Research and analysis

Research review series: English

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Applies to England

Contents

Print this page

Introduction

More than any other subject, English – and especially reading – gives pupils access to the rest of the curriculum and is fundamental to their educational success. This is why the introduction to the national curriculum says: 'Fluency in the English language is an essential foundation for success in all subjects'.[footnote 1]

But English is so much more than the gateway to success in other curriculum subjects. Through studying literature, pupils' eyes are opened to the human experience; they explore meaning and ambiguity as well as the beauty and power of language. English also has a strong creative and expressive dimension.

This review explores the research literature relating to English. Its purpose is to identify factors that can contribute to high-quality curriculums, pedagogy, assessment and schools' systems for managing the subject. The purpose of this review is set out more fully in the 'Principles behind Ofsted's research reviews and subject reports'.[footnote 2]

Aspects of English, particularly how to teach reading, have been the subject of much debate over many years. In this report, we have:

- set out the national context in relation to English
- summarised our review of research into factors that can affect the quality of education in English
- considered curriculum progression in English, pedagogy, assessment and the impact of school leaders' decisions on provision

The review draws on a range of sources, including our 'Education inspection framework: overview of research' and the 3 phases of our curriculum research.[footnote 3] However, it does not revisit in depth the research literature on phonics and on what pedagogical approaches to teaching phonics are most successful: these have already been summarised as part of the overview of research.

Our education inspection framework (EIF) and the research underpinning it are the lenses through which we have considered, framed and presented the research literature in this review.

We hope that, through this review, we will contribute to improving the quality of education in English, thereby raising standards in reading, writing and spoken language for all young people.

Ambition for all

The requirement for maintained schools and academies to offer a broad and balanced curriculum is set out in:

- the Education Act 2002,[footnote 4] which applies to all maintained schools
- the Academies Act 2010,[footnote 5] which applies to academies

This expectation is reflected in the national curriculum and is at the heart of the EIF. English has been a core subject of the national curriculum since the Education Reform Act of 1988.

National context

The broad headlines about the performance of pupils in English have remained constant over many years.

National checks, tests and examinations show girls outperforming boys, and pupils from disadvantaged backgrounds achieving less well than their peers. International studies in which England has participated, such as the Progress in International Reading Literacy Study (PIRLS) and the Organisation for Economic Cooperation and Development (OECD)'s Programme for International Student Assessment (PISA), show a similar picture.[footnote 6]

In 2018 and 2019, 74% of children achieved the early learning goal for writing at the end of the early years foundation stage (EYFS). In the same years, 77% met the early learning goal for reading. In 2019, 73% of children met the expected level of development across all the combined early learning goals for communication, language and literacy, which include reading and writing.[footnote 7]

At the end of Year 1, the phonics screening check assesses whether children can accurately decode a selection of words that include common grapheme–phoneme correspondences (GPCs): the first step in word reading. Performance overall has improved substantially since 2011, the first year of the check – by 24 percentage points.[footnote 8] These figures still show that around 3 in 10 pupils from disadvantaged backgrounds cannot decode at the minimum standard required.[footnote 9]

Since new key stage 1 assessments were introduced in 2016, the percentage of pupils reaching the expected standard for reading and writing has remained broadly stable for reading, with an upward trend for writing. In the 2019 key stage 2 national tests, 73% of pupils reached the expected standard in the reading test. However, put another way, over 1 in 4 pupils moved to secondary school having not met the expected standard of the test. This carries implications for their learning both in English and more widely across the secondary curriculum.

It is concerning that 3 in 10 pupils in 2019 did not gain even a 'standard pass' in English language at GCSE.[footnote 10] Early entry has also affected outcomes. Pupils who were entered for English literature in 2018 and then for English language in 2019 generally achieved lower grades in English language than pupils who took both subjects in 2019.[footnote 11] A recent study of GCSEs also showed that disadvantaged pupils 'were more likely to attend schools that enter pupils early and, consequently, a higher-than-average percentage (7.5%) were entered early in English'.[footnote 12] As well as potentially impacting on pupils' performance, early entry might limit the breadth of the English literature curriculum.

Over the last 10 years, the number of pupils studying A-level English has declined: in 2019, 57,912 pupils chose A-level English, compared with 84,037 in 2010.[footnote 13] The same data shows the decline was more marked for boys.

Curriculum and pedagogy

Aims of education in English

English is a complex subject that combines the disciplines of English language and literature. It is beyond the scope of this review to debate the aims of a curriculum for English. Instead, we discuss the nature of the curriculum and the pedagogy that could meet the aims of the national curriculum for English.

The review structure is designed to consider individual national curriculum aims. It draws on research that outlines the **progression** in curriculum content that best enables pupils to meet each of these aims. The review then discusses what might be the most appropriate pedagogies for learning that particular content. For example, the review considers the aim of improving reading comprehension and how comprehension becomes possible partly through acquiring and deepening vocabulary. Appropriate pedagogies for learning vocabulary are then discussed. The use of this structure avoids confusion between curriculum goals and the means of achieving and nurturing those goals. It also helps reduce repetition when discussing knowledge of language, such as

vocabulary, across each of the speaking, reading and writing modalities.

The review reflects the advice given by the expert panel on the government's last review of the national curriculum. The panel argued that 'developmental aspects and basic skills are more crucial for young children [key stage 1/2], while appropriate understanding of more differentiated subject knowledge, concepts and skills becomes more important for older pupils'.[footnote 14] Panel members developed a working definition of this subject knowledge as 'the concepts, facts, processes, language, narratives and conventions of each subject'.[footnote 15]

The implications of research into expertise bear out the usefulness of a curriculum structure that places varying emphasis on different curriculum goals as pupils gain expertise.[footnote 16] However, this review also considers the ways in which English is a unified subject across all phases of schooling. There is a separate section on early years, but the insights in the other sections are generally relevant to pupils in both primary and secondary schooling. This is because most of the principles discussed are important at primary and secondary level or are relevant to many pupils in both phases of schooling. Where it is probable that findings of the review are more relevant at primary or at secondary level, we refer to 'younger pupils' or 'older pupils', respectively. We use this wording to be clear that we do not imply there is a specific age when these findings start to apply.

The importance of foundational knowledge for spoken language, reading and writing

One distinctive feature of English teaching is that the modalities of speaking, reading and writing are not only the objects of study but also the means through which the subject is learned. Teaching activities, or pedagogies, to improve speaking, reading and writing will necessarily involve activities that use speaking, reading and writing.

There is a risk that planning for English teaching ends up focusing on using modalities (pedagogy) at the expense of identifying the foundational knowledge of language that pupils need for comprehension or communication in whatever modality they are using. When this happens, means and ends have become confused. For example, there is a body of research exploring the benefits of using discussion (dialogic talk) as a generic pedagogy.[footnote 17] Using such a pedagogy to help pupils learn any objective across curriculum subjects should not be conflated with the prior teaching of the structures of language that would allow effective communication in the first place.

Knowledge of language, which includes linguistic knowledge like vocabulary and grammar, as well as knowledge of the world for comprehension, underpins progression in spoken language, reading and writing. This insight repeatedly emerges from the evidence outlined in this review. The review will explore the important implications of this insight for curriculum design. It argues that, when planning a curriculum, teachers and leaders should prioritise progression in knowledge of language

and of its forms, usage, grammar and vocabulary. This knowledge, of the structures of language, can then be used by pupils across their spoken language, reading and writing.

A survey of teachers reported overwhelmingly that if pupils have limited vocabulary, this affects their progress across a wide range of subjects.[footnote 18] Eighty per cent of these teachers said it was 'very' or 'extremely' challenging for pupils with limited vocabulary to read national test papers. This limited vocabulary, or so called 'word gap',[footnote 19] has been an area of interest over decades. A range of research has found that this word gap exists between pupils from different socio-economic backgrounds and within different socio-economic groups.[footnote 20] The nature of this word gap is explored in the section 'The importance of high-quality spoken language'.

Pupils' expressive vocabulary (the words that they can use) and receptive vocabulary (the words that they understand) are important components of their wider language skills.[footnote 21] There is a positive correlation between a pupil's vocabulary size and their academic success.[footnote 22] Pupils' vocabulary size can act as a proxy measure for educational attainments and abilities in English as well as for general knowledge of science, history and the arts.[footnote 23]

Importantly, pupils can use the knowledge learned in the context of one modality to help them in another. For example, they can use vocabulary learned through reading when they are speaking and writing, both in school and their wider lives.

There can be a presumption that English is a 'skills-based' subject without an identifiable body of knowledge, including vocabulary, to be learned. However, evidence on the foundational importance of different forms of knowledge, cited throughout this review, challenges this presumption. For example, a review of research on the role of background knowledge in reading comprehension suggests that explicitly teaching background knowledge is foundational to increasing pupils' reading competency.[footnote 24] Furthermore, pupils need to be exposed to background knowledge in a 'specific, explicit and sequenced way'.[footnote 25] In this review, we explore the forms of knowledge that give pupils the capacity to perform skilfully in spoken language, reading and writing, including the study of literature.

The early English curriculum in schools

Summary

> This section will outline findings suggesting that, in the early years and into key stage 1, teachers need to develop children's spoken language as well as accurate word reading and spelling. They also need to teach children fluent letter formation (unjoined handwriting).

> Pupils should be taught to read using a systematic synthetic phonics programme in Reception and this should not be delayed if children are not already phonologically aware. Teaching phonics also supports the development of pupils' handwriting and spelling. Schools should identify early on any children who have not grasped the alphabetic code and intervene swiftly. Children who master the alphabetic code early on make better progress than their peers who do not. Good language development, including vocabulary, has benefits for pupils beyond their reading.

The importance of high-quality spoken language

At both primary and secondary level, the gap between those who are word-rich and those who are word-poor correlates with lasting socio-economic and health inequalities. Children with a language deficit at the age of 5 are 4 times more likely to have reading difficulties when they are adults.[footnote 26] Spoken language proficiency also has a positive effect on later economic well-being, and on happiness and mental health.[footnote 27]

Developing spoken language, including vocabulary, is essential for the academic progress of all children. This is because broad underpinning knowledge, such as of vocabulary and syntax, supports later reading success.[footnote 28] Research has also shown the positive impact of language ability, but particularly vocabulary, on GCSE outcomes in mathematics, English language and English literature.[footnote 29] Developing spoken language is especially important for those from disadvantaged backgrounds, who are the most likely to be word-poor.[footnote 30]

Developing vocabulary explicitly, especially in the early years, is therefore critically important. Without action to tackle it, the word gap grows.[footnote 31] This has been called the 'Matthew effect': that is, the word-rich get richer and the word-poor get poorer.[footnote 32] If schools work to reduce the word gap in the early years and key stage 1 well, disadvantaged children can develop their vocabulary faster.[footnote 33]

The components of reading and writing in the early years and key stage 1

The national curriculum's programmes of study for reading reflect the simple view of reading.[footnote 34] The updated version of Gough and Tunmer's original model describes reading comprehension as the product of word recognition and language comprehension.[footnote 35] The national curriculum outlines that:[footnote 36]

> " Skilled word reading involves both the speedy working out of the pronunciation of unfamiliar printed words (decoding) and the speedy recognition of familiar printed words. Underpinning both is the understanding that the letters on the page represent the sounds in spoken words. Good comprehension draws from linguistic knowledge (in particular of vocabulary and grammar) and on knowledge of the world."

The programmes of study for key stages 1 and 2 are organised to reflect these 2 aspects of reading – word reading and comprehension.[footnote 37]

The programmes of study for writing distinguish between 'transcription' and 'composition'. This reflects the approach to reading, and sees writing as its counterpart (with spelling as the counterpart of decoding). Transcription also includes handwriting.

Once children are fluent in word reading, they are able to focus on comprehending what they read.[footnote 38] Similarly, fluency in transcription frees up working memory to focus on composing writing.

Teaching word reading and transcription should begin in Reception, as part of the teaching of phonics.[footnote 39] This priority continues into key stage 1 and for older pupils who have not mastered the early stages of learning to read (and write). The Department for Education's early reading framework provides further guidance.[footnote 40]

Language comprehension and composition can be developed through a literature-rich environment,[footnote 41] for example through interactions between adults and children and by listening to, talking about and learning by heart stories, poems, rhymes and songs.

Starting phonics teaching early

A rigorous review and meta-analysis of research literature on reading by the National Reading Panel (NRP), from the United States, found it highly beneficial for phonics teaching to begin on entry to school.[footnote 42] According to the NRP analysis, systematic phonics teaching is much more effective if introduced early on rather than after American first grade at age 6. Daily systematic phonics instruction leads to a faster start in early reading and spelling.[footnote 43] Findings from cognitive neuroscience reinforce the importance of early phonics teaching. This allows children to develop efficient word-reading skills.[footnote 44] Children become primed to learn to read.

Our overview of research highlighted evidence that showed a systematic synthetic approach is particularly effective and that children need direct instruction in phonics. This is especially the case for those from lower socio-economic status backgrounds and those who are having difficulties reading.[footnote 45] Phonics represents a body of knowledge needed for successful word reading. Synthetic phonics teaches children to decode words: children look at each grapheme to say each corresponding phoneme in turn, and then to blend the phonemes to say the whole word. They are taught to encode (spell) words, by identifying the phonemes in spoken words first and then writing the graphemes that represent the phonemes.

Young children with well-developed phonemic awareness skills tend to be successful readers, while children without these skills are not.[footnote 46] Shanahan defines phonemic awareness as being about 'hearing and thinking about or manipulating the individual sounds within words'.[footnote 47]

However, phonics teaching in Reception should not be delayed if children cannot yet distinguish individual phonemes. This is because children's ability to do this will typically develop as a result of phonics teaching.[footnote 48] Exposing them to letters and the sounds they represent and teaching them about GPCs in phonics lessons help children to distinguish individual phonemes and improve their phonemic awareness.[footnote 49] Evidence from the NRP concluded that phonemic awareness instruction had a greater impact when it was taught with letters rather than without letters.[footnote 50] Children who find it difficult to distinguish between phonemes often benefit from small group or one-to-one teaching to support them to link sounds to letters.[footnote 51]

Drawing on these research findings, the Department for Education reading framework[footnote 52] states that: 'To enable children to keep up, they should be given extra practice, either in a small group or one-to-one, whether or not a specific reason has been found. The extra practice should:

- take place in a quiet place, at a regular time every day so that the children become familiar with the routine
- be a school priority, with maximum efforts made to avoid disruption or cancellation
- be provided by a well-trained adult: teacher or teaching assistant
- be consistent with the school's mainstream phonics programme
- include activities that secure the important phonic knowledge the children have not grasped.'

Decodable books

The national curriculum requires that children hear, share and discuss a wide range of high-quality books. In terms of their own reading, the national curriculum states that they should practise with decodable books. These are 'books that are consistent with their developing phonic knowledge and that do not require them to use other strategies to work out words'.[footnote 53] During story time, the books that teachers and parents read to children develop their language knowledge. These books do not need to be decodable because the children are not using them to learn to decode.

Research supports giving children daily opportunities to read words that they can decode, both in isolation and in the books they read.[footnote 54] In using decodable books to practise their reading, children learn to apply their phonic knowledge to words. If children are required to 'guess' how to read a word, then this can be a missed opportunity for them to learn and practise how to spell and read the word and thus reduce the need to guess it in the future.[footnote 55]

Research on the effectiveness of decodable texts is sparse. However, a review of research on the influence of decodable texts on reading achievement found that decodability is a 'critical characteristic' of early reading text.[footnote 56] The research reviewed suggests that decodability increases the likelihood that children will use a decoding strategy, and may also improve accuracy.[footnote 57] It seems reasonable to presume that successful use of decoding is motivating for children.

Pupils who struggle with decoding

Schools need to prioritise teaching the alphabetic code to pupils, of any age, who are not able to decode accurately or who are otherwise at risk of not learning to read.[footnote 58] Research investigating the role of phonics in predicting later reading success has shown that pupils who pass the phonics screening check by the end of Year 2 are more successful in reading comprehension at age 12 than those who do not pass the test by the end of key stage 1.[footnote 59] In primary and secondary schools, teachers and leaders need to identify quickly those pupils who are finding it hard to grasp any of the code they have been taught. Intervention is most effective when it occurs promptly.

