all schools, leaders' ambition for the geography curriculum extended to all pupils, including those with SEND. No pupils, in any of the schools visited, were regularly removed from geography lessons. All pupils could choose to study the subject as part of their GCSE course. In almost all cases, classes were mixed attainment, with everyone working towards the same objectives. However, in a minority of schools, whole-school approaches to pedagogy were leading to differentiated objectives and pupils working towards different end points (see ['Pedagogy'](#)).

Selecting what to teach

Summary of the research review relevant to selecting what to teach

Leaders need to identify both the content (substantive knowledge) to be taught and the knowledge of relationships that enable pupils to understand how ideas are connected (disciplinary knowledge). Pupils' combined appreciation of both substantive and disciplinary knowledge can be described as geographical understanding.

86. In most schools, there was a sensible balance between the different forms of geographical knowledge. In many cases, leaders had mapped out when these different forms would be taught in each topic. This approach helped them to make sure that their ambition to develop pupils' geographical understanding was realised.

It allowed pupils to layer different types of geographical knowledge as they studied a place, process or issue.

87. Although all schools claimed to follow the national curriculum, in some there were significant gaps in the curriculum compared with the scope and ambition of the national curriculum. When an aspect of the national curriculum was missing, it usually related to the locations or places specified. Some schools did not teach anything about the geography of Russia or of the Middle East. Neither did they replace it with something of similar scope and ambition. This was most likely to be the case in schools where little time was given to key stage 3 geography.

88. Some schools taught the concept of place very well. Where this happened, pupils were able to use their locational knowledge to explain some of the features of the places studied. They also considered how a range of different human and physical processes applied to the place and contrasted the place with other places that they had learned about. In these schools, leaders were very aware of the issues around presenting a 'single story' about a place, and they planned to revisit places in a range of contexts over time. For example, one school knew that they wanted to study the Nepal earthquake in key stage 4, so they ensured that they had studied the region in different contexts throughout key stage 3. As a result, pupils were aware of the multi-faceted nature of the places they studied.

89. However, place was a less well-planned aspect of the curriculum in some schools. At times, pupils did not understand location well, which resulted in them struggling to understand the processes occurring in different places. In one school, pupils did not know how the latitude of a country affected its climate, or what its neighbouring countries were. Another common issue was that places were often taught in a way that promoted very narrow knowledge of them. Some schools taught about a very large number of places but used each one to typify just one feature, aspect or phenomenon. For example, in some schools, pupils only learned about India in the context of informal housing or about Brazil in terms of deforestation. Some schools included what they described as a 'study' of a region of Africa, which only looked at issues relating to economic development across the continent.

90. Selecting places to teach proved a particular challenge for teachers at key stages 4 and 5. Many schools based these decisions on the resources available in textbooks or online. At times, this created problems. For example, one school taught about Nepal and Italy, 2 contrasting places that had experienced tectonic hazards. However, there were too many variables to be able to draw any conclusions about why the impacts of the hazards were different. Leaders had rarely ensured that the case studies they used were appropriate for the objective they had set.

91. Schools were also likely to teach about a wide range of places, using each to typify a single process or issue. Pupils therefore did not develop a geographical understanding of those places, as their knowledge of them was limited to just one factor. In a minority of schools, leaders had considered how to teach about a place several times in different contexts. Where this was done, pupils developed a more thorough sense of place.

92. At all key stages, leaders struggled to sequence geographical procedural knowledge in the curriculum and rarely did it well. Although many schools have moved away from this approach, some began key stage 3 with a topic on 'geographical skills'. One problem with this was that pupils were taught a wide range of different geographical procedural knowledge in their first term, but they did not then have the opportunity to practise using it to develop fluency in it as a skill. They struggled to carry out the procedures in the future.

93. Leaders also found it difficult to choose the procedural knowledge they needed to teach pupils. This sometimes led to procedural knowledge being included in lessons as and when individual teachers thought they could include it, but there was no overall plan to build pupils' procedural knowledge over time. In addition, as procedural knowledge had not been identified in the curriculum, it was rarely assessed (see ['Assessment'](#)).