Ongoing assessment of all children's phonic knowledge is critical to identifying pupils who need intervention. They need to be taught the alphabetic code as effectively and as swiftly as possible so that they do not fall behind their peers, and so that they have full access to the curriculum that proficient reading gives them.

Fluency

In the early stages of learning to read, it is critical that children achieve both accuracy and sufficient speed in decoding (fluency). The national curriculum says that pupils in Year 1 should be able to read words comprising the Year 1 GPCs 'accurately and speedily'.[footnote 60] Pupils who can decode accurately but cannot do so quickly will not progress towards reading confidently beyond sounding out words in texts. Fluent word reading frees up children's working memory to focus on comprehension.[footnote 61] To develop fluency, children need repeated practice.

Writing

Writing involves transcription (spelling and handwriting) and composition (articulating ideas and structuring them in speech, before writing them down).[footnote 62] Pupils need sufficient capacity in their working memory to plan, compose and review effectively. This requires transcription skills to be secure.[footnote 63] As a result, fluent transcription skills should be a critical focus for the early years and key stage 1. By the beginning of Year 1, 'not all pupils will have the spelling and handwriting skills they need to write down everything that they can compose out loud'. The national curriculum suggests using dictated sentences in Year 1 to apply and practise spelling.

Working towards written composition

In the earliest stages of writing instruction, it may be effective to teach composition and transcription separately. For example, when focusing on composition, pupils can convey their ideas orally. Teachers can model how text is an important vehicle for recording ideas, thoughts and feelings by putting pupils' ideas into writing, modelling spelling and punctuation, or showing how a writer chooses appropriate words and sentence structure to convey an idea. This allows pupils to focus their attention on composition through oral activities. Separate teaching activities can be devoted to transcription. For example, in the early stage of phonics instruction, practising letter formation or writing simple sentences dictated by the teacher can support recall of GPCs for spelling.[footnote 64]

Developing written composition is considered in more detail in the 'Writing' section of this review.

Spelling

When young children are taught phonics, they learn the alphabetic code for spelling (encoding) as well as for reading (decoding). This is why spelling and decoding have been referred to as 'reversible processes'.[footnote 65] Reading involves blending the individual sounds of a word to say the whole word, while spelling requires the writer to segment a whole word into its individual sounds (phonemes) and to identify what they are.

As well as the skill of segmenting, children need to know which graphemes can represent the separate phonemes they have identified in the word they want to spell. They also need to know how to spell what the national curriculum refers to as 'common exception words', so called because their GPCs are unusual or have not yet been taught.[footnote 66]

Knowing how to spell a word 'makes the representation of it sturdy and accessible for fluent reading'.[footnote 67] This is because spelling and reading call on the same representation – that is, the order of the letters that make up the word.

The Department for Education's non-statutory curriculum guidance for the early years, 'Development matters', suggests that teachers of Reception-age children should dictate sentences for children to write that contain only the taught letter-to-sound correspondences.[footnote 68] Similarly, the Year 1 national curriculum programme of study requires pupils to write down dictated sentences using 'the GPCs and common exception words taught so far'.[footnote 69]

Dictation gives children opportunities to practise and apply their spelling knowledge and segmenting skills, without having to compose sentences by themselves. It requires them to distinguish between the sounds they hear in order to choose the correct graphemes to represent the sounds and to form the letters correctly. They also have to understand what they are hearing to distinguish between homophones (for example, 'to'/'two' and 'meat'/'meet').

Handwriting

The national curriculum specifies that children should be taught to correctly form letters of the correct size and orientation.[footnote 70] This requires effort and attention, as well as suitable motor skills. There is evidence that repeated practice in handwriting is necessary to go beyond accuracy to fluency in letter formation.[footnote 71] There is no need to start the formal teaching of handwriting before Reception, but children at the end of the EYFS should be able to 'hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases'.[footnote 72]

The national curriculum requires children to learn unjoined handwriting before they 'start using some of the diagonal and horizontal strokes that are needed to join letters'.[footnote 73] Delaying teaching joined handwriting gives teachers and children time to focus on other aspects of the writing process, such as composition, spelling and forming letters correctly.

Research supports the idea that writing letters may be important for supporting children's early reading development, because it stimulates the areas of the brain known to underpin successful reading. A small study with 4- to 5-year-olds showed that practice in writing letters 'stroke by stroke' may be the 'gateway' through which beginning readers learn to recognise the features of each letter, as well as learning which features are not important.[footnote 74]

There is also evidence that repeated practice in handwriting, going beyond accuracy to fluency, leads to success in higher-level writing tasks.[footnote 75] Skilful handwriting has an impact on composition. According to 2 meta-analyses of research on handwriting instruction, teaching handwriting is closely associated with the quality, length and fluency of writing.[footnote 76] As these meta-analyses showed, teaching handwriting can improve writing because the pupil can spend more time planning, thinking about content and constructing the sentences.

Based on the above, high-quality English in early years/key stage 1 may have the following features:

- Vocabulary is developed explicitly to reduce the word gap in the early years, and to enable disadvantaged children to develop their vocabulary faster.
- The school prioritises daily teaching of systematic synthetic phonics from the start of the Reception Year and into key stage 1, until pupils are fluent in word reading (decoding) and transcription (spelling and handwriting).
- Daily opportunities for children to apply their knowledge of GPCs by reading 'decodable' books that support their fluency in word reading.
- Teachers focus on identifying children who are not able to decode accurately (or are otherwise at risk of not learning to read) early and prioritise teaching them to read.
- The programme of reading develops pupils' accuracy and speed.
- Children practise composition through oral activities before their transcription becomes fluent.
- Children get the practice they need to acquire fluent transcription skills (spelling and handwriting), which is the foundation for their progress in writing.
- Carefully chosen dictation activities enable pupils to practise and apply their spelling knowledge and segmenting skill to use the content they have been taught and to do so without having their working memories overloaded by composing sentences.

Spoken language

Summary

This section will outline findings that suggest that a strong command of the spoken word is a crucial outcome of English education. The benefits of spoken language extend beyond just success at school. Becoming an articulate, effective communicator forms the basis of democratic engagement within wider society.

A curriculum for spoken language depends on a range of different interrelated aspects: physical, linguistic, cognitive, and social and emotional. The discipline of rhetoric can provide pupils with insight into how spoken language is used by writers and orators. Opportunities for pupils to develop their proficiency in spoken language require explicit teaching of the knowledge, for example vocabulary, and ideas necessary for effective communication. These opportunities should be planned carefully, both in English lessons and across other subjects. The teacher has an important role in modelling competence as a speaker and listener, contributing significantly to developing pupils' spoken language.

A curriculum for spoken language

This section builds on 'The early English curriculum in schools' section of the review and applies to primary and secondary levels. Research indicates that there is a correlation between pupils' spoken language skills and their academic outcomes, social development and emotional development.[footnote 77] This suggests a link between spoken language development and pupils' broader life outcomes.[footnote 78] Therefore, spoken language is an important goal of the curriculum. Alexander outlines how talk can be undervalued because its function is considered to be primarily social, but talk in classrooms is cognitive and cultural and well as social.[footnote 79]

While it is not discussed in this section, there is a significant amount of literature on the role of spoken language as a pedagogical tool.[footnote 80] Pupils can learn to use dialogic talk, which can then be used to enable learning across the curriculum. However, there is foundational knowledge of language that pupils need for comprehension or communication in whatever modality they are using (this knowledge is explored in the bullet points below). Given the importance of spoken language, as well as a specific programme of study for English, there should be a clearly planned provision for developing pupils' spoken language across the curriculum.[footnote 81]

For pupils of all ages to use spoken language successfully, they need to make progress in interrelated aspects of language:[footnote 82]

- physical (vocal control and body language, such as making eye contact and speaking loudly and clearly)

- linguistic (knowledge of vocabulary and grammatical constructions, and use of rhetorical devices)
- cognitive (knowledge of content, organisation of ideas, and tailoring talk to a specific purpose, such as to persuade or inform). This will include pupils learning about 'exploratory talk' (to explore new ideas and come to new understandings) and 'presentational talk' (to share their thinking with others).[footnote 83] Pupils should learn how to pose questions, and use talk to narrate, explain, speculate, imagine, hypothesise, explore, include, discuss, argue, reason and justify[footnote 84]
- social and emotional (considering the needs of different listeners, responding appropriately to others and developing the confidence to share ideas with different audiences)

It is important to note that spoken language is not just about improved speech. Pupils also need to develop their ability to collaborate through conversation.[footnote 85]

A curriculum should link these elements. For example, pupils' success in using spoken language depends on their knowledge of the topic. Even when classroom talk is chosen as a pedagogy to encourage speculative and exploratory discussion, pupils need knowledge of possible areas to explore through discussion and how they can be framed.

Standard English

The register and vocabulary of social talk that pupils might engage in at home and with their peers is different to the academic or formal register and vocabulary used in classrooms, in universities and formally in many workplaces. The national curriculum programmes of study for spoken language and for writing emphasise the importance of pupils being taught to use Standard English. A spoken language curriculum should ensure that all pupils can select and use appropriate grammar and register for audience and purpose, including Standard English where necessary.

Teaching activities for spoken language

There is an important distinction between what primary and secondary school pupils need to learn for success in spoken language and the teaching activities that might promote learning spoken language. This distinction is important because it cannot be assumed that pupils will learn the knowledge necessary for effective spoken communication, for example vocabulary, simply by being encouraged to speak more or through unstructured activities. That knowledge can be identified and directly taught and is also acquired through reading.[footnote 86]

Opportunities for pupils of all ages to develop their proficiency should be planned carefully, both in English lessons and across other subjects. Classroom activities should allow opportunities for teachers to model competence as a speaker and listener. This modelling contributes significantly to developing pupils' spoken language.[footnote 87]

Teachers should therefore model language forms that pupils might not encounter away from

school, as well as introducing potentially unfamiliar vocabulary, returning to key words and phrases to embed new knowledge. This might include teachers reframing pupils' spoken language and asking pupils to repeat back the reframing.

Pupils of all ages will benefit from frequent opportunities to practise and apply their new knowledge of spoken language across a range of contexts and for a range of purposes.[footnote 88] Examples include carefully planned opportunities for pupils to take part in both 'exploratory talk', which enables the speaker to try out ideas, and 'presentational talk', which focuses on accurate communication.[footnote 89] The necessary skills for these forms of talk require direct and explicit teaching and practice in English.[footnote 90] In addition to the planned aspects of the curriculum, proficiency in spoken language can be developed through teachers' and pupils' daily interactions.

Teachers can support pupils in developing the ability to collaborate in conversation by providing ground rules.[footnote 91] For example, they can ensure that all pupils contribute, without any individual dominating. Effective talk involves turn-taking, managing interactions, active listening and responding appropriately.

Rhetoric

For older pupils, the discipline of rhetoric can give an insight into how writers and orators use spoken language.[footnote 92] Pupils can learn how spoken language is constructed and produced, and the connections between words, sentences and whole texts or in speech, from individual utterances to dialogues and speeches. Pupils can learn about the meanings and nuances of the spoken word, the craft of a writer or speaker, and the ways in which spoken language conveys, explores and manipulates meaning. They can grasp the role and effect of rhetorical devices, the range of registers and social contexts of spoken language in use, the interplay of speaking, reading and writing, the artistry of spoken language and the knowledge and skills that underpin that artistry.

Based on the above, high-quality English may have the following features:

- An effective spoken language curriculum identifies the components that pupils need to learn for successful spoken communication. It focuses on interrelated aspects that constitute effective spoken language (physical, linguistic, cognitive, and social and emotional).
- Teachers equip pupils with the right knowledge and vocabulary for them to be able to speak on a topic effectively.
- Pupils learn how to take part in exploratory talk and use talk to present ideas.
- There is a focus on ensuring that pupils can select and use appropriate grammar and register for audience and purpose, including Standard English where necessary.
- Teachers model spoken language for pupils. This includes language that pupils might

not encounter away from school.

- The curriculum provides frequent opportunities for pupils to practise, refine and apply their spoken language knowledge and skills.

Reading

Summary

This section sets out findings that suggest that skilled reading requires accurate, speedy word reading and good language comprehension. Urgency is necessary to ensure that pupils learn to decode accurately and with automaticity at the start of primary school. This also allows pupils to form positive attitudes to reading.

Pupils of all ages need to be taught a broad curriculum that will allow them to comprehend increasingly complex texts. Reading comprehension is supported by practising strategies to uncover the meaning of texts. However, teaching these strategies is time-limited in its usefulness and unlikely to benefit pupils before they can read sufficiently fluently, which is most likely to be in upper key stage 2. Reading comprehension requires knowledge of vocabulary, context, syntax and narrative structure and the capacity to read fluently. Carefully choosing texts to be studied in English can support progression, as will reading in other relevant subjects.

In this section of the review, we will go beyond discussion of what children need to learn in Reception. We will consider the goals of a high-quality curriculum in reading for primary- and secondary-age pupils.

Progression in comprehension

Factors that underpin reading comprehension

Three factors underpin reading comprehension and their significance to comprehension is explored, in turn, below. These factors are:

- **knowledge** – for example, linguistic knowledge, orthographic knowledge and general knowledge
- **processes** – for example, decoding, word identification, meaning retrieval, sentence parsing, inferring and comprehension monitoring

- **general cognitive resources**: for example, memory[footnote 93]

Pupils must understand the language used in the text.[footnote 94] Once pupils' word reading is automatic, any barriers to understanding a text are far more likely to relate to difficulties with language comprehension than word-reading problems.[footnote 95]

Reading comprehension is 'the orchestrated product' of the factors set out above.[footnote 96] Readers use knowledge, processes and general cognitive resources to produce a mental model of the text.[footnote 97]

Knowledge informs comprehension

References to knowledge as it informs comprehension can be understood in different ways:

- in research, references to knowledge for comprehension include syntactical and lexical knowledge. Thus, the knowledge necessary for comprehension is 'broadly conceived and may include information such as the meanings of words, rules of grammar, knowledge of events and temporal relations, episodes, scenarios, emotions, and characters'.[footnote 98]
- in English schools, references to knowledge for comprehension can sometimes more specifically refer to a more limited consideration of 'background knowledge', understood as a pupil's knowledge of the text's **context**. This might be topic knowledge provided by the teacher to help the pupil make sense of the text or – more particularly – knowledge that the pupil can supply in their answers to comprehension questions.

A narrower discussion of knowledge, limited to context, may lead to confusion when discussing the knowledge needed for comprehension. This is because it is difficult to disentangle the types of knowledge used in comprehension. For example, it can be unhelpful to consider vocabulary separately from contextual knowledge. For comprehension pupils will need knowledge of vocabulary as well as knowledge of the text's context, and these are closely intertwined. To understand the text's vocabulary requires a grasp of the context in which those specific words have been used. This is because the words that readers know represent concepts and information. Therefore, these concepts have to be understood to appreciate the meaning of the words that are read.[footnote 99]

In this review, we will consider knowledge broadly. Where the term 'background knowledge' is used, this will not preclude an appreciation of how vocabulary serves as a label for concepts pupils understand from their contextual knowledge to allow comprehension.

Text complexity and progression in reading comprehension

Considerations of the knowledge necessary for comprehension need to take account of the texts that pupils might be required to comprehend. In this review, we consider what knowledge pupils need to learn to comprehend increasingly complex texts. This knowledge provides a progression model for reading comprehension. It needs to be identified in a curriculum and taught to pupils. The

national curriculum requires that reading instruction, through each key stage, should prepare pupils ultimately to read more complex texts, for example 'to read and appreciate the depth and power of the English literary heritage'.[footnote 100] Variation in text complexity affects pupils' reading comprehension.[footnote 101] Therefore, pupils of all ages need to be taught a curriculum that will allow them to comprehend increasingly complex texts.[footnote 102]

For example, the primary curriculum should prepare pupils during key stage 2 to read independently in different subjects and to read a wide range of fiction and non-fiction. The key stage 2 curriculum should prepare pupils for key stage 3, at which point texts will include prose, poetry and drama, Shakespeare plays and seminal world literature, both contemporary and pre-1914. The key stage 3 curriculum should prepare pupils for the reading demands of key stage 4, including literature on the GCSE examination specifications.

Factors that may affect text complexity for pupils of all ages, and therefore their comprehension, include:

- linguistic features, such as longer or more complicated sentence structures or less-common, academic or domain-specific vocabulary[footnote 103]
- textual references to concepts and objects, and knowledge drawn from experience, including cultural experience[footnote 104]
- cohesion – both in the ideas explored across a text and the language used to articulate those ideas[footnote 105]
- levels of meaning – texts with a single level of meaning are often simpler to understand than those with multiple levels, for example allegorical or satirical texts[footnote 106]
- text structure – texts with simple, linear, chronological structures are often easier to understand than those that have non-linear time sequences or other structural irregularities and manipulations[footnote 107]
- style of narrator – texts with a single, reliable narrator are often more accessible than those that contain unreliable or multiple narrators[footnote 108]
- allusions, cultural references and intertextuality (relationships or references to other texts)[footnote 109]

These factors are discussed in further detail in the 'Literature' section of this review.

All these factors mean that it is not possible to measure the complexity of a text solely by its semantic and syntactic complexity.[footnote 110] This is further complicated by the role that a reader's background knowledge plays in comprehension.[footnote 111]

The curriculum should ensure that pupils of all ages acquire the knowledge they need for improved comprehension through reading increasingly challenging texts at each stage. These can provide a smooth ramp from listening to stories and poetry in the early years to reading Shakespeare and

19th-century texts as well as pre-20th-century literary non-fiction.

Without sufficient experience and practice, fluency and comprehension can stall.[footnote 112] At primary and then secondary level, texts should therefore be carefully selected 'so each text bootstraps the language and knowledge needed for the next. Gradually, students will be ready for texts of greater complexity.'[footnote 113] For example, Lemov, Driggs and Woolway highlight the challenge of reading archaic texts, such as Victorian literature, in which the syntax and vocabulary have passed out of common use. They advocate preparing younger pupils for archaic texts by ensuring that they read 'pre-complex' texts first. They give one example of how this can be done by pupils reading a text such as CS Lewis's 'The Magician's Nephew', published in 1955.[footnote 114]

> " First in reading The Magician's Nephew, they are alerted to the fact that people spoke differently then. Over time, they begin to pick up some of… [the text's] rhythm and quirks but at an accessible scale and wrapped in a story that is engaging… perhaps later they read something that has been written fifty years before that. It is the first step in a process that gives students access over the long run to the texts of the past."

Incremental exposure to increasingly difficult texts alone may allow some pupils to acquire the knowledge they need to read challenging material independently. However, an effective English curriculum will explicitly identify what it is that pupils need to learn in order to understand progressively more complex texts. It is this knowledge, listed below, that teaching should highlight and develop.

Progression in reading should come from reading a broad range of increasingly challenging texts. Reading these texts can gradually increase pupils' 'readiness' for reading the ambitious literature that is the end point of the national curriculum. The knowledge gained through this reading is explored in the 'Components of comprehension and effective pedagogies to teach them' section.

Components of comprehension and effective pedagogies to teach them

Vocabulary: what words should instruction focus on?

There is a lot of evidence that shows that vocabulary knowledge is important for comprehension.[footnote 115] It is through reading that most vocabulary will be encountered. This is because most words and language patterns occur far more often in written texts than in spoken language.[footnote 116] This remains true of books for young children as well as novels and non-fiction for older readers.[footnote 117] Therefore, teaching cannot rely on pupils' experience of spoken language for vocabulary learning. Further to this, and although we explore the development of vocabulary knowledge in this section, vocabulary knowledge is also crucial for successful spoken communication and writing.

Teachers can select texts that contain some vocabulary that is likely to be unfamiliar but that are

not overwhelmingly difficult to understand. While pupils of all ages will gradually learn vocabulary through repeated encounters as they read, there is evidence showing that it is beneficial to identify and explicitly teach some vocabulary.[footnote 118]

There are a number of rationales that teachers can use for selecting vocabulary to teach. The teacher will need to consider pupils' likely prior vocabulary knowledge. They may look at how frequently a word is used or the role and utility of particular words.[footnote 119] For example, the word 'emphasis' is likely to have high utility and can be used across different subjects. What have been called 'tier 2' words are high-frequency words that pupils are likely to encounter across written texts and in more formal situations than in everyday conversation.[footnote 120]

An effective curriculum is also likely to teach pupils the meaning of roots and affixes (prefixes and suffixes).[footnote 121] Research has shown that learning the meaning of common affixes such as un-, dis-, -able and -ing can help pupils to understand unfamiliar words, as well as being useful for spelling.[footnote 122] Building knowledge about morphemes (the smallest meaningful units of language) in English can develop vocabulary by helping pupils to make informed guesses about the possible meanings of new words, linking new words with familiar ones.[footnote 123] Awareness of how in English the meaning of words can be changed by adding inflections such as -s, -ed or -er as well, and knowledge of the history of words (etymology) and how this can affect meaning, will also support pupils' vocabulary and reading comprehension.[footnote 124]

Ways of teaching vocabulary

Pupils will learn many words incidentally. However, it is also effective to teach pupils of all ages some vocabulary directly. Older pupils can be taught the relationships across words and the links between a word's structure, origin and meaning.[footnote 125] Teaching should avoid complicated activities that create unnecessary cognitive load for pupils.[footnote 126] Pupils usually need to encounter a word a number of times in different contexts for it to enter their working vocabulary.[footnote 127]

Teaching how new words function in different contexts is more effective than simply learning definitions.[footnote 128] A synthesis of research on vocabulary instruction found that interactive teacher-to-pupil activities, during which pupils encountered and used new words in a variety of contexts, produced bigger gains in vocabulary development than just reading or adding definitions to the words.[footnote 129] Planned and spaced recall can also be a valuable strategy for learning and can improve the transfer of knowledge to new contexts.[footnote 130]

Knowledge of morphology, which is also vital for spelling, plays an important role in comprehension. Activities can be designed to help pupils recognise that similar-looking words might be related in meaning, even if they are pronounced differently – such as 'inquire' and 'inquisition'. These activities can help pupils' understanding because there is a strong correlation between spelling and comprehension.[footnote 131]

Knowledge of context

As outlined in the 'Knowledge informs comprehension' section above, it is difficult to clearly delineate knowledge of the context of the text from other knowledge needed for comprehension, such as knowledge of vocabulary. This is because understanding a text's vocabulary requires a grasp of the context in which those specific words can be used. The background knowledge needed to understand the words, phrases and ideas in a text goes well beyond socio-historical background to the text or topic knowledge. However, readers with good topic knowledge will have better comprehension of texts related to that topic than of texts that they know less about.[footnote 132] As knowledge development is related to reading, weaker readers often have less relevant knowledge than their peers.[footnote 133]

Teaching, therefore, needs to provide the contextual knowledge that pupils require to adequately comprehend a text. This does not, however, mean that it is necessarily useful to pre-teach swathes of background to an individual text if that knowledge is not essential for adequate comprehension of that text. Indeed, through reading itself, pupils can find out about the world beyond their own experience, including what they learn in other lessons on the curriculum. Teachers should therefore give pupils an abundant and rich variety of accessible texts to read in relevant classes across the curriculum as well as independently. Over time, this reading can gradually broaden pupils' horizons and their knowledge of words, phrases and ideas and ensure that they become increasingly able to comprehend the texts they will encounter in their later education and through life.

Knowledge of narrative structure

Comprehension is also affected by the extent to which pupils are familiar with the type and structure of the text they are reading, including the features of a story.[footnote 134] Different texts have their own structures, such as compare and contrast, sequences, cause and effect, and descriptions.[footnote 135] As a result, an effective reading curriculum will contain a broad range of text genres, styles and narrative structures, and types of non-fiction texts.[footnote 136]

From the early years onwards, pupils should become increasingly familiar with the structures and features of narrative texts, such as setting, character, plot and conflict. This is not the same as knowing the meaning of these terms but rather an increasing familiarity with different structures and features of texts that can come through broad and deep engagement in a rich variety of texts provided by the teacher. Once pupils are fluent readers, teachers can draw their attention to these features to better enable pupils to recognise them in future reading. Older primary-age pupils can use texts that contain a much wider range of structural elements, such as subplots and multiple problems.

Knowledge of syntax

Comprehension also depends on the knowledge needed to understand sentences (knowledge of syntax).[footnote 137] This knowledge of sentences allows reading with accuracy and sufficient speed for fluency.[footnote 138] Comprehension depends on understanding whole sentences and the connections between them, in addition to understanding the meaning of individual words in those

sentences. Ability to follow the internal coherence of a text and understanding the syntax of a sentence support comprehension. This ability includes recognising referents (words that refer back to an earlier part of the text); for example, older pupils will need to recognise that, when Cassius says to Brutus, '… he doth bestride the narrow world / Like a Colossus…', the pronoun 'he' refers to Caesar.

Pupils who can read fluently should increasingly encounter texts that contain more, and more complex, multi-clause sentences. An effective curriculum can include teachers reading accessible but more complex texts aloud. Pupils need to hear and read these texts regularly to help them become familiar with the structure of sentences and therefore increase the likelihood that they will be able to understand the texts they read independently.[footnote 139]

When pupils understand the meaning conveyed through a sentence structure, they are better able to read aloud with an understanding of the possible and intended phrasing, rhythm, expressiveness and stress of sentences (also known as prosody).[footnote 140]

Rasinski suggests a focus on 4 aspects of prosody:[footnote 141]

- expression and volume
- phrasing
- smoothness
- pace

Prosody is important because it connects children's knowledge of written sounds and words with spoken language and allows children to read with meaning. It 'completes the bridge by connecting to comprehension'.[footnote 142]

As well as providing a strong basis for comprehension as a whole, prosody can also be used 'to resolve ambiguous meaning at the phrase level'.[footnote 143] Simple examples might include distinguishing between 'the greenhouse' and 'the green house' or resolving the ambiguity in 'Paula phoned her friend from Alabama'.[footnote 144] Whether reading aloud or silently, the reader integrates information at the level of words, phrases and sentences with semantic information and 'will often pause at the end of a clause or sentence to facilitate this processing'.[footnote 145]

Teaching reading fluency

The most important factor explaining variation in pupils' reading fluency is amount of exposure to text.[footnote 146] This can include oral exposure to text.[footnote 147] There are stark differences in the amount of reading practice children get both inside and outside the classroom. As Stanovich and Nathan outline, if children are to become fluent readers, 'they need to read a lot'.[footnote 148]

Beyond the crucial importance of a large amount of exposure to text, research pinpoints a number of strategies that can improve fluency.[footnote 149] Padeliadu and Giazitzidou's review of research

on reading fluency identified several strategies that were shown to support fluency development. One of the most effective strategies was repeated readings of texts. Repeated reading allows pupils to apply their knowledge to new material and is effective for a wide range of pupils from the early years onwards. The evidence reported in the review showed that repeated reading was effective for pupils with reading difficulties.[footnote 150]

Research found that simultaneously listening to and reading along with texts was a valuable strategy with struggling readers. The teacher's reading shows how the text should sound and, in doing so, highlights the 'prosodic cues' in a text to pupils. However, the demands on working memory of this activity suggest that pupils' comprehension might be lower when reading-while-listening.[footnote 151] This possible limitation should be considered when deciding whether this strategy will fulfil the aims of the lesson. It would also seem counterproductive to undertake this sort of activity before pupils have mastered the alphabetic code.

A third strategy considered in the same review was discussing the wording in a text before reading it. Pupils can practise key words in the text before they read it for themselves.

And a final strategy is to provide opportunities for pupils to perform and read aloud.[footnote 152] The national curriculum says that pupils in Years 5 and 6 should have opportunities for 'preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience'.[footnote 153]

Comprehension processes and the limits of teaching comprehension strategies

A range of processes allow knowledge to be activated and processed. These processes include decoding, word identification, meaning retrieval, sentence parsing, inferring and comprehension monitoring.

There is good evidence that significant aspects of these processes happen automatically, for example inference generation.[footnote 154] Skilled readers may unconsciously use a range of comprehension strategies to uncover the meaning of texts. However, pupils may need to be taught to use strategies that prompt comprehension processes. For example, teachers may recognise the phenomenon of a child who sounds fluent but has limited understanding of what has been read. This may be particularly the case when pupils regularly do not have all the knowledge (outlined in the 'Components of comprehension and effective pedagogies to teach them' section above) that they may need to readily comprehend a text and therefore may have never grown to expect to understand the texts they read even if they can decode them. Therefore, some pupils may need to build the habit of constructing meaning as they read. There is plentiful evidence of the benefit of teaching pupils reading comprehension strategies that direct them to pay attention to the meaning of the text.[footnote 155] The NRP found that those approaches that emphasise pupils' understanding of the reasoning and mental processes involved in reading strategically were most successful.[footnote 156]

Studies that have investigated the longer-term effectiveness of teaching and practising reading comprehension strategies suggest that reading comprehension instruction can be beneficial when it is brief and explicit.[footnote 157] Evidence suggests that a total of 10 to 15 sessions of instruction is sufficient.[footnote 158] Research also suggests that there is little point in teaching these reading strategies before pupils have gained fluency, which is likely to be in upper key stage 2.[footnote 159]

The implications of these findings are significant, given that it could be assumed that if pupils struggle to comprehend texts, then more teaching of strategies must be necessary. Beyond some time-limited instructional and practice sequences, comprehension strategies are unlikely to be useful as a continued learning objective for most pupils. Willingham and Lovette argue that this is because these strategies are not skills that can be honed through repeated practice regardless of context. Rather, they are useful metacognitive strategies, or maxims, that will be applied successfully when pupils have enough relevant knowledge of the text to do so.[footnote 160]

This underlines the importance of ensuring that pupils read a breadth of literature. This will allow pupils to embed strategies they have learned even when they no longer need the time-limited instructional prompting of the teacher, as well as ensuring that pupils encounter the range of knowledge they need for successful comprehension. Comprehension strategies do not provide an ongoing progression in reading. Progress comes from developing the knowledge needed to understand increasingly challenging texts. This can be illustrated when considering inference.

Making inferences

Inference depends on a reader's vocabulary knowledge, contextual knowledge and knowledge of language structures. The reader needs this knowledge to make links between different parts of the text and construct a robust mental model of it. This is because language is 'surrounded by a cloud of taken-for-granted, unspoken knowledge, without which the said cannot be understood'.[footnote 161]

Readers use these links and background information to fill in details not explicitly stated by the author.[footnote 162] Therefore, knowledge of the text content is needed to make inferences and this is why general practice in making inferences will not lead to a general inferencing skill.

To illustrate this point, in the following example, the reader unconsciously draws from background knowledge, for example of vocabulary and context, to realise that it is Alison's birthday, although we are not told this: 'As the singing came to an end, Alison blew out the candles. Everyone clapped.' The reader integrates the new information from the text with their existing knowledge – in this case, about birthday parties.

Pupils are likely to be able to make successful inferences when the knowledge they currently possess, initially just of the everyday world, is adequate to make those inferences. This ability to make inferences is likely to be well developed because everyday conversation requires regular inferences.[footnote 163] A review of research looking at the impact of inference instruction suggests

that, as with other reading comprehension strategies, focused and time-limited instruction related to inferences can increase comprehension for primary and secondary school pupils.[footnote 164] Nonetheless, a pupil with limited academic or cultural knowledge will find it difficult to make inferences about non-everyday topics about which they know little.

Comprehension monitoring

Skilled readers monitor their comprehension and detect when it breaks down. For example, when they spot an apparent inconsistency, they re-read or apply their background knowledge of the topic. In the 'Comprehension processes and the limits of teaching comprehension strategies' section above, we discuss how pupils may not expect to understand a text when they regularly do not have all the knowledge that they may need for comprehension. These less-skilled readers may not know that it is important to think while reading.