94. In schools where procedural knowledge was selected more carefully, it was treated in a similar way to substantive knowledge in the curriculum. Leaders had considered what pupils needed to know, when best to teach it and when to return to it. They also considered when pupils would have the opportunity to practise, to become more skilled in using it.

95. GIS continued to be an area of the national curriculum that was rarely being taught in schools. When asked why GIS was not being used more widely, leaders tended to point to time constraints, a lack of access to computers and/or a lack of training. Another reason was the perceived complexity of GIS software. Where GIS software was used well, leaders focused on simple methods for pupils to plot data on a map and use different layers of data to reach conclusions about the spatial distribution of different phenomena.

Geographical concepts

Summary of the research review relevant to geographical concepts

Concepts are important in geography because they draw out the links between processes and ideas. While there is no definitive list of these concepts, the GA's curriculum framework identifies 4 commonly agreed key concepts: space, place, earth systems and environment. It also identifies 5 organising concepts: time, scale, diversity, interconnection and interpretation. [\[footnote 15\]](#) To develop their understanding of each of these concepts, pupils need to learn the range of relevant knowledge and skills. It is critical to break down the content of the curriculum into component parts (or chunks) so that pupils can first understand these in their own right. The components can then be combined so that pupils gain a fuller appreciation of geographical concepts.

96. When teachers or leaders in school discussed geographical concepts, they were rarely in the form of the key concepts or organising concepts referred to above. Instead, they were more likely to reference significant areas of substantive knowledge that may reoccur in different topics. Most commonly, these were sustainability, migration and climate change. Even where this was the case, these were not being used to shape the curriculum or to help pupils develop a greater knowledge of the subject.

97. Geographical concepts, as they would be understood in the literature on the subject, were not a feature of the curriculum planning in any schools visited. While it is not necessary for pupils to know the concepts that underpin geography, these concepts would have helped those responsible for curriculum planning to consider how to approach the teaching of substantive and procedural knowledge. For example, the national curriculum specifies 'economic activity' as an area for study, but not what to study about economic activity. By considering key concepts (such as environment) and organising concepts (such as interconnection), a leader might decide to focus on how economic activity in an area that is affected by the physical environment and how that environment is in turn affected by the economic activities. This would then have helped to ensure that the study of the topic was geographical in nature.

98. Because some leaders did not have a clear view of geographical concepts, they struggled to identify the core knowledge that they wanted pupils to learn. However, in many other schools, this identification of concepts has been a developing area of strength. In schools where leaders were able to identify core knowledge, it was usually because each topic had a clear geographical question at its heart that pupils were gaining the knowledge to answer. Leaders could then decide on the

substantive and procedural knowledge that pupils would need in order to answer it.

99. In some schools, a lack of understanding of geographical concepts resulted in the questions that were used to underpin the curriculum lacking in rigour or not matching what was being taught in classrooms. This usually happened when the question was added to an existing topic, rather than the topic being planned around the question or questions.

Sequencing the curriculum

Summary of the research review relevant to sequencing

Sequencing geographical content is complex. When considering the curriculum as the progression model, leaders need to identify precisely what pupils need to know and to sequence it clearly. There needs to be a clear progression 'map' for each subject.

100. In most schools, leaders had sequenced the key stage 3 curriculum. Leaders had considered the order in which pupils would be taught different topics and how they would go on to build on what they had learned. The largely cumulative, rather than hierarchical, structure of geography meant that there was no common approach to this sequencing, and each curriculum plan had its own rationale.

101. Most schools drew on the synoptic nature of geography to create an approach to the key stage 3 curriculum whereby pupils layered up knowledge so that it became more complex over time. This approach to curriculum thinking was relatively new in many of the schools visited but was already evident in planning and practice.

102. Most schools had given less thought to sequencing in the key stage 4 and, at times, key stage 5 curriculums. In these schools, decisions about sequencing were often based on exam specifications. In some schools, leaders decided simply to work through the specification in the order in which topics were presented, or to cover everything needed for one exam paper before moving on to the next. Occasionally, leaders decided to alternate between human and physical topics. In both these cases, leaders had not planned how content could be sequenced in a way that enabled pupils to develop more complex knowledge over time.