This 'comprehension monitoring' correlates closely with wider reading comprehension. As we might expect, older pupils and more expert readers tend to be better at detecting when their understanding has broken down. For this reason, pupils need to be alerted to the importance of thinking about what they read and understanding the content.

Comprehension strategies have an ongoing use as a pedagogical tool

When pupils no longer need to be taught to use comprehension strategies, it is reasonable to continue to use these strategies as a **pedagogical** tool. When a teacher needs pupils to think carefully about a certain meaning of a particular text, they might direct pupils to apply a particular strategy they have learned, for example summarising or identifying the main point. In this situation, the primary curriculum goal is not to teach or practise a strategy (when pupils are already familiar with the strategy from prior teaching). Rather, the teacher can direct pupils to use a strategy to draw out a particular aspect of the text and its meaning, which may not otherwise have been readily apparent to pupils, given their current knowledge.

Through applying the strategy to consider a feature of the text, pupils acquire new knowledge that may enable them to comprehend other and more challenging texts in the future. While there might be good reasons for selecting comprehension strategies as a pedagogical tool, this does not mean that there is a benefit from pupils discovering an insight (about a text or otherwise) for themselves over learning such an insight from their teacher.[footnote 165]

Implications of limits to working memory

The amount of information a person can hold temporarily in their working memory is limited.[footnote 166] Research suggests that interventions targeted at improving working memory are unlikely to improve pupils' reading.[footnote 167] Instead, being able to draw on knowledge needed for comprehension from long-term memory and being able to decode accurately and read fluently help to make cognitive space available for pupils to consider meaning. Curriculum time is therefore likely to be most effectively used in ensuring that pupils read fluently and to develop their wider curriculum knowledge and vocabulary so that working memory can be directed towards making

meaning from a text.[footnote 168]

Reading independently and for pleasure

Research on the benefits of pupils' reading for pleasure is extensive.[footnote 169] This research indicates a positive correlation between pupils' engagement with reading and their attainment in reading, motivation to read and their self-confidence in reading.[footnote 170] Research also suggests a link between pupils choosing to read and improved general knowledge;[footnote 171] a wider vocabulary and better language development;[footnote 172] and improved attainment and more positive attitudes to writing.[footnote 173]

Reading for pleasure is highly desirable. However, an emphasis on reading for pleasure does not mean it is wise to ignore the positive impact on all children of exposure to increasingly challenging texts in relevant lessons across the curriculum. Initiatives like dressing up as book characters, collecting points and certificates, or creating elaborate displays might also help to raise awareness of reading. Yet they could also be a distraction, taking time and energy away from reading itself.

A curriculum for reading for pleasure

The manifold benefits of reading for pleasure might lead to the assumption that the best starting point is to encourage pupils to read. However, research suggests that it is the more accomplished readers who choose to read more.

A meta-analysis of research with children aged 5 to 18 considered predictors of **long-term** motivation to read.[footnote 174] This analysis suggested that achieving short-term motivation to read is not a predictor for the long term when compared with pupils becoming accomplished readers early. The latter is a stronger predictor of later motivation. In other words, if children struggle with reading early on, they may not be persuaded to read more. The findings emphasise the overriding importance of children getting off to a successful start with reading, as this is the strongest predictor of later motivation.

For many, reading for pleasure is something that develops at home, when books and other reading material are available, and where parents and carers read with children and also read themselves.[footnote 175] For others, it is vital that the curriculum and wider school culture nurture reading for pleasure.

Research suggests several strands that form a 'coherent strategy' that schools can draw on when designing a curriculum that supports reading for pleasure. These include:

- developing teachers' knowledge of children's literature and other texts
- developing teachers' knowledge of pupils' current reading practices and preferences
- establishing a 'reading for pleasure pedagogy' that includes reading aloud and time for pupils who can read fluently to read independently

- creating social reading environments, and providing time for informal book talk and recommendations
- supporting staff to become ‘reading teachers’ who read widely and reflect on their own and others’ reading
- creating reading communities, both in and out of school[footnote 176]

Children may enjoy reading but prefer other activities. Making the option of reading the most readily available seems sensible. When the option is visible and attractive, it can make it more likely that children will read.[footnote 177]

Based on the above, high-quality English may have the following features:

- The reading curriculum enables pupils to read increasingly complex and whole texts.
- Teachers develop pupils’ reading accuracy, automaticity and prosody.
- Time is given to pupils reading a lot of text, across the school curriculum, to develop their reading fluency.
- Instruction in reading comprehension strategies is time-limited and explicit.
- Knowledge necessary for comprehension is taught explicitly and includes vocabulary, knowledge of narrative structure, lexical and syntactical knowledge, as well as knowledge of context and ideas in the text.
- Teachers emphasise the relationships between words, helping pupils to explore morphology and etymology to support their comprehension and spelling.
- Teachers encourage pupils to read for pleasure while ensuring that they become accomplished readers as soon as possible.
- Planned and spaced recall helps pupils to retain the new vocabulary they have learned.

Writing

Summary

> Fluent writing depends on transcription (spelling and handwriting) and composition, which involves knowledge about the topic and discourse knowledge about how to write effectively. Explicit teaching of foundational skills, including spelling and handwriting, sentence

> construction, control of grammar and use of vocabulary, allows all pupils to write effectively. Cycles of planning, drafting, revising and editing can improve writing but do not significantly improve motivation to write or improve the quality of struggling writers' compositions.

Features of an effective writing curriculum in primary and secondary schools

Learning to write well allows pupils to share their ideas, communicate with others and learn from the wider curriculum. The 2014 national curriculum, unlike the 1998 National Literacy Strategy, does not require pupils to be taught to write particular genres or text types.[footnote 178] It focuses on writing for different purposes: 'to describe, narrate, explain, instruct, give and respond to information, and argue'.[footnote 179] Across the different phases, pupils will produce many different forms of writing, including:[footnote 180]

> " … well-structured formal expository and narrative essays; stories, scripts, poetry and other imaginative writing; notes and polished scripts for talks and presentations; and a range of other narrative and non-narrative texts, including arguments, and personal and formal letters."

An effective writing curriculum will give pupils opportunities to develop their proficiency in 2 interrelated areas of writing:

- transcription (spelling and handwriting)
- composition (articulating ideas and structuring them in speech and writing)

Transcription

Fluent transcription skills are the foundations of writing. If pupils master these, they can then focus their attention on developing, organising and communicating their ideas. If spelling and handwriting are not fluent, pupils' working memory is overloaded and it becomes difficult to focus on composition.[footnote 181]

An effective writing curriculum should give time for pupils to be taught and to practise the component skills of transcription, at least in the early stages of primary. Kellogg has argued that, if pupils do not develop sufficient fluency in handwriting (or typing) in primary school, this significantly affects the development of the higher-order processes, such as planning and generating ideas, and writing and reviewing texts.[footnote 182]

These transcription skills should continue to be the focus later for any pupils who lack sufficient fluency. If they struggle with the process of writing as a whole, interventions aimed at writing overall, like asking them to do further extended writing, are likely to be ineffective. Instead, research suggests the focus should be on more time spent practising individually the specific components of writing that need attention.

Spelling

The early stages of spelling begin with pupils learning phonics – in other words, knowing how to use the alphabetic code of English to represent the individual sounds in the words they need to spell. Struggling with these letter-to-sound correspondences reduces pupils' ability to transmit their ideas and compose their writing.[footnote 183]: Stopping to think about spelling a word uses working memory needed for other aspects of writing. Pupils may then forget ideas or plans that they were holding in their heads.[footnote 184]

Spelling has been described as 'a psychological, linguistic, and conceptual process involving knowledge of the alphabet, syllables, word meaning, and the history of words'.[footnote 185] Teaching needs to reflect these different aspects. Although English spelling has many irregularities, these irregularities frequently follow patterns that, although complex, can be learned.[footnote 186]

Spelling should be taught explicitly.[footnote 187] The national curriculum outlines that pupils should know the alphabetic code and 'the role of morphology and etymology'.[footnote 188] Once they have mastered the alphabetic code, usually in key stage 1, they need to apply this knowledge in their own writing.[footnote 189] In later years, teachers might support pupils' spelling by:

- encouraging them to draw on their knowledge of phonics to identify the sounds in more complex words[footnote 190]
- relating spellings to the content being taught (rather than teaching spelling from 'decontextualised word lists')[footnote 191]
- pre-teaching spellings of challenging words and anticipating common errors[footnote 192]
- ensuring that pupils practise spellings, for example by using new spellings in their writing or writing words from dictation[footnote 193]
- focusing on a word's etymology to show how spelling is related to meaning and drawing attention to shared morphemes in words, even when the sounds in the related words differ (for example, 'vine' and 'vineyard')[footnote 194]
- adding morphemes (where possible) to words in the national curriculum Years 5 and 6 word list to spell many related new words (for example, correspond > correspondence, corresponding, correspondingly, correspondent)[footnote 195]
- combining vocabulary development with spelling instruction, including explaining the meaning and function of prefixes and suffixes[footnote 196]
- teaching irregular words by grouping these together where there are useful similarities (such as grouping the irregular spelling 'two' with associated regular words such as 'twin', 'twice' and 'twenty')[footnote 197]

Assessment should identify what words or parts of words pupils find difficult, so that they can focus on learning these. Low-stakes spelling tests, at secondary as well as primary level, can support pupils to learn to spell.[footnote 198] These might be simply 'pre-tests' so that pupils know which of

the selected words they cannot spell and can then focus their efforts on those, or 'practice tests' that involve repetition, peer testing and games that involve correctly spelling words.[footnote 199] These activities can serve as recall practice after pupils have studied the words so that they retain the correct spellings in their long-term memory.

Composition

Knowledge of grammar

Pupils need secure knowledge of English grammar for composition. This enables them to express themselves clearly and creatively through writing. The grammatical structures of a text carry much of the writer's intended meaning. Exploring these choices in texts allows the writer to understand the writer's thoughts better.[footnote 200]

Research with secondary school pupils suggests that pupils benefit from being taught how to combine and construct sentences. This not only improves the sentences they write but also improves their writing quality and accuracy.[footnote 201]

The curriculum can therefore be organised so that pupils are taught to write using a variety of sentences. Teaching should focus on sentence recognition, construction, meaning and accuracy. A logical progression might start with the concept of a sentence, including capitalisation and other basic punctuation, before progressing from single main clauses to constructing multi-clause sentences.

For expertise to develop, pupils will benefit from direct instruction and modelling, followed by extensive, deliberate practice until they are fluent. Effective practice may consist of short, focused tasks, interspersed with feedback, before pupils apply what they have learned to their independent writing.[footnote 202]

There is also research that indicates that it may be effective for teachers to model different ways of constructing sentences.[footnote 203] This might include completing an incomplete sentence, expanding a sentence or combining 2 or more sentences.[footnote 204] To help pupils to become better writers, activities such as these need to link to their independent writing. Pupils need to be prompted to draw on and apply what they have learned when they come to write.

Research suggests that it can be effective for teachers to focus on the function and application of grammar within the context of writing.[footnote 205] Teaching pupils grammar as part of writing lessons, emphasising the connections between linguistic features and the effects they can produce, can have a positive impact, at least for more able writers.

Vocabulary knowledge

Pupils without a specialised vocabulary for different types of text will struggle to express ideas and

opinions in writing.[footnote 206] A broad and deep vocabulary leads to better writing.[footnote 207] Teaching vocabulary is covered in 'Ways of teaching vocabulary' in the reading section.

A curriculum for writing

Perhaps not surprisingly, research suggests that greater knowledge of the topic leads to better writing.[footnote 208] Additionally, 'discourse knowledge' is important. This is knowledge about how to write, including knowledge about the genre of writing, linguistic and grammatical knowledge, and knowledge about how to carry out specific aspects of the writing process.[footnote 209]

In practice, teachers can ensure that pupils have knowledge of the world that provides content to write about, for example by ensuring that pupils write about the curriculum content they have studied. Teachers can help pupils to build discourse knowledge by making sure that they understand the characteristics of texts written for specific purposes and audiences, and by providing models of effective writing.[footnote 210] This gives pupils a repertoire of features to draw on for their own writing.

Models of writing development suggest that pupils move through several stages as they become more mature and proficient as writers.[footnote 211] Research highlights the starting points and assumptions of novice writers and how their writing can improve. Pupils need to become increasingly aware of:

- how writing can be used to share new interpretations of their ideas
- their reader's needs and existing knowledge
- how that reader might interpret what they write[footnote 212]

Knowledge of the writing process and how to teach it

Repeated meta-analyses have identified several factors that are positively linked to teaching pupils to write effectively:[footnote 213]

- explicit teaching of foundational writing skills (sentence construction and control of grammar and syntax, as well as spelling and handwriting), aiming for fluency
- a 'process approach' to writing (see below for an explanation)
- direct instruction about writing knowledge and targeted practice
- encouraging pupils' self-regulation, such as pupils monitoring their own performance, setting goals for improvement and making self-assessments of their writing
- opportunities to write frequently
- opportunities to work cooperatively on different aspects of writing and stages of the writing process

A process approach

The process approach involves pupils learning to plan, draft, revise, edit and publish their writing,

and practising these processes. This can develop pupils' proficiency.[footnote 214] Eventually, they can apply their knowledge independently.

However, research suggests that a process approach is not sufficient on its own, has a limited impact and should be used alongside other approaches.[footnote 215] The research emphasised the importance of explicit teaching of foundational skills as a prerequisite, including spelling and handwriting, sentence construction, control of grammar and use of vocabulary, to allow all pupils to write effectively.[footnote 216]

Research suggests that explicit instruction about writing knowledge and strategies can develop older pupils' writing.[footnote 217] Self-regulated strategy development (SRSD) is an approach to teaching writing strategies that has been found to be effective in helping pupils learn the specific discourse knowledge needed for effective writing. This knowledge includes general and task-specific writing strategies, the background knowledge needed to use these strategies, and procedures for regulating these strategies.[footnote 218] The 6 stages of SRSD are:

1. Pupils are taught the background knowledge they need to use a writing strategy effectively.
2. The teacher explicitly describes and discusses the purpose and benefit of the strategy.
3. The teacher models how to use the strategy.
4. Pupils memorise the steps/components of the strategy.
5. The teacher supports and scaffolds pupils' mastery of the strategy.
6. Pupils use the strategy independently.

At each stage, pupils have opportunities to learn and practise the main components. This can be particularly effective for less confident writers.[footnote 219] Because the strategies break up the complex process of writing into manageable smaller parts, each of which can be taught, practised and combined, SRSD instruction helps pupils to overcome the limits of their working memory and processing capacities. Research also suggests that these strategies are motivating for young writers, because pupils can write successfully and are likely to attribute their success to something they can control, such as following a specific process or working hard on a task.[footnote 220]

In addition to approaches built on specific stages, model texts can be used effectively as worked examples.[footnote 221] Reading and studying extracts and short stories help pupils to build background knowledge that they can then recall and apply when writing their own versions.[footnote 222]

Although discourse knowledge of the features of certain text types and genres of writing is important,[footnote 223] listing the features that pupils must include in a piece of writing can lead to writing to follow mark schemes, as noted in the 'Assessment' section. This might lead to pupils using textual and language features without understanding why they are useful and what purposes they serve.[footnote 224] This might be avoided by emphasising the audience for, and purpose of, the

writing and encouraging pupils to tailor their language and structure to these rather than trying to replicate the features of a specific genre or text type.

Motivation

Research suggests that motivation to write, and a classroom and school environment that promotes it, is correlated strongly both with pupils' attitudes to writing and their skill as writers.[footnote 225] Factors associated with motivation include:

- writing for real audiences and purposes
- writing collaboratively with peers
- a choice of topic
- the desire to share ideas with an audience[footnote 226]

Motivation can come from enjoying or being engaged with writing itself. It can also come from external factors, such as:

- pride in creating a pleasing piece of work
- accomplishing something after overcoming difficulty
- mastering something that will be important when obtaining qualifications for the workplace

Based on the above, high-quality English may have the following features:

- The curriculum secures the knowledge needed for successful writing: knowledge about the topic and knowledge about how to write.
- Pupils' accuracy and automaticity in transcription are developed early on and secured by lower key stage 2, so that older pupils are able to pay attention to the higher-level processes of composing, planning, writing and revision.
- Pupils write frequently, for a range of audiences and purposes (once they have sufficient accuracy and automaticity in transcription).
- Teachers directly teach sentence construction, control of grammar and syntax, so that pupils can use them with accuracy, confidence and increasing flair.
- Teachers teach older pupils to master the components of how to plan, draft, revise and edit their writing.

Pedagogical approaches for pupils with special educational needs and/or

disabilities

The general principles from research into effective teaching outlined in this review are just as relevant for pupils with special educational needs and/or disabilities (SEND), whether learning English or any other subject. Research shows that pupils with SEND do not generally benefit from differentiated teaching, activities or resources to achieve a curriculum goal.[footnote 227] Differentiation is not the same as targeted teaching to break down or reinforce aspects of the curriculum, for example repetition of important phonic knowledge.

Teachers may attribute weaknesses in reading to a pupil having dyslexia rather than having gaps in their phonic knowledge. This can also lead to teachers using reading interventions that have an alternative approach rather than teaching systematic synthetic phonics. However, reading requires the same phonic knowledge for all children. Teachers can help pupils overcome difficulties by ensuring that they learn GPCs; pupils with SEND are highly likely to need much more frequent repetition. Assessment should be used to identify a child's specific knowledge gaps. These gaps and their identification are considered in the 'Assessment' section of this review.

Based on the above, high-quality English may have the following features:

- Teaching does not rely on differentiated teaching, activities or resources to achieve a curriculum goal.
- Reading interventions incorporate training in knowledge of letter-sound correspondences, and how to apply knowledge of phonics to reading and spelling.
- Struggling pupils have more opportunities for repetition where necessary. This can secure essential knowledge to automaticity.

Literature

Summary

> An English literature curriculum should identify the knowledge pupils will need to make progress in English literature. Pupils need to learn epistemic knowledge of how critics apply different perspectives as well as knowing about influential readings of specific texts and how interpretations of texts can be reached. Pupils also require contextual and aesthetic knowledge to appreciate a text.

> Knowledge can be acquired through studying carefully chosen and sequenced texts that become increasingly complex in style and substantial in content and themes. Studying carefully sequenced texts can gradually increase the knowledge pupils have, which in turn allows them to comprehend new literature. This learning will best be achieved with some explicit teaching and modelling, for example, of different interpretations.

The study of English literature

Literature is at the heart of the subject of English. It has profound effects on our thoughts and on the ways in which we experience the world. It can shape our inner lives, and our identity. Novels provide scope for the exploration of worlds: real and imagined; far and near. Drama can depict intense moral dilemmas, domestic conflicts and powerful moments in history. Poetry, because it works in special ways, can convey heartfelt emotions and epiphanies. Literature also contributes to the big debates in society and to political and social discourse.

The language in literature – the words writers choose and how they use them – can fire our imagination and introduce us to new ways of knowing. The study of literature as a discipline seeks to explain this power.

This section discusses how the content, scope and sequence of the literature curriculum, which is not necessarily specified in the national curriculum, can best enable primary- and secondary-school pupils to achieve the goals of the national curriculum. There is no fixed demarcation between this section and the previous parts of this review that discuss reading comprehension and reading for pleasure. However, this section explores the specific body of knowledge, additional to that already discussed, that enables the disciplinary study of literature.

This part of the review is different in character from other sections because the empirical literature is more limited. We have, however, drawn on a wide and diverse range of sources including opinion pieces and theoretical articles. In some cases, the overarching argument presented in these sources is not fully aligned to the principles of the EIF, but we decided to include them because they are indicative of the highly nuanced nature of the topic. The EIF and the research underpinning it remain the lenses through which the insights and research on literature is considered, framed and presented.

Literary knowledge

As pupils advance through school, the curriculum in English, including literature studies, should include the subject-specific prerequisite knowledge needed for achieving the subject's curriculum goals.

A strong curriculum will develop pupils' **epistemic** knowledge, defined by the OECD as 'the understanding of how expert practitioners of disciplines work and think'.[footnote 228] Some commentary uses the term 'disciplinary knowledge' to describe a similar idea. Epistemic knowledge helps pupils to 'find the purpose of learning, understand the application of learning and extend their disciplinary knowledge'.[footnote 229] For literature study, this might include learning how critics apply different perspectives (critical positions) to key concepts, as well as knowing about influential readings of specific texts. It also might include knowing that literary scholars and critics use evidence from the text and other relevant contemporaneous texts to justify their interpretations.

This review draws on Atherton, Snapper and Green to define 4 fields of literary knowledge. The following table is an adaptation of the 5 areas of literary knowledge identified by Atherton, Snapper and Green for teaching English literature at 16 to 19. The 4 areas described in the table, and what each covers, focus on those that relate to the EIF and the national curriculum.[footnote 230]

Knowledge	What it covers
The history and development of literature	This includes: history of literature; literary forms; narrative; genre; poetry; drama; the novel; non-fiction; literary movements; how significant aspects of literature (for example, narrative or character) function in different forms, genres or even other media; how literary texts respond to historical or ethical events; and the relationship between literature and broader social and cultural movements.
The craft of the writer	This includes: how and why writers, including the pupils themselves, use language, form and structure, genre and conventions to respond to social and cultural contexts and respond intertextually to other works.
The response of the reader	This includes: how and why readers, including first and foremost the pupils themselves, respond to, interpret and value texts, balancing personal enjoyment with judgement and understanding of wider social and historical contexts; understanding works of literature in the context of life; and making and judging inferences.
The nature of literary study	This includes: the role of literary study, literary criticism and literary theory; how different approaches and ways of reading impact on what and how we read; how students value the study of literature; how to analyse perceptively, and write and develop their own critical voices in discussion; and the use of context.

The 4 fields above also draw on **contextual** knowledge, which is transferable between texts. In the case of historical context, this knowledge needs to be carefully selected. For example, pupils studying the Victorian novel may not need an extended preamble on key events in the reign of Queen Victoria. Rather, the specific knowledge that enables pupils to enter the imaginative world of

the text should be identified. Historical context for a work of literature is not an end in itself. It might be useful to know that in Victorian times streets were cobbled and richer people travelled in hansom cabs. This knowledge may need to be explicitly taught or it may emerge through the study of the text rather than through teaching before reading.

The fields above also draw on **aesthetic** knowledge. This knowledge enables appreciation and thus enjoyment of a literary work. For example, knowing that, in Shakespeare's time, a nunnery was also slang for a brothel means that Hamlet's command to Ophelia, 'Get thee to a nunnery', is even more heart-breaking and emotionally charged. Enjoyment and knowledge can grow through text-based conversations, discussions and debates.

Progression in literature through carefully chosen and sequenced texts

Through the study of carefully chosen literature (see the 'Sequencing text choices for progression: building readiness' section), pupils' epistemic knowledge and capacity to appreciate literature can grow over time. For instance, pupils can gain an increasing understanding of the craft of the writer (including the specific language, grammar and syntax used in each text) through studying a carefully chosen sequence of texts over time. They also gain knowledge of the main characters, the plot and the literary techniques employed, and will have a progressively better grasp of the role of the reader and the nature of literature. This allows pupils to make increasingly meaningful connections between specific knowledge from different texts. This could be through a selection of texts that allow pupils to learn how writers use certain tropes in specific genres (for example, entrapment in gothic literature gives pupils a conceptual framework for connecting characters in 'The Strange Case of Dr Jekyll and Mr Hyde' with characters in 'Jane Eyre').

Appreciation of English literature and key components

Our review has identified that there is specific component knowledge needed for comprehension and that novices benefit from learning these components. While pupils might engage meaningfully with unmediated text, it is the purpose of the curriculum to identify what they may need to learn, step by step, to be successful. This is not to say that some key aspects of a literature curriculum that work holistically can never form part of the earlier curriculum while components are still being mastered. For example, the curriculum can include meaningful personal responses to narratives that might be possible even if the components necessary to more fully understand those narratives have not yet been learned. In the very early stages, this form of literary knowledge can be developed by discussing stories that teachers read aloud to children or by asking pupils about how a story read aloud makes them feel.

Standish suggests that pupils can reach a possible 'transitional' point somewhere between late key stage 2 and early key stage 3.[footnote 231] At this point, pupils may have the capacity to understand different interpretations of literature. Teachers might introduce pupils to interpretations of literature that pupils can choose, adapt or reject. This would not be to stifle original interpretations, but to give pupils a useful framework for developing their own interpretations, as well as knowledge of subject-

specific terminology.

Novices learn more efficiently by studying worked examples, while experts can learn from inquiry-based activities that allow them to apply their broad conceptual knowledge.[footnote 232] Expertise in English literature is characterised by the ability to carry out critical inquiry, engage in debates about meaning and explore how the text functions as a work of art. However, these practices need to develop over time. This will best be achieved through some explicit teaching and modelling different interpretations (worked examples) and the necessary component knowledge that underpins them.

Pedagogy for novices in literature is different than for experts

There are possible implications of the novice/expert research mentioned in the paragraph above.[footnote 233] If teachers use a purely inquiry-based approach from the start – in which pupils are expected to produce responses to texts with minimal guidance – the potential for success may be limited. For example, pupils may not learn what determines a credible or justifiable interpretation. They may also lack the background knowledge required to produce one.

Implications for pupils' written literary analysis

From their earliest years, children benefit from listening to adults read to them and recount stories verbally. Ongoing reading of carefully chosen and sequenced texts can ensure that pupils learn more about how stories are structured and how plots work. These understandings in turn make pupils better writers as well as readers.

Analytical writing is a composite process that involves multiple individual components, some learned through studying literature and some being explicitly part of the writing curriculum. Pupils need to be able to embed evidence, use appropriate subject terminology, apply precise vocabulary and evaluate interpretations, including their own interpretations. If pupils are to succeed at analytical writing, they need to be secure in each of these components. The curriculum should therefore include a range of subject-appropriate writing activities that require the use of the components for writing that pupils have learned.

Applying insights from cognitive psychology such as spacing and interleaving

Tharby suggests that insights from cognitive psychology can be used to ensure that pupils learn the literature curriculum and that this will allow them to appreciate that 'literature is a beautiful, throbbing nexus, not a set of unrelated texts'.[footnote 234] He qualifies this, stating that he has 'deep misgivings… about a crude scientific application' of cognitive psychology to curriculum planning. He suggests that the literature curriculum should be structured so that carefully selected content is revisited. He advocates spacing and interleaving content in literature to create a spiral-structured curriculum.

Some research suggests that spacing and interleaving might be useful for structuring some content in the literature curriculum. Appel and Richter show that some subject-specific 'habits of mind' that come from reading fictional narratives, such as empathy, do not present themselves

immediately.[footnote 235] This pause before the results show is known as an ‘absolute sleeper effect’. For sleeper effects to occur, a gestation period is required. In this time, pupils can rethink and relive what they have read. Spending some time on unrelated activities can be beneficial.

Elliott suggests that interleaving might help pupils make connections between ‘texts and concepts, to create a larger schema of how literature works’.[footnote 236] She adds the caveat that ‘like all tools, they are not good in and of themselves: it is the content that makes the difference’.

Sequencing text choices for progression: building readiness

We have already explored text choices in the reading comprehension section (see ‘Text complexity and progression in reading comprehension’), but there is additional detail that is especially relevant when selecting texts specifically for English literature, which is explored below. Additionally:[footnote 237]

> “ It is important to recognise that the books students read and study in school are finite – a scarce and valuable resource… these few books form the foundation of their knowledge of how literature works within and interacts with society, so teachers must select them like the precious resource they are.”

Over time, texts studied should become increasingly complex in style and substantial in content and themes. In the ‘Literary knowledge’ section, we identify the range of knowledge pupils need to comprehend a text. Quality literary narratives tend to use a greater variety of sentence structures than simpler, easier narratives. This is important because it enables pupils to gain important grammatical knowledge that they can use in their own writing. It also builds ‘readiness’ for the complex syntax used in 19th-century narratives that are studied in key stage 4. Therefore, text selection is not as simple as moving more archaic texts or texts with adult themes to key stages 2 or 3. If pupils are required to read texts but do not have the knowledge they need to read fluently and understand them, whatever the ambition, pupils will not gain the hoped-for outcomes from reading those texts.

Texts may be chosen because they prepare pupils for later texts that they will study or writers they will encounter. Counsell calls this ‘curriculum readiness’ and argues:[footnote 238]

> “ We need to take seriously the possibility that a curriculum can turn (say) a disadvantaged, vocab-poor Year 5 into a pupil who carries such reference points in poetry that they are ready to notice what is new and startling in (say) Romantic poetry before they hit Year 10.”

Stoneman describes this readiness as ‘deliberate crafting’ in which ‘we help knowledge to manifest itself indirectly but dynamically in future learning of other curricular content’.[footnote 239] It is very different from GCSE texts being taught in key stage 3. This would narrow the curriculum rather than create readiness for those texts when they are studied at GCSE.

An example of text choice for curriculum readiness might be reading ‘The Curious Incident of the

Dog in the Night-Time' to create readiness for Perkins Gilman's novella, 'The Yellow Wallpaper', because one is more accessible than the other but both use unreliable narrators. Building readiness is not solely about themes and content of texts.

A coherent sequence of texts

In the section above, we discuss the importance of sequencing carefully selected literature texts so that they are increasingly complex in style and substantial in content and themes. Through the study of carefully chosen literature, teachers can develop pupils' epistemic knowledge so that their capacity to appreciate literature can grow over time. Therefore, as well as text complexity being a criterion for selecting individual texts, the sequence of these over time can enable a coherent progression.

Didau explores different curriculum possibilities that provide coherence.[footnote 240] For example, he suggests choosing texts that illustrate the development of English language or texts that illustrate the story of literature and its forms over time. Alternatively, a thematic approach might be chosen that weaves the threads of metaphor, story, argument, pattern, grammar and context as enablers of disciplinary considerations for pupils learning literature. Didau does not argue for any one of the models above but suggests that coherent text choices will allow pupils to appreciate past literature.

Studying complex and whole texts

Studying one substantial complex text can do a lot of curricular 'heavy lifting'. It can support pupils to develop and use knowledge across the categories detailed in this section. A text like this might use a complex narrative viewpoint to tell a story, and explore multiple or sophisticated themes. It might also contain allusions, cultural references and intertextual links.

In some circumstances, carefully chosen extracts from literary texts can have a purpose in the curriculum. However, there is research that suggests that whole texts read aloud and at a faster pace than usual (as opposed to extracts) are important, including for weaker readers. Research by the University of Sussex with 343 pupils aged 12 to 14 in 10 schools found that weaker readers made 16 months' progress in reading comprehension when they read 2 challenging novels in class in 12 weeks.[footnote 241]

There are other disciplinary-focused arguments for the study of whole texts. Sehgal Cuthbert suggests that, as the reader works their way through a whole work of literature, meaning is built up and layered and their responses evolve.[footnote 242] In addition, some specific forms of the novel need to be read in their entirety for the form to realise its intention. For example, the Bildungsroman, which aims to show the development of the protagonist's mind and character from childhood through to adulthood, needs to be read as a whole to achieve that aim.

A disciplinary-based approach to relevancy

It is, arguably, important for the curriculum to introduce pupils to texts that broaden their horizons, as well as enabling them to experience the novelty and beauty of rich language. Sehgal Cuthbert

suggests that texts should have ‘sufficient aesthetic form to encourage broader and deeper interpretations that demand greater imaginative effort’.[footnote 243] Applebee argues that the curriculum should be imagined as a conversation between pupils and the world mediated by teachers. He says that ‘the process of schooling must be a process of actually entering into particular traditions of knowing and doing’.[footnote 244] However, sometimes, text choice can be restricted by notions of what Warwick refers to as the ‘tyranny of relevance’.[footnote 245]

According to Applebee, a focus on relevance has led to curriculum inequity, where only advantaged pupils get the chance to read texts that are distanced from their reality.[footnote 246] This has led to the narrowing of the literature curriculum for some groups of pupils, who only access texts that reflect their own lives rather than different times or settings. Some types of literature can provide knowledge of other times and places that, in turn, helps pupils to comprehend texts. Additionally, reading more literature from other times, places and cultures can enable pupils to both develop and expand what they might consider meaningful to them.