103. Leaders and teachers rarely considered how pupils' knowledge could build between topics in key stage 4. They often expressed a belief that this approach was discouraged by the way the exams are structured. As a result, the curriculum in key stage 3 was often more ambitious than the curriculum in key stage 4. This left pupils unprepared for the more synoptic nature of the key stage 5 curriculum, or for higher education.

104. Across the key stages, the sequencing of procedural knowledge and fieldwork was particularly underdeveloped. Leaders had rarely planned when they would introduce or return to different geographical skills. They did not consider why some procedural knowledge should be taught before other procedural knowledge, even though procedural knowledge is more hierarchical in nature than substantive knowledge. Likewise, leaders rarely considered when pupils should carry out fieldwork or how it would become more complex over time.

Disciplinary knowledge

Summary of the research review relevant to disciplinary knowledge

Teachers can develop pupils' disciplinary knowledge not as a separate topic but as pupils learn more about the substantive content of the geography curriculum. Disciplinary knowledge should be organised in the curriculum so that pupils learn how geographers question and explain the world. Sometimes this is described as 'thinking like a geographer'.

105. We saw a great deal of variety in how much thought leaders had given to disciplinary knowledge in their curriculum. In schools where this was strongest, pupils were taught explicitly about how geographical knowledge is gained and how what we know has changed over time. For example, in one school pupils were regularly reminded of how developments in technology, such as the use of satellite imagery, were changing what we thought we knew about earth systems.

106. Schools often approached disciplinary knowledge through the use of geographical models. Where disciplinary thinking was clearest, pupils were taught not only what these models are but how they were formed and what their limitations are. However, too often, models such as the Burgess model or the demographic transition model were presented uncritically. This tended to happen in schools where

leaders treated the exam specification as the curriculum and did not have the time or desire to go beyond this.

107. In a few schools, teachers used geographical enquiry well to help develop pupils' disciplinary knowledge. Pupils were taught how geographers identify questions, collect, present and analyse data, and then reach and evaluate their conclusions. However, this was rare. In most schools, geographical enquiry was either ignored completely or mistaken for asking pupils to research topics themselves (see ['Pedagogy'](#)).

The use of fieldwork

Summary of the research review relevant to planning fieldwork

Through observing, collecting data for themselves, analysing it and describing their findings, pupils learn how to view and record the environment around them. One benefit of this is that they become immersed in relevant thinking, and so key geographical knowledge sticks in their memory. Fieldwork also provides opportunities to draw together different forms of geographical knowledge. To be able to explain what they have observed, pupils must draw on their knowledge of human and physical processes, as well as knowledge about location.

108. In most schools, fieldwork stopped completely during the COVID-19 pandemic. In part, this was because exam boards removed the requirement to carry out fieldwork, as well as because of restrictions on movement. However, it is notable that, although the opportunities to carry out fieldwork had to be curtailed, the opportunities to learn about fieldwork could have continued. In almost all cases it did not. Some leaders said that fieldwork had to be removed, and in some cases was still absent, so that the school could focus on helping pupils to catch up on any gaps in learning in the classroom.

109. While it is clear that the amount of fieldwork was reduced, it was also clear that in most schools very little fieldwork was done before the COVID-19 pandemic beyond that needed to fulfil the requirements of the exam boards. Pupils may have gone out on visits at key stage 3, but they did very little fieldwork during these visits. Many pupils did not learn how to collect geographical data. Those who did often did not do anything meaningful with the data when back in the classroom. In a minority of

schools, fieldwork at key stage 3 was, and continues to be, completely absent.

110. In most schools, leaders had done very little curriculum thinking about fieldwork. They had not decided what they wanted fieldwork to achieve and therefore could not plan for how best to achieve it. Fieldwork was rarely taught as part of the wider geography curriculum, and opportunities to carry out fieldwork either on the school site or at home were rarely taken.

111. In a minority of schools, there was a clear curriculum for fieldwork. Leaders approached fieldwork alongside other aspects of procedural knowledge, so that pupils had frequent opportunities to collect and present data and to analyse it. These opportunities were not limited to occasions when pupils were taken out of the school site.

Impact

What pupils know and remember

Summary of the research review relevant to what pupils know and remember

To ensure that information moves from pupils' working memory to long-term memory, content can be broken into small chunks of material. This reduces cognitive load and gives pupils the opportunity to connect related ideas. As a result, pupils become more fluent and learn more. It also strengthens the schema that pupils are building, as they see how new knowledge relates to what they have already learned.

112. What pupils had learned reflected the school's curriculum. At times, this meant that younger pupils had more subject knowledge than older pupils, as the curriculum had recently been improved, and younger pupils were benefiting from more ambitious or rigorous approaches to teaching.

113. The impact of the curriculum on pupils' location knowledge was very varied. In schools where pupils had a secure knowledge of location, and where they could

describe locations accurately, this had been explicitly taught as part of the curriculum. These pupils had been taught, and knew, what made a good description of location, and could use this to locate places in the world. In schools where the curriculum for location was weaker, pupils struggled to locate even the places they were currently studying.

114. Pupils' knowledge of places was strong in some schools. In these schools, pupils could demonstrate a nuanced appreciation of the places they had studied. They connected their knowledge of places to their knowledge of geographical processes and their knowledge of location. However, in many schools where pupils' knowledge of places was weaker, pupils had learned a disconnected list of facts about a place. They were not able to connect information or to answer wider questions about those places.

115. Pupils' knowledge of geographical processes and themes was often strong. They understood the complexity of contemporary issues, such as climate change. They could approach their knowledge through different geographical lenses, such as economic, social and environmental issues. However, in some schools, pupils' knowledge was weaker in this area. This was often where the curriculum was less well sequenced and where pupils had not had opportunities to revisit and build on what they had already learned.

116. Procedural knowledge was the area where there was most variation. In most schools where this was strong, pupils had been taught procedural knowledge in the context of different places or geographical processes. For example, they had studied map skills when looking at rivers, or created and analysed scatter graphs when studying development indicators. When procedural knowledge had been studied separately, pupils rarely had the chance to develop the skill by practising it to fluency, and so they did not remember it.

Misconceptions

Summary of the research review relevant to the dangers of misconceptions

The role of the teacher is to tackle misconceptions (or errors) so that pupils can properly understand the phenomena that they are studying. To do so, it is essential that teachers' knowledge is secure. Understanding pupils' misconceptions, however ill-conceived they may be, is useful in establishing how

best to teach pupils to correct errors in their thinking.

117. When planning the curriculum, many schools had identified misconceptions that pupils were likely to have. This helped non-specialists and less experienced teachers to identify and address them. In some schools, especially where this support was missing, these teachers struggled to do so and, as a result, pupils retained misconceptions.

118. Teachers often used formative assessments well to identify and then address pupils' misconceptions. For example, they used hinge questions during lessons, or in activities at the end of lessons, to inform their planning for the next lesson. Hinge questions are designed to check whether the class is ready to move on or whether something needs to be retaught.

119. The most frequent misconceptions that pupils had related to places and the people who live in them. This was most common in schools where leaders had not considered the dangers of teaching single stories about places in their curriculum. Pupils also often had misconceptions about:

- tectonic processes (the causes of earthquakes, volcanoes and the movement of plates)
- climate change – For example, they often mentioned the hole in the ozone layer as the cause of human-induced climate change
- weather – This was particularly in relation to high- and low-pressure systems

Pedagogy

Summary of the research review relevant to pedagogy

In high-quality geography education, teachers are clear about the rationale for the teaching approaches they adopt and why they are successful. Teachers think carefully about how pupils can learn geographical content most effectively so that they are able to reach ambitious curriculum goals.

120. In most schools, specialist teachers had the subject knowledge they needed to explain geographical ideas with confidence, ask effective questions and pick up on

and challenge misconceptions. In almost all lessons, teachers were enthusiastic about the subject they were teaching. They could support their explanations with examples and anecdotes to bring the content to life and to help pupils learn the identified core knowledge for that lesson.