A range of perspectives

Teachers and critics advocate a greater range of perspectives in the choices of literature that pupils study.[footnote 247] It is beneficial for pupils to see people similar to them represented as the heroes and protagonists in the books they read.

However, ideas about writers’ intentions can be over-simplified if they are viewed solely through the prism of our current political landscape or contemporary issues. This can also lead to reductionist interpretations: readings that fail to do justice to the many layers within the text and their meanings. It can also lead to significant, influential texts being removed from the curriculum or texts being included only because they address contemporary issues rather than due to literary merit.

Within the aims of the national curriculum, any rationale for choosing texts should be based on the knowledge, practices and traditions of the subject itself. Other purposes, for example learning about a particular contemporary social issue, such as ‘homelessness’ or ‘social media shaming’, should take a back seat to literary merit.

It may be useful for teachers and leaders to develop a set of criteria for choosing texts. Didau suggests questions to consider when choosing a text that include notions such as:[footnote 248]

- an entitlement to read certain texts
- whether texts have been read already
- the extent to which texts introduce pupils to new knowledge
- whether the text offers a genuine variety of voices and perspectives (including older, less popular voices)
- whether the text has ‘conversations’ backwards and forwards with other texts

Based on the above, high-quality English may have the following features:

- The curriculum has been designed to develop in pupils a genuine love of literature, and an ability to respond to texts personally.
- The curriculum has been designed to enable pupils to deepen their understanding in the 4 domains or fields of knowledge in literature, and to apply the key concepts from each field using disciplinary methods in their writing.
- The curriculum includes a range of ambitious whole texts in different forms and genres, which have been carefully chosen using subject-specific criteria.
- Over time, teachers build pupils' 'readiness' for future encounters with texts and critical views. They do this in a meaningful way so as not to narrow the literature curriculum.
- Teachers introduce pupils to texts that they would not choose to read for themselves, especially from other times and places and with a range of perspectives.

Assessment

Summary

This section outlines how formative assessment can allow teachers to assess pupils' knowledge and plan next steps. Feedback should be specific, challenging and related to the learning goals. Success criteria can be useful but do have their pitfalls. Similarly, problems can arise when mark schemes designed for summative assessment are used in place of a curriculum that identifies the range of knowledge pupils need for success in each written task. Multi-tiered systems can assess difficulties that pupils have with reading.

Formative assessment

Large-scale reviews of research have noted the positive impact of formative assessment on pupils' achievement across several subjects and for all ages.[footnote 249] Formative assessment provides feedback for both teachers and pupils that can then be used to improve teaching and

learning.[footnote 250] Formative assessment tasks can also be used to improve pupils' retention of the content through low-stakes assessment of knowledge and retrieval tasks.

Effective feedback for teachers

Effective formative assessment will allow the teacher to identify gaps in pupils' component knowledge and adjust the curriculum and pedagogy to take account of these. However, grade descriptors created for summative purposes may not function effectively to provide formative feedback for teachers. For example, grade descriptors probably will not allow the teacher to assess whether pupils had the specific knowledge of vocabulary and context that would allow them to comprehend a text.[footnote 251]

More useful formative tasks could ask pupils a series of questions on a particular section or aspect of a text or include specific practice activities, focused on areas where pupils need to improve, such as specific spellings or learning to use particular punctuation, embed a quotation or conclude an essay. The narrow focus in these tasks means that the teacher can identify precise knowledge gaps and misapprehensions.

Effective feedback for pupils

A meta-analysis of studies investigating the impact of formative assessments of writing directly tied to classroom teaching and learning found that adult feedback and self-assessment had the greatest impact on writing quality.[footnote 252] Older pupils' retention of new content can improve from marking and correcting their own work.[footnote 253] Teachers may need to help pupils with self-assessment, including understanding scoring rubrics and knowing how to assess their work against the aims of that work.[footnote 254]

Although feedback can have a positive influence on pupils' learning, it is challenging to establish the right conditions, and its impact varies widely, based on its form and purpose.[footnote 255] To be useful, it needs to be 'a recipe for future action'.[footnote 256] Pupils also benefit from modelling and feedback that is specific rather than general, such as 'Can you add the key terms "anaphora" and "hyperbole" to your response?' instead of 'You need to use more sophisticated vocabulary'.

Large-scale studies indicate that feedback is most effective when pupils do a focused task and the feedback is specific, challenging and related to the goal of the task.[footnote 257] These studies also show that the more information teachers give, the more effective it is. This includes information at task and process level. The large effect of this type of feedback suggests that it is most beneficial when it helps pupils not only to understand their mistakes but also to know why they made them and how to avoid them in the future.[footnote 258]

Research suggests that feedback should be immediate and precise when pupils are learning new knowledge and skills in order to prevent them from making errors and developing misconceptions.[footnote 259] For example, when pupils are learning how to embed examples in text

through practice activities, teachers should give them instant verbal feedback that focuses on accuracy.

There is research that suggests that later, when pupils are applying what they have learned, delaying feedback might be more effective.[footnote 260] This is because delayed and less frequent feedback will improve long-term retention more than regular and instant feedback. Additionally, if pupils are given feedback too frequently, they can become too dependent on it and may then struggle to work independently when required to do so.[footnote 261]

There is an important balance to be drawn here: the immediacy and frequency of feedback should be dependent on the stage of instruction and the pupil's level of expertise.

Success criteria

Sharing learning intentions and success criteria are common ways that teachers draw pupils' attention to what they need to learn. For example, if pupils are learning to punctuate direct speech, it is useful if they know what they should be able to do by the end of the lesson. It is helpful to use a worked example to draw attention to specific features before using those features as success criteria for pupils' own writing. For example, teachers could discuss the features of a persuasive letter, before using those features as success criteria for pupils' own writing.

However, there are a number of possible pitfalls when using success criteria. It can be unhelpful to give different pupils in the class different success criteria. This may result in pupils doing different tasks that require them to have been previously taught different component knowledge. This in-class differentiation has also generally not been shown to have much impact on pupils' attainment.[footnote 262]

Pupils need to understand the success criteria used to judge their work, but this can be problematic. Some approaches that are designed to avoid this problem, such as extended writing, can 'oversimplify the complexity of a good piece of writing'.[footnote 263] Marshall and Wiliam argue that this runs the risk of pupils following a rule or formula at the expense of meaning and writing becoming formulaic. Similarly, a learning intention such as 'To use the features of an effective story opening' is likely to be too broad for pupils to understand what a successful opening might look like. Success criteria amount to maxims that can only make sense to pupils who have enough expertise to appreciate how they can be applied.

Teachers and pupils might 'co-construct' success criteria derived from worked examples. However, this is not entirely straightforward. Since the teacher knows more about the subject than the pupils, the teacher would be abdicating their responsibilities to 'let whatever the students feel should be valued be adopted as learning intentions'.[footnote 264]

Alternatives to written feedback and marking

Written feedback can be time-consuming for teachers. There is also a risk that the pupils might not read feedback, or that they might not be able to understand it or act on it independently.[footnote 265]

Oral feedback is an effective alternative. For example, the teacher might note gaps or common errors in pupils' work and then give feedback to the whole class. Models of excellent work can form a basis for feedback, particularly when a teacher highlights the successful aspects.[footnote 266] Research suggests that worked examples can be effective when pupils face a complex task, reducing the cognitive load for them.[footnote 267]

Assessment of learning: summative assessment

Internal summative assessments allow schools to measure standards, see how effective teaching and the curriculum are across year groups, report to parents, and monitor pupils' progress and wider outcomes. It is crucial that schools are aware of the limits to the inferences that can be drawn from summative assessments, which check performance in complex tasks rather than the component knowledge necessary for success.

Reliability and validity of summative assessment of writing

Summative assessment of extended writing presents significant challenges. Research from Ofqual showed the difficulty of examiners reaching reliable judgements for GCSE and A-level English.[footnote 268] These issues apply more broadly, including to the assessment of writing at the end of key stage 2.[footnote 269] The limits to the reliability of assessing writing in English suggest that data generated through internal school assessments to 'track progress' and attainment may be of limited use. The Teacher Workload Advisory Group recommended that attainment data should be collected no more than 2 or 3 times a year unless it could be collected without additional workload and with a clear rationale for doing so.[footnote 270]

The validity of assessment is an issue when using criterion-referenced assessments, where writing is assessed against a set of criteria describing particular levels of performance. Scoring rubrics with lists of criteria can be limiting, effectively narrowing the concept of quality and excluding legitimate responses that fall outside the descriptors.[footnote 271]

Comparative judgement is an emerging approach to assessing writing, which research suggests can result in higher reliability than traditional criteria-based marking.[footnote 272] It can reduce the limiting effects of mark schemes and encourage expert markers to make decisions based on multiple and complex aspects of quality, which avoids some of the issues of using criteria.[footnote 273]

Problems with using mark scheme criteria as a progression model

Progression in English, as outlined in the curriculum section, depends on far more than just knowing how to approach test or examination questions. Mark scheme levels typically describe differences in the quality of final written outcomes that pupils produce. Mark schemes do not identify the range of curriculum content that pupils need to learn incrementally to succeed in the specific written tasks they are set. Therefore, treating examination mark schemes as the curriculum for pupils to master (that is, as a 'progression model') will mean that pupils may not acquire the very prior knowledge they need for final summative assessments.

Assessing reading

Word reading (decoding) and comprehension, the 2 aspects of reading discussed earlier (in 'The early English curriculum in schools' section) require different types of assessment to ensure validity.

Pupils' reading may be assessed through available standardised tests. However, these are not necessarily as effective as diagnostic tools.[footnote 274] One implication that the importance of prior knowledge has for reading comprehension assessments is that pupils' background knowledge of the topic being tested can vary and this can affect scores. This is because pupils' relevant prior knowledge is the most significant factor in successful reading comprehension. Difficulties with decoding are another possible explanation of why pupils might struggle to read a text. Standardised tests do not generally identify the reasons for pupils' reading difficulties.

Reading difficulties often go undiagnosed in primary and secondary schools, and around 20% of pupils start secondary school with reading skills that are below the expected standard.[footnote 275] One study found that a substantial proportion of pupils that the researchers identified as being poor readers were not receiving extra support for reading in school.[footnote 276]

Standardised tests of comprehension may be useful in secondary schools for initially identifying reading difficulties, particularly as part of a multi-tiered system of reading assessment. Teachers can first identify pupils who may be struggling through a general reading test and then move onto further one-to-one diagnostic testing to identify specific gaps or issues. Pupils may have poor word reading and/or deficits in comprehension skills.[footnote 277] It must be clear which aspect of reading is to be assessed, so that any test provides valid information about this.[footnote 278]

Based on the above, high-quality English may have the following features:

- The curriculum breaks learning down into component parts, which are assessed formatively. This enables teachers to identify precisely pupils' misconceptions, gaps and errors. Teachers use information from this assessment to adapt the curriculum.
- Feedback to pupils is specific and provides them with a 'recipe for future action'.
- Low-stakes assessment of knowledge and retrieval tasks are also used to improve

pupils' retention of the content.

- A multi-tiered approach to assessing reading problems leads to accurate identification and diagnosis of difficulties and pupils receive targeted support.
- Teaching focuses on building pupils' prerequisite knowledge rather than on practice for answering examination questions.

Systems at subject and school level

Summary

> The leadership roles of senior and middle leaders in primary schools are critical in ensuring that all pupils learn to read. Teachers' content knowledge in English is fundamental to pupils' progress. Continuing professional development (CPD) should be relevant to teachers' specific needs and capabilities, but it must also ensure that they understand the rationale for what they are being asked to learn.

Leadership

Leadership of English begins with primary school headteachers making sure that the youngest pupils grasp the basic knowledge and skills of reading. This will include a complete programme for, and resources to support, the teaching of systematic synthetic phonics.

Senior leaders cannot, of course, be expert in every aspect of curriculum.[footnote 279] Middle leaders – subject leads in primary schools and heads of department in secondary schools – therefore play an important role in ensuring positive outcomes for pupils and developing the knowledge and practice of other teachers.[footnote 280] However, their effectiveness depends on their knowledge of the subject and of effective pedagogy, and the extent to which they have autonomy and control over the curriculum, drawing on their subject expertise.[footnote 281] Senior leaders need to give them this autonomy as part of the school's shared vision and accountability framework for English.[footnote 282]

Continuing professional development

A study by Coe and others reviewed existing research and identified 4 ‘dimensions’ that teachers need in order to understand the content of a subject and how it is learned:[footnote 283]

- deep and fluent knowledge and flexible understanding of the content you are teaching
- knowing the requirements of curriculum sequencing and dependencies in relation to the content and ideas you are teaching
- knowing the relevant curriculum tasks, assessments and activities
- knowing pupils’ misconceptions and sticking points

Teachers’ professional learning is most effective when the content and the activities are directed towards the needs and existing capabilities of teachers.[footnote 284]

There is some evidence that a fortnightly to monthly rhythm of CPD sessions and/or support may be most effective in improving teachers’ knowledge.[footnote 285]

Based on the above, high-quality English may have the following features:

- In the early years and key stage 1, leaders prioritise the expert teaching of systematic synthetic phonics.
- Regular, subject-specific CPD focuses on improving disciplinary and pedagogical content knowledge.

Conclusion

This review shows how curriculum content and sequencing, as well as subject-specific pedagogy, best enable pupils to achieve the national curriculum aims for English. Our review has identified some themes that relate to an effective English curriculum.

Strong foundational knowledge for reading, writing and spoken language are

essential aspects of the early years curriculum

Automaticity in the basics of reading and writing early on enables pupils to rise to the challenges of an ambitious curriculum. It is critical that young children achieve both accuracy and speed in reading. Effective communication through writing depends on younger pupils developing foundational transcription skills (spelling and handwriting). Alongside this, they should develop knowledge of the world around them from stories and talking with adults. For both reading and writing, repeated practice is key to gaining proficiency.

Vocabulary is fundamental to pupils' progress

Vocabulary is the foundational knowledge for reading, speech and writing. Narrowing the word gap between pupils who are word-rich and word-poor is vital. Vocabulary development and wider language development feed into reading and writing. Adults' engagement in dialogue with young children supports their language development. Sharing books and stories introduces not only a wider, deeper range of vocabulary than is found in speech, but also shows how the meaning of words is context-dependent.

An effective reading curriculum ensures that pupils read large amounts of text and it focuses on providing pupils with the knowledge they need for comprehension

Once pupils have secured the basics of reading, they can develop skilled reading through a curriculum that includes exposure to large amounts of text and progressively more complex text. Teachers explicitly introduce the specific knowledge to pupils needed for comprehension. Over-simplistic approaches to reading (such as comprehension skills like summarising, drawing inferences or making predictions) do not work in isolation.

There can be unhelpful confusion about the term 'background knowledge'. It is often used quite narrowly and excludes vital syntactical lexical and literary knowledge. Research suggests that 'explicitly teaching background knowledge should be considered foundational to increasing competency in reading'.[footnote 286] Pupils benefit from exposure to background knowledge in a specific and sequenced way.

A reading curriculum is supported by the careful choice of increasingly challenging texts

The focus on literature-rich texts in the curriculum starts with sharing stories and rhymes at home before children start school. Throughout the curriculum, the choice of texts studied is critically important. An effective English curriculum will feature increasingly challenging texts at each stage. Different factors contribute to the challenge of a text. A clear understanding of this enables the construction of a curriculum that builds readiness for future reading. Pupils are likely to benefit from opportunities to read whole texts.

Carefully selected knowledge of literary studies is needed for pupils to make meaningful interpretations in keeping with the disciplinary tradition of literature. In a strong literature curriculum, this knowledge will be skilfully combined with aesthetic, epistemic and contextual knowledge.