121. It was common for non-specialists to teach geography. This was especially true in key stage 3, and sometimes happened in key stage 4. At times, these non-specialist teachers lacked the knowledge to teach geography effectively. They sometimes failed to identify or address pupils' misconceptions or could not provide answers to pupils' questions. The same was sometimes true of less experienced specialist teachers.

122. Some leaders provided very effective support for non-specialist and inexperienced teachers. They sometimes did this through centrally planned lesson resources, which included detailed notes to help teachers with subject knowledge. This was especially effective when it helped to identify misconceptions that were likely to arise.

123. Although there were some differences between schools' approaches to lessons, they also had some features in common. Most lessons started with some sort of retrieval practice. This was followed by new information, mainly from the teacher and often supported by video clips, data and texts. This was usually followed by a combination of discussion and independent work based on the new material.

124. Teachers used some form of retrieval practice in almost all lessons. Often this took the form of a quiz at the start of the lesson, but increasingly teachers were looking to make retrieval of existing knowledge a feature throughout lessons, so that they could make connections to other topics explicit. This was most effective when curriculum plans identified how component knowledge in one topic would be used in another topic.

125. In some lessons, teachers did not allow enough time for pupils to apply what they had been taught. Pupils were given a large amount of information, but they did not then do anything with it to help them remember or understand it. This was most likely to occur in key stage 4 lessons. At this key stage, many teachers and leaders expressed concerns about the amount of content in the exam specifications that they needed to cover. This led to a pedagogy built around coverage rather than around learning.

126. Some lessons were more distinctly geographical than others. In schools where practice was strongest, pupils were given authentic geographical data and taught how to use it to answer geographical questions. This was more likely to happen in

schools where there was a stronger geography curriculum and more thought was given to geographical concepts.

127. In a minority of lessons, pupils were expected to answer questions without having been taught anything about the subject first, drawing on their own opinions or the opinions of those near them. Very occasionally, pupils were asked to find information relating to a topic or place for themselves online. This was rarely successful, as the pupils did not know enough about the topic to select relevant information or to put it together in a meaningful way. However, these approaches to teaching were very rare.

128. In most lessons, teachers asked questions of pupils. These were often well planned and developed through further probing of pupils' answers.

Assessment

The use of assessment

Summary of the research review relevant to the use of assessment

Class teachers should use assessments that are designed to check that the intended curriculum has been covered and that identify how secure pupils' knowledge is. Research has found that this kind of assessment flags any areas that may need further teaching and highlights any misconceptions that pupils have. Equally, it identifies aspects that pupils quickly grasp.

129. In most schools, teachers used formative assessment well throughout lessons. They asked well-planned questions that helped them to identify misconceptions and check for understanding. When issues were uncovered, they paused the lesson and retaught material. This was made easier when the curriculum identified likely misconceptions and the core component knowledge that pupils must secure before moving on.

130. In a few schools, where formative assessment was weaker, teachers either did not check for understanding throughout the lesson or they carried on regardless of

what these checks revealed. This was most likely to occur when the lessons were taught by non-specialists who were not adequately supported. It was also more likely in schools where time for geography was limited, and the focus was on covering content rather than learning it.

131. In most schools, summative assessments were well designed. Where practice was strongest, usually in key stage 3, assessments had a mix of shorter questions to check that component knowledge had been learned and then longer tasks in which pupils needed to apply this knowledge. Increasingly, schools were moving away from attempting to use this data to provide a grade or to say whether pupils were on track to meet a certain grade. In all schools, key stage 4 and 5 assessments made use of past exam papers. This usually resulted in the teacher estimating a GCSE or A-level grade. However, given how grade boundaries are decided, it is unlikely that these are very accurate. Teachers and leaders rarely used these summative judgements in any meaningful way.

132. Summative assessment of procedural knowledge, including of fieldwork, was noticeably weaker and often entirely absent. These were also the areas of weakness most often seen in curriculum design.

133. In some schools, where summative assessment was weaker, assessments bore little relation to what had been taught. Assessment criteria was ill defined and did not precisely specify the geography that pupils were expected to know or to be able to use.