The English curriculum for novices is structured differently in many aspects from the curriculum for experts

Different approaches to teaching may be more or less appropriate depending on pupils' level of expertise. Novices are likely to learn more effectively through direct instruction where they are 'explicitly shown what to do and how to do it'. Once they have gained this knowledge, they can apply it to future tasks.

Finally, teachers should be aware that novices may be less able to successfully produce their own meaningful responses without guidance. Securing foundational knowledge is a prerequisite. Once secure, teachers should carefully design more complex tasks so that pupils can attempt these successfully and without developing misconceptions. There is strong evidence for the value of using worked examples with novice learners. The idea of scaffolding has also been proven to guide instruction and reduce cognitive load.

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1. 'The national curriculum in England: framework document', Department for Education, September 2013.↩
2. 'Principles behind Ofsted's research reviews and subject reports', Ofsted, March 2021.↩
3. 'Education inspection framework: overview of research', Ofsted, January 2019; 'Commentary on curriculum research – phase 3', Ofsted, December 2018.↩
4. Education Act 2002, section 78.↩
5. Academies Act 2010, section 1.↩

6. J McGrane, J Stiff, J-A Baird, J Lenkit and T Hopfenbeck, 'Progress in international reading literacy study (PIRLS) 2016: national report for England', December 2017; J Sizmur, R Ager, J Bradshaw, R Classick, M Galvis and others, 'Achievement of 15-year-olds in England: PISA 2018 results', National Foundation for Education Research, December 2019, pages 1 to 7.↩
7. 'Early years foundation stage profile results in England 2019', Department for Education, October 2019.↩
8. Comparing pupils who took the check at the end of Year 1 in 2012 with those who took it at the end of Year 1 in 2019.↩
9. 'Phonics screening check and key stage 1 assessments in England, 2019', Department for Education, September 2019.↩
10. 'An infographic: GCSEs in 2019', Ofqual, August 2019.↩
11. 'Ad-hoc notice: early entry into GCSE exams in England', Department for Education, November 2020.↩
12. D Thomson, 'GCSE results 2019: to what extent are schools entering pupils early?', FFT Education Datalab, August 2019.↩
13. 'A level English entry and achievement, 2017–2019', Department for Education, 2019.↩
14. 'The framework for the national curriculum. A report by the expert panel for the national curriculum review', Department for Education, December 2011, page 12.↩
15. 'The framework for the national curriculum. A report by the expert panel for the national curriculum review', Department for Education, December 2011, page 11.↩
16. 'Learning with understanding: seven principles', in 'Learning and understanding: improving advanced study of mathematics and science in U.S. high schools', edited by J Gollub and others, National Academy of Sciences, 2002, pages 117 to 133; 'How people learn: brain, mind, experience, and school', edited by JD Bransford, AL Brown and RR Cocking, National Academy Press, 2000.↩
17. C Howe and N Mercer, 'Children's social development, peer interaction and classroom learning', in 'Primary Review Research Survey 2/1b', University of Cambridge, Faculty of Education, 2007; C Howe and M Abedin, 'Classroom dialogue: a systematic review across four decades of research', in 'Cambridge Journal of Education', Volume 43, Issue 3, 2013, pages 325 to 356.↩
18. 'Why closing the word gap matters: Oxford language report overview', Oxford University Press, 2018.↩
19. B Hart and TR Risley, 'Meaningful differences in the everyday experience of young American children', Paul H Brookes Publishing, 1995.↩
20. J Gilkerson, JA Richards, SF Warren, JK Montgomery, CR Greenwood, D Kimbrough Oller, J Hansen and TD Paul, 'Mapping the early language environment using all-day recordings and automated analysis', in 'American Journal of Speech-Language Pathology', Volume 26, Issue 2,

2017, pages 248 to 265; DE Sperry, LL Sperry and PJ Miller, 'Reexamining the verbal environments of children from different socioeconomic backgrounds', in 'Child Development', Volume 90, 2019, pages 1,303 to 1,318; J Gilkerson, JA Richards, SF Warren, JK Montgomery, CR Greenwood, D Kimbrough Oller, J Hansen and TD Paul, 'Mapping the early language environment using all-day recordings and automated analysis', in 'American Journal of Speech-Language Pathology', Volume 26, Issue 2, 2017, pages 248 to 265.

21. J Oakhill, K Cain and C Elbro, 'Understanding and teaching reading comprehension: a handbook', Routledge, 2014.

22. J Milton and J Treffers-Daller, 'Vocabulary size revisited: the link between vocabulary size and academic achievement', in 'Applied Linguistics Review', Volume 4, Issue 1, 2013, pages 151 to 172; MJ Snowling, C Hulme, AM Bailey, S Stothard and G Lindsay, 'Language and literacy attainment of pupils during early years and through key stage 2: does teacher assessment at five provide a valid measure of children's current and future educational attainments?', Better Communication Research Programme, Department for Education, November 2011.

23. ED Hirsch, 'A wealth of words', in 'City Journal', Volume 23, Issue 1, 2013.

24. R Smith, P Snow, T Serry and L Hammond, 'The role of background knowledge in reading comprehension: a critical review', in 'Reading Psychology', Volume 42, 2021, pages 214 to 240, quote on page 233.

25. R Smith, P Snow, T Serry and L Hammond, 'The role of background knowledge in reading comprehension: a critical review', in 'Reading Psychology', Volume 42, 2021, pages 214 to 240, quote on page 233.

26. 'Why closing the word gap matters: Oxford language report overview', Oxford University Press, 2018.

27. J Law, J Charlton and K Asmussen, 'Language as a child wellbeing indicator', Early Intervention Foundation and Newcastle University, September 2017.

28. M Snowling and C Hulme, 'Language skills, learning to read and reading intervention', in 'London Review of Education', Volume 4, Issue 1, 2006, pages 63 to 76.

29. S Spencer, J Clegg, J Stackhouse and R Rush, 'Contribution of spoken language and socio-economic background to adolescents' educational achievement at age 16 years', in 'International Journal of Language & Communication Disorders', Volume 52, Issue 2, 2017, pages 184 to 196.

30. J Gilkerson, JA Richards, SF Warren, JK Montgomery, CR Greenwood, D Kimbrough Oller, J Hansen and TD Paul, 'Mapping the early language environment using all-day recordings and automated analysis', in 'American Journal of Speech-Language Pathology', Volume 26, Issue 2, 2017, pages 248 to 265; M Rowe, 'Child-directed speech: relation to socioeconomic status, knowledge of child development and child vocabulary skill', in 'Journal of Child Language', Volume 35, Issue 1, 2008, pages 185 to 205.

31. ED Hirsch, 'Reading comprehension requires knowledge — of words and the world', in 'American Educator', 2003, pages 10 to 45.
32. KE Stanovich, 'Matthew effects in reading: some consequences of individual differences in the acquisition of literacy', in 'Reading Research Quarterly', Volume 22, 1986, pages 360 to 407.
33. ED Hirsch, 'Reading comprehension requires knowledge — of words and the world', in 'American Educator', 2003, pages 10 to 45.
34. WA Hoover and WE Tunmer, 'The primacy of science in communicating advances in the science of reading', in 'Reading Research Quarterly', 2021, pages 1 to 10.
35. P Gough and W Tunmer, 'Decoding, reading, and reading disability', in 'Remedial and Special Education', Volume 7, Issue 1, 1986, pages 6 to 10.
36. 'The national curriculum in England: framework document', Department for Education, September 2013, page 15.
37. 'The national curriculum in England: framework document', Department for Education, September 2013.
38. 'Education inspection framework: overview of research', Ofsted, January 2019; 'Commentary on curriculum research – phase 3', Ofsted, December 2018, page 27.
39. T Shanahan, 'The national reading panel report. Practical advice for teachers', Learning Point Associates/North Central Regional Educational Laboratory, 2005.
40. 'The reading framework: teaching the foundations of literacy', Department for Education, July 2021.
41. 'Education inspection framework: overview of research', Ofsted, January 2019; 'Commentary on curriculum research – phase 3', Ofsted, December 2018, pages 25-26.
42. 'Report of the national reading panel: teaching children to read', National Reading Panel, 2000.
43. T Shanahan, 'The national reading panel report. Practical advice for teachers', Learning Point Associates/North Central Regional Educational Laboratory, 2005.
44. Y Petscher and others, 'How the science of reading informs 21st century education', in 'Reading Research Quarterly, Volume 55, Issue 1, 2020, pages 1 to 25.
45. 'Education inspection framework: overview of research', Ofsted, January 2019.
46. T Shanahan, 'The national reading panel report. Practical advice for teachers', Learning Point Associates/North Central Regional Educational Laboratory, 2005.
47. T Shanahan, 'The national reading panel report. Practical advice for teachers', Learning Point Associates/North Central Regional Educational Laboratory, 2005, page 9.
48. JL Anthony and DJ Francis, 'Development of phonological awareness', in 'Current Directions in Psychological Science', Volume 14, Issue 5, 2005, pages 255 to 259.

49. T Shanahan, 'The national reading panel report. Practical advice for teachers', Learning Point Associates/North Central Regional Educational Laboratory, 2005; LC Ehri, SR Nunes, DM Willows, B Valeska Schuster, Z Yaghoub-Zadeh and others, 'Phonemic awareness instruction helps children learn to read: evidence from the national reading panel's meta-analysis', in 'Reading Research Quarterly', Volume 36, Issue 3, 2001, pages 250 to 287.↩

50. LC Ehri, SR Nunes, DM Willows, B Valeska Schuster, Z Yaghoub-Zadeh and others, 'Phonemic awareness instruction helps children learn to read: evidence from the national reading panel's meta-analysis', in 'Reading Research Quarterly', Volume 36, Issue 3, 2001, pages 250 to 287; 'Report of the national reading panel: teaching children to read', National Reading Panel, 2000.↩

51. 'Foundational skills to support reading for understanding in kindergarten through 3rd grade', What Works Clearinghouse, 2016.↩

52. 'The reading framework: teaching the foundations of literacy', Department for Education, July 2021, page 66.↩

53. 'The national curriculum in England: framework document', Department for Education, September 2013, page 20.↩

54. 'Foundational skills to support reading for understanding in kindergarten through 3rd grade', What Works Clearinghouse, 2016, page 2.↩

55. Y Petscher and others, 'How the science of reading informs 21st century education', in 'Reading Research Quarterly, Volume 55, Issue 1, 2020, pages 1 to 25, quote on page 10; A Castles, K Rastle and K Nation, 'Ending the reading wars: reading acquisition from novice to expert', in 'Psychological Science in the Public Interest', Volume 19, Issue 1, 2018, pages 5 to 51.↩

56. JP Cheatham and JH Allor, 'The influence of decodability in early reading text on reading achievement: a review of the evidence', in 'Reading and Writing: An Interdisciplinary Journal', Volume 25, Issue 9, 2012, pages 2,223 to 2,246.↩

57. JP Cheatham and JH Allor, 'The influence of decodability in early reading text on reading achievement: a review of the evidence', in 'Reading and Writing: An Interdisciplinary Journal', Volume 25, Issue 9, 2012, pages 2,223 to 2,246, quote on page 2,241.↩

58. Y Petscher and others, 'How the science of reading informs 21st century education', in 'Reading Research Quarterly, Volume 55, Issue 1, 2020, pages 1 to 25.↩

59. KS Double, JA McGrane, JC Stiff and TN Hopfenbeck, 'The importance of early phonics improvements for predicting later reading comprehension', in 'British Educational Research Journal', Volume 45, Issue 6, 2019, pages 1,220 to 1,234.↩

60. 'National curriculum in England: primary curriculum', Department for Education, September 2013, page 20.↩

61. ED Hirsch, 'Reading comprehension requires knowledge — of words and the world', in 'American Educator', 2003, page 12.↩

62. 'Early adopter schools: EYFS profile handbook', Department for Education, July 2020.↩
63. RT Kellogg, 'Training writing skills: a cognitive developmental perspective', in 'Journal of Writing Research', Volume 1, Issue 1, 2008, pages 1 to 26.↩
64. 'The national curriculum in England: framework document', Department for Education, September 2013.↩
65. J Rose, 'Independent review of the teaching of early reading: final report', Department for Education and Skills, 2006.↩
66. 'National curriculum in England: English programmes of study', Department for Education, September 2013.↩
67. CE Snow, P Griffin and MS Burns, 'Students change: what are teachers to learn about reading development?', in 'Knowledge to support the teaching of reading: preparing teachers for a changing world', edited by CE Snow, P Griffin and MS Burns, Wiley, 2005, pages 15 to 122, quote on page 86.↩
68. 'Development matters: non-statutory curriculum guidance for the early years foundation stage', Department for Education, March 2017.↩
69. 'National curriculum in England: English programmes of study', Department for Education, September 2013, page 13.↩
70. 'National curriculum in England: English programmes of study', Department for Education, September 2013, pages 28 and 34.↩
71. C Binder, 'Behavioral fluency: evolution of a new paradigm', in 'The behavior analyst', Volume 19, Issue 2, pages 163 to 197.↩
72. 'Early adopter schools: EYFS profile handbook', Department for Education, July 2020, page 12.↩
73. 'The national curriculum in England: framework document', Department for Education, September 2013, page 28.↩
74. K James and L Engelhardt, 'The effects of handwriting experience on functional brain development in pre-literate children', in 'Trends in Neuroscience and Education', Volume 1, Issue 1, December 2012, pages 32 to 42.↩
75. C Binder, 'Behavioral fluency: evolution of a new paradigm', in 'The behavior analyst', Volume 19, Issue 2, pages 163 to 197, quote on page 173.↩
76. T Santangelo and S Graham, 'A comprehensive meta-analysis of handwriting instruction', in 'Educational Psychology Review', Volume 28, 2016, pages 225 to 265; S Graham, KR Harris and T Santangelo, 'Research-based writing practices and the common core: meta analysis and meta synthesis', in 'The Elementary School Journal', Volume 115, Issue 4, 2015, pages 498 to 522.↩

77. MJ Snowling, C Hulme, AM Bailey, S Stothard and G Lindsay, 'Language and literacy attainment of pupils during early years and through key stage 2: does teacher assessment at five provide a valid measure of children's current and future educational attainments?', Better Communication Research Programme, Department for Education, November 2011; J Gross, 'The contribution of oral language skills to school improvement and outcomes for children and young people', Office of the Communication Champion, 2011; C Howe and N Mercer, 'Children's social development, peer interaction and classroom learning', in 'Primary Review Research Survey 2/1b', University of Cambridge, Faculty of Education, 2007; H Shablack and KA Lindquist, 'The role of language in emotional development', in 'Handbook of emotional development' edited by V LoBue, K Pérez-Edgar and K Buss, Springer, 2019; SGK Yew and R O'Kearney, 'Emotional and behavioural outcomes later in childhood and adolescence for children with specific language impairments: meta-analyses of controlled prospective studies', in 'Journal of Child Psychology and Psychiatry, and Allied Disciplines', Volume 54, 2013, pages 516 to 524.
78. J Law, R Rush, I Schoon and S Parsons, 'Modelling developmental language difficulties from school entry into adulthood: literacy, mental health, and employment outcomes', in 'Journal of Speech, Language and Hearing Research', Volume 52, 2009, pages 1,401 to 1,416.
79. R Alexander, 'Improving oracy and classroom talk in English school: achievements and challenges', University of Cambridge, Faculty of Education, 2012.
80. C Howe and N Mercer, 'Children's social development, peer interaction and classroom learning', in 'Primary Review Research Survey 2/1b', University of Cambridge, Faculty of Education, 2007.
81. RJ Alexander, 'Improving oracy and classroom talk: achievements and challenges', in 'Primary First', Volume 10, 2013, pages 22 to 29; W Millard and L Menzies, 'Oracy in our schools', in 'Voice 21', 2016, pages 1 to 90.
82. N Mercer, P Warwick and A Ahmed, 'An oracy assessment toolkit: linking research and development in the assessment of students' spoken language skills at age 11–12', in 'Learning and Instruction', Volume 48, 2017, pages 51 to 60.
83. D Barnes, 'From communication to curriculum', Penguin, 1976; D Barnes, 'Exploratory talk for learning', in 'Exploring talk in school: inspired by the work of Douglas Barnes', edited by N Mercer and S Hodgkinson, SAGE, 2008, pages 1 to 16.
84. RJ Alexander, 'Improving oracy and classroom talk: achievements and challenges', in 'Primary First', Volume 10, 2013, pages 22 to 29.
85. C Howe and M Abedin, 'Classroom dialogue: a systematic review across four decades of research', in 'Cambridge Journal of Education', Volume 43, 2013, pages 325 to 356.
86. IL Beck, MG McKeown and L Kucan, 'Bringing words to life: robust vocabulary instruction', second edition, Guilford Press, 2013.
87. RJ Alexander, 'Improving oracy and classroom talk: achievements and challenges', in 'Primary

First', Volume 10, 2013, pages 22 to 29.