Subject-specific feedback

Summary of the research review relevant to feedback

In a systematic review of assessment in geography education, formative assessment (or assessment for learning) was found to have a significant impact on pupils' outcomes, their motivation and their autonomy in learning. Students who understood assessment criteria – focusing on the knowledge to be drawn on – were better at explaining what 'quality' meant and could interpret teachers' feedback to improve their scores.

134. In most schools, pupils were given subject-specific feedback on their work. On

many occasions, they were then given opportunities to use this feedback to improve their work. Where practice was strongest, pupils applied this feedback not just to these pieces of work but to other tasks in the future. This allowed them to see the wider implications of the feedback they had received for future activities.

135. In a few schools, feedback from short assessments (such as quizzes) was a feature of every lesson as part of a whole-school or departmental policy. This feedback usually picked up on information gathered from some form of activity in the previous lesson. It was sometimes aided by technology to quickly gather responses to a series of questions. Pupils and teachers alike valued this rapid, usually whole-class and verbal, feedback. Where these approaches were used, pupils were less likely to have misconceptions about the subject.

136. In some schools, school or departmental policies on feedback were not followed consistently. In a few schools, we saw very little feedback, including verbal feedback during lessons. Where feedback was given, it did not help pupils to improve their work in the future or did not address misconceptions or gaps in their knowledge. This was most likely to happen when feedback was generic in nature. In such cases, the same comments could sometimes be seen throughout a pupil's book, but there was no evidence of these having had an impact.

137. Teachers and leaders usually used feedback from assessments well. In many schools, teachers used assessment information to identify material that needed to be retaught. Some schools made changes to the curriculum as a result of what assessment data was telling them.

138. In a few schools, assessment provided no information to teachers or leaders, or, if there was information from assessment, the information was not used. This sometimes occurred even with high-quality assessments, but it was more likely to happen when the assessments were not effective. When curriculum time was limited, assessment was less likely to lead to responsive teaching.

Leadership and resources

Curriculum time and staffing

Summary of the research review relevant to time spent on geography

Leaders' and governors' decisions about the curriculum are a significant factor in the way it is designed and implemented at subject level. The historical low status of the subject and the different calls on curriculum time can limit pupils' exposure to geography.

Secondary schools are using an increasing number of non-specialist teachers to teach geography. It is reported that the proportion of GCSE hours taught by subject specialists is approximately 80% for the least deprived schools and 70% for the most deprived schools.

139. Time given to geography in key stage 3 varied from 1 to 2 hours a week. In most schools, key stage 3 lasted for 3 years, and many had recently moved to this from a 2-year key stage 3. At GCSE, most pupils had 3 hours of geography a week, while a few had 2.5 hours and some 3.5 hours. At A level, all had 4 to 5 hours a week. Those schools at the lower end of the range in each key stage struggled to meet the aims of their curriculum.

140. All schools had distinct geography lessons on the timetable. No schools took a cross-curricular approach to teaching geography.

141. In some cases where schools had moved to a 3-year key stage 3, leaders had not given enough thought to how best to use the extra time, or how best to make up for any time lost in key stage 4. Subject leaders were rarely given sufficient time to replan their curriculum.

142. In some schools with what was called a 2-year key stage 4, pupils started learning content for the GCSE exam part way through Year 9. Leaders had rarely considered whether the benefits of a well-planned key stage 3 curriculum outweighed the advantages of covering GCSE content earlier. Many complained that they would need to re-cover much of what was taught in Year 9, as pupils would have forgotten it by the time they came to the exams.

143. In most schools, the majority of geography lessons were taught by geography specialists. However, in most schools, some geography lessons were taught by non-specialists. This happened most often in key stage 3, but included some GCSE classes. In a few schools, most geography lessons were taught by non-specialists.

144. The impact of having non-specialist teachers depended on the level of support offered to them. In some schools, multi-academy trusts provided centralised support in the form of CPD and lesson resources. However, in some schools there was little capacity to support non-specialists, and they were not well prepared to use

any centrally produced lesson resources.

145. In many schools, subject leads had very little time for quality assurance activities. Instead, quality assurance was often carried out by trust leads or senior leaders. This usually took the form of lesson visits and book scrutiny. Some quality assurance was also done through analysing assessment data. In some schools, leaders other than subject leads were not as well placed to identify issues. This led to problems being missed by those carrying out quality assurance, usually around the scope and ambition of the curriculum. Sometimes issues were identified by one level of leadership, but this was not communicated well to subject leads and so was not acted on.

Resources

Summary of the research review relevant to selecting resources

Access to high-quality, up-to-date resources is important in implementing the geography curriculum. The national curriculum sets out some resources that pupils should become more proficient in using through their schooling. These include different types of maps, including topographical as well as topological maps, maps at various scales, and both digital and hard copy maps. They also include atlases, globes, aerial and satellite imagery, and GIS.

146. In almost all schools, there was no issue with accessing most resources that teachers needed. Teachers had copies of up-to-date atlases and textbooks and could access other materials they needed digitally. At times, it was difficult to access appropriate IT facilities for GIS, but this was not the main barrier to using it (see [‘Professional development’](#)).

147. Schools were increasingly using digital technology to support their teaching of geography. This was especially effective for creating short quiz-style assessments, where feedback could be automated and data gathered instantly. This was often used well to inform future planning.

148. In a few schools, teachers were finding and using out-of-date resources such as photographs and data. Some of these presented overly simplistic, inaccurate and/or outdated views of the places being studied.

Supporting fieldwork

Summary of the research review relevant to how leaders support fieldwork

Sending pupils off site requires a significant investment of curriculum time. However, fieldwork is a core part of the geography curriculum, and pupils need to practise their geographical skills regularly and in different environments. For some purposes, this is possible on the school site, which is less time consuming. For most, it involves visiting other locations.

149. Leaders in most schools were very supportive of pupils going out of school on visits. They recognised that fieldwork is a core part of the subject and ensured that cost and time were not barriers.

150. In a few schools, while leaders spoke positively about fieldwork, their policies and practices created barriers to effective fieldwork taking place. These included the cost of cover being passed on to pupils, making the trip too expensive or restricting when fieldwork could be done.

151. In most schools, the lack of support for, or awareness of, effective CPD on carrying out fieldwork was the main barrier to improving it (see [‘Professional development’](#)).

Professional development

Summary of the research review relevant to professional development

If good geographical subject knowledge is a prerequisite for good teaching, then subject-specific training becomes critical. Teachers need to have the knowledge to plan and revise the geography curriculum successfully and to consider their own teaching and its impact on pupils’ learning.

As geography is a dynamic subject, it is essential that teachers keep their subject knowledge up to date and engage in discussions about the nature of the subject and pedagogy.

152. Many schools offered very little subject-specific CPD. This was especially true of CPD aimed at improving or updating teachers' subject knowledge. Where there was subject-specific CPD, this was usually organised and provided by the subject lead during departmental meetings. However, there was little wider support from leaders in providing or quality assuring this CPD.

153. Schools that were part of a multi-academy trust tended to offer more subject-specific CPD. Some of this CPD took the form of trust-wide subject meetings. Some schools had a planned programme of subject-specific CPD, designed to meet needs identified through quality assurance.

154. In some cases, subject-specific CPD was dominated by preparing for external exams. This often involved reading moderators' reports, looking at exam analysis or attending CPD provided by exam boards. This form of CPD was the only example of external CPD encountered during our research visits.

155. The 2 areas where teachers reported needing more CPD were in planning fieldwork and using GIS. Lack of professional knowledge of these areas was a major barrier to improvement.

156. In almost all schools, leaders and teachers talked positively about the CPD offered on more generic aspects of teaching and learning. They were especially positive about the impact of CPD when they had been given time to adapt what they had learned for their subject. Much of this CPD had focused on adaptive teaching approaches, particularly for pupils with SEND, and approaches to teaching based on cognitive science.

157. In just under half the schools, either an individual or the department was a member of one or more subject associations. Some leaders found subject associations helpful for developing their own subject knowledge, especially in relation to curriculum planning and subject-specific pedagogy. A few schools used lesson resources provided by subject associations, but this was rare.

Appendix

Methodological note

This thematic report draws on findings from 50 research visits to schools in England. These visits were carried out between December 2022 and May 2023.

The research visits were carried out by His Majesty's Inspectors, as well as Ofsted inspectors with subject specialisms and experience in either the primary or secondary phase.

We made sure that the sample was broadly representative of the national picture, as defined by different characteristics, such as regional spread, Ofsted judgements, levels of deprivation, and rural and urban locations. The research visits were split evenly between primary and secondary schools and included some middle schools and all-through schools.

Inspectors gathered qualitative evidence about geography education in schools they visited by using a similar methodology to the deep dives carried out during inspection activity. The range of evidence gathered across these visits enabled us to identify common themes in geography education that are likely to be relevant in a wide range of schools.

Inspectors focused on gathering evidence that related to the following areas:

- curriculum
- pedagogy
- assessment
- school-level systems and their impact on geography education

When analysing this evidence, we drew on the conception of quality in geography education that we set out in our geography research review. This enabled us to consider how geography education in English schools relates to our best evidence-based understanding of how schools can ensure a high-quality geography education for all pupils.

-
1. R Bustin, 'What's your view? Curriculum ideologies and their impact in the geography classroom', in 'Teaching Geography', volume 42, issue 2, 2019, pages 61 to 63.[↵](#)
 2. ['What is geography?'](#), The Geographical Association (accessed 7 February 2023).[↵](#)
 3. ['Geography'](#), The Royal Geographical Society (with IBG) (accessed 1 June 2023).[↵](#)

4. [‘Research review series: Geography’](#), Ofsted, 17 June 2021 (accessed 7 February 2023).↵
5. [‘Analysis of entries and attainment in GCSE geography’](#), FFT Education Datalab, October 2019 (accessed on 7 February 2023).↵
6. [‘Geography and GCSE A ILevel results’](#), The Geographical Association (accessed 3 May 2023).↵
7. [‘Geography of geography: the evidence base’](#), The Royal Geographical Society (with IBG) (accessed 1 June 2023).↵
8. [‘Teacher labour market in England: Annual report 2022’](#), NFER (accessed 2 June 2023).↵
9. S Catling, ‘Not nearly enough geography! University provision for England’s pre-service primary teachers’, in ‘Journal of Geography in Higher Education’, volume 41, issue 3, 2017, pages 434 to 458

S Catling, R Bowles, J Halocha, F Martin and S Rawlinson, ‘The state of geography in English primary schools’, in ‘Geography’, volume 92, issue 2, 2007, pages 118 to 136.↵

10. F Martin, ‘What is geography’s place in the primary school curriculum?’, in ‘Debates in geography education’, edited by D Lambert and M Jones, 1st edition, Routledge, 2012, pages 17 to 28.↵
11. B Marsden, ‘On taking the geography out of geography education: some historical pointers’, in ‘Geography’, Volume 82(3), 1997, pages 241 to 252.↵
12. [‘Key stage 3: the wasted years’](#), Ofsted, 10 September 2015 (accessed 25 April 2023).↵
13. M Biddulph, ‘Editorial: the danger of a single story’, in Teaching geography, volume 36(2), 2011, page 45.↵
14. E Rawling, ‘A framework for the school geography curriculum’, The Geographical Association, 2023.↵
15. E Rawling, ‘A framework for the school geography curriculum’, The Geographical Association, 2023.↵

[↑ Back to top](#)

Is this page useful?

Yes

No

Report a problem with this page

Services and information

[Benefits](#)

[Births, death, marriages and care](#)

[Business and self-employed](#)

[Childcare and parenting](#)

[Citizenship and living in the UK](#)

[Crime, justice and the law](#)

[Disabled people](#)

[Driving and transport](#)

[Education and learning](#)

[Employing people](#)

[Environment and countryside](#)

[Housing and local services](#)

[Money and tax](#)

[Passports, travel and living abroad](#)

[Visas and immigration](#)

[Working, jobs and pensions](#)

Government activity

[Departments](#)

[News](#)

[Guidance and regulation](#)

[Research and statistics](#)

[Policy papers and consultations](#)

[Transparency](#)

[How government works](#)

[Get involved](#)

OGL

All content is available under the Open Government Licence v3.0, except where otherwise stated



© Crown copyright