88. K Littleton and N Mercer, 'Interthinking: putting talk to work', Routledge, 2013.

89. D Barnes, 'From communication to curriculum', Penguin, 1976; D Barnes, 'Exploratory talk for learning', in 'Exploring talk in school: inspired by the work of Douglas Barnes', edited by N Mercer and S Hodgkinson, SAGE, 2008, pages 1 to 16.

90. RJ Alexander, 'Improving oracy and classroom talk: achievements and challenges', in 'Primary First', Volume 10, 2013, pages 22 to 29.

91. D Edwards and N Mercer, 'Common knowledge: the development of understanding in the classroom', Methuen, 1987.

92. M Robinson, 'Trivium 21c: preparing young people for the future with lessons from the past', Crown House Publishing, 2013.

93. C Perfetti and J Stafura, 'Word knowledge in a theory of reading comprehension', in 'Scientific Studies of Reading', Volume 18, Issue 1, 2014, pages 22 to 37.

94. A Castles, K Rastle and K Nation, 'Ending the reading wars: reading acquisition from novice to expert', in 'Psychological Science in the Public Interest', Volume 19, 2018, page 27.

95. HW Catts, SM Adlof and S Ellis Weismer, 'Language deficits in poor comprehenders: a case for the simple view of reading', in 'Journal of Speech, Language, and Hearing Research', Volume 49, Issue April, 2006, pages 278 to 293; CA Perfetti, N Landi and J Oakhill, 'The acquisition of reading comprehension skill', in 'The science of reading: a handbook', edited by M Snowling and C Hulme, Blackwell, 2005, pages 227 to 247.

96. A Castles, K Rastle and K Nation, 'Ending the reading wars: reading acquisition from novice to expert', in 'Psychological Science in the Public Interest', Volume 19, 2018, quote on page 28.

97. CA Perfetti, N Landi and J Oakhill, 'The acquisition of reading comprehension skill', in 'The science of reading: a handbook', edited by M Snowling and C Hulme, Blackwell, 2005, pages 227 to 247.

98. A Castles, K Rastle and K Nation, 'Ending the reading wars: reading acquisition from novice to expert', in 'Psychological Science in the Public Interest', Volume 19, 2018, quote on page 27.

99. WH Rupley, WD Nichols, M Mraz and TR Blair, 'Building conceptual understanding through vocabulary instruction', in 'Reading Horizons: A Journal of Literacy and Language Arts', Volume 51, Issue 4, 2012, pages 299 to 312.

100. 'English programmes of study: key stage 4 national curriculum in England', Department for Education, July 2014.

101. DS McNamara, AC Graesser and MM Louwerse, 'Sources of text difficulty: across genres and grades', in 'Measuring up: advances in how to assess reading ability', edited by J Sabatini, E Albro and T O'Reilly, Rowman & Littlefield Education, 2012, pages 3 to 20.

102. C Perfetti and J Stafura, ‘Word knowledge in a theory of reading comprehension’, in ‘Scientific Studies of Reading’, Volume 18, Issue 1, 2014, pages 22 to 37.

103. GL Williamson, J Fitzgerald and AJ Stenner, ‘The Common Core State Standards’ quantitative text complexity trajectory: figuring out how much complexity is enough’, Educational Researcher, Volume 42, Issue 2, 2013, pages 59 to 69.

104. N Duke and K Cartwright, ‘The science of reading progresses: communicating advances beyond the simple view of reading’, in ‘Reading Research Quarterly’, Volume 56, 2021, pages 25 to 44.

105. DS McNamara, AC Graesser and MM Louwerse, ‘Sources of text difficulty: across genres and grades’, in ‘Measuring up: advances in how to assess reading ability’, edited by J Sabatini, E Albro and T O’Reilly, Rowman & Littlefield Education, 2012, pages 3 to 20.

106. P Deane, J Sabatini, G Feng, J Sparks, Y Song and others, ‘English language arts: literacy in history/social studies, science, and technical subjects key elements of the standards glossary of key terms’, in ‘ETS Research Report Series’, Volume 2015, Issue 2, 2015, pages 1 to 29.

107. D Lemov and E Badillo, ‘On writing a knowledge-driven English curriculum’, in ‘The researched guide to the curriculum’, edited by C Sealy, John Catt, 2020, pages 85 to 94.

108. D Lemov and E Badillo, ‘On writing a knowledge-driven English curriculum’, in ‘The researched guide to the curriculum’, edited by C Sealy, John Catt, 2020, pages 85 to 94.

109. P Deane, J Sabatini, G Feng, J Sparks, Y Song and others, ‘English language arts: literacy in history/social studies, science, and technical subjects key elements of the standards glossary of key terms’, in ‘ETS Research Report Series’, Volume 2015, Issue 2, 2015, pages 1 to 29.

110. D Lemov, C Driggs and E Woolway, ‘Reading reconsidered: a practical guide to rigorous literacy instruction’, Jossey-Bass, 2016.

111. R Smith, P Snow, T Serry and L Hammond, ‘The role of background knowledge in reading comprehension: a critical review’, in ‘Reading Psychology’, Volume 42, 2021, pages 214 to 240.

112. DD Paige, ‘The importance of adolescent fluency’, in ‘Fluency instruction: research-based best practices’, edited by T Rasinski, C Blachowicz and K Lems, second edition, Guilford Press, 2012, pages 55 to 71.

113. MJ Adams, ‘Advancing our students’ language and literacy: the challenge of complex texts’, in ‘American Educator’, Volume 34, Issue 4, 2011, pages 3 to 11, quote on page 9.

114. D Lemov, C Driggs and E Woolway, ‘Reading reconsidered: a practical guide to rigorous literacy instruction’, Jossey-Bass, 2016.

115. See, for example, IL Beck, L Kucan and MG McKeown, ‘Bringing words to life: robust vocabulary instruction’, Guilford Publications, 2013; KE Stanovich, ‘Matthew Effects in reading: some consequences of individual differences in the acquisition of literacy’, in ‘Reading Research

Quarterly', Volume 21, Issue 4, 1986, pages 360 to 407; C McBride-Chang, 'Children's literacy development', Routledge, 2004; K Cain and J Oakhill, 'Vocabulary development and reading comprehension: a reciprocal relationship', in 'Why closing the word gap matters', edited by J Harley, Oxford University Press, 2018, page 17; M Snowling and C Hulme, 'Language skills, learning to read and reading intervention', in 'London Review of Education Education', Volume 4, Issue 1, 2006, pages 63 to 76.

116. D Hayes, 'Speaking and writing: distinct patterns of word choice', in 'Journal of Memory and Language', Volume 27, Issue 5, 1988, pages 572 to 585; N Dawson, Y Hsiao, AWM Tan, N Banerji and K Nation, 'Features of lexical richness in children's books: comparisons with child-directed speech', Language Development Research, 2021.

117. J Montag and M MacDonald, 'Text exposure predicts spoken production of complex sentences in 8- and 12-year-old children and adults', in 'Journal of Experimental Psychology: General', Volume 144, Issue 2, 2015, pages 447 to 468.

118. IL Beck, MG McKeown and L Kucan, 'Bringing words to life: robust vocabulary instruction', second edition, Guilford Press, 2013; TS Wright and GN Cervetti, 'A systematic review of the research on vocabulary instruction that impacts text comprehension', in 'Reading Research Quarterly', Volume 52, Issue 2, 2017, pages 203 to 226; S Butler, K Urrutia, A Buenger, N Gonzalez, M Hunt and others, 'A review of the current research on vocabulary instruction', National Reading Technical Assistance Center, 2010.

119. IL Beck, MG McKeown and L Kucan, 'Bringing words to life: robust vocabulary instruction', second edition, Guilford Press, 2013.

120. IL Beck, MG McKeown and L Kucan, 'Bringing words to life: robust vocabulary instruction', second edition, Guilford Press, 2013.

121. T Shanahan, 'The national reading panel report. Practical advice for teachers', Learning Point Associates/North Central Regional Educational Laboratory, 2005.

122. M Joshi, R Treiman, S Carreker and LC Moats, 'How words cast their spell: spelling is an integral part of learning the language, not a matter of memorization', in 'American Educator', Volume Winter, 2008, pages 5 to 43.

123. K Rastle and M Davis, 'Morphological decomposition based on the analysis of orthography', in 'Language and Cognitive Processes', Volume 23, 2008, pages 942 to 971; VW Berninger, RD Abbott, W Nagy and J Carlisle, 'Growth in phonological, orthographic, and morphological awareness in grades 1 to 6', in 'Journal of Psycholinguistic Research', Volume 39, Issue 2, 2010, pages 141 to 163.

124. E James, N Currie, SX Tong and K Cain, 'The relations between morphological awareness and reading comprehension in beginner readers to young adolescents', in 'Journal of Research in Reading', Volume 44, 2021, pages 110 to 130; K Flanigan, S Templeton and L Hayes, 'What's in a word? Using content vocabulary to generate growth in general academic vocabulary knowledge', in 'Journal of Adolescent and Adult Literacy', Volume 56, Issue 2, 2012, pages 132

to 140.

125. LC Moats, 'Teaching reading is rocket science: what expert teachers of reading should know and be able to do', American Educator, 2020.

126. S Seok and B DaCosta, 'Oral reading fluency as a predictor of silent reading fluency at secondary and postsecondary levels', in 'Journal of Adolescent and Adult Literacy', Volume 58, Issue 2, 2014, pages 157 to 166.

127. K Cain, JV Oakhill and C Elbro, 'The ability to learn new word meanings from context by school-age children with and without language comprehension difficulties', in 'Journal of Child Language', Volume 30, pages 681 to 694.

128. S Butler, K Urrutia, A Buenger, N Gonzalez, M Hunt and others, 'A review of the current research on vocabulary instruction', National Reading Technical Assistance Center, 2010.

129. S Butler, K Urrutia, A Buenger, N Gonzalez, M Hunt and others, 'A review of the current research on vocabulary instruction', National Reading Technical Assistance Center, 2010.

130. HL Roediger and JD Karpicke, 'Test-enhanced learning', in 'Psychological Science', Volume 17, Issue 3, 2006, pages 249 to 255; HL Roediger, AL Putnam and MA Smith, 'Ten benefits of testing and their applications to educational practice', in 'The psychology of learning and motivation – cognition in learning', edited by JP Mestre and BH Ross, Academic Press, 2011, pages 1 to 36.

131. NK Duke and KB Cartwright, 'The science of reading progresses: communicating advances beyond the simple view of reading', in 'Reading Research Quarterly', Volume 56, Special Issue 1, pages 25 to 44; RM Joshi, R Treiman, S Carreker and LC Moats, 'How words cast their spell: spelling is an integral part of learning the language, not a matter of memorization', in 'American Educator', Volume Winter, 2008, page 9.

132. R Smith, P Snow, T Serry and L Hammond, 'The role of background knowledge in reading comprehension: a critical review', in 'Reading Psychology', Volume 42, 2021, pages 214 to 240.

133. D Compton, A Miller, A Elleman and L Steacy, 'Have we forsaken reading theory in the name of "quick fix" interventions for children with reading disability?', in 'Scientific Studies of Reading', Volume 18, 2014, pages 55 to 73.

134. CA Perfetti, N Landi and J Oakhill, 'The acquisition of reading comprehension skill', in 'The science of reading: a handbook', edited by M Snowling and C Hulme, Blackwell, 2005, pages 227 to 247.

135. T Shanahan, K Callison, C Carriere, NK Duke, PD Pearson and others, 'Improving reading comprehension in kindergarten through 3rd grade: a practice guide', What Works Clearinghouse, 2010.

136. CA Perfetti, N Landi and J Oakhill, 'The acquisition of reading comprehension skill', in 'The science of reading: a handbook', edited by M Snowling and C Hulme, Blackwell, 2005, pages

227 to 247.

137. J Oakhill, K Cain and C Elbro, 'Understanding and teaching reading comprehension: a handbook', Routledge, 2014.

138. T Rasinski, 'Why fluency should be hot', in 'The Reading Teacher', Volume 65, Issue 8, 2012, pages 516 to 522.

139. CA Perfetti, N Landi and J Oakhill, 'The acquisition of reading comprehension skill', in 'The science of reading: a handbook', edited by M Snowling and C Hulme, Blackwell, 2005, pages 227 to 247.

140. PJ Schwanenflugel and others, 'Becoming a fluent reader: reading skill and prosodic features in the oral reading of young readers', in 'Journal of Educational Psychology', Volume 96, Issue 1, 2004, pages 119 to 129.

141. T Rasinski, 'Why fluency should be hot', in 'The Reading Teacher', Volume 65, Issue 8, 2012, pages 516 to 522.

142. T Rasinski, 'Why fluency should be hot', in 'The Reading Teacher', Volume 65, Issue 8, 2012, pages 516 to 522.

143. DD Paige, WH Rupley, GS Smith, TV Rasinski, W Nichols and T Magpuri-Lavell, 'Is prosodic reading a strategy for comprehension?', in 'Journal for Educational Research Online 9', Volume 2, 2017, pages 245 to 275, quote on page 267.

144. Second example is quoted in K Carlson, 'How prosody influences sentence comprehension', in 'Language and Linguistics Compass 3/5', 2009, pages 1,188 to 1,200, quote on page 1,192.

145. DD Paige, WH Rupley, GS Smith, TV Rasinski, W Nichols and T Magpuri-Lavell, 'Is prosodic reading a strategy for comprehension?', in 'Journal for Educational Research Online 9', Volume 2, 2017, pages 245 to 275, quote on page 250.

146. RG Nathan and KE Stanovich, 'The causes and consequences of differences in reading fluency', in 'Theory into Practice', Volume 30, Issue 3, 1991, pages 176 to 184.

147. T Rasinski, 'Why fluency should be hot', in 'The Reading Teacher', Volume 65, Issue 8, 2012, pages 516 to 522.

148. RG Nathan and KE Stanovich, 'The causes and consequences of differences in reading fluency', in 'Theory into Practice', Volume 30, Issue 3, 1991, pages 176 to 184.

149. T Rasinski, 'Why fluency should be hot', in 'The Reading Teacher', Volume 65, Issue 8, 2012, pages 516 to 522; S Padeliadu and S Giazitzidou, 'A synthesis of research on reading fluency development: study of eight meta-analyses', in 'European Journal of Special Education Research', Volume 3, Issue 4, 2018, pages 232 to 256, quote on page 247; WH Rupley and others, 'Fluency: deep roots in reading instruction', in 'Education Sciences', Volume 10, 2020, page 6.

150. S Padeliadu and S Giazitzidou, 'A synthesis of research on reading fluency development: study of eight meta-analyses', in 'European Journal of Special Education Research', Volume 3, Issue 4, pages 232 to 256, quote on page 247; WH Rupley and others, 'Fluency: deep roots in reading instruction', in 'Education Sciences', Volume 10, 2020, page 6.↩

151. D Didau, 'The problem with "reading along"', The Learning Spy, March 2017.↩

152. T Rasinski, 'Why fluency should be hot', in 'The Reading Teacher', Volume 65, Issue 8, 2012, pages 516 to 522.↩

153. 'National curriculum in England: English programmes of study', Department for Education, July 2014.↩

154. A Castles, K Rastle and K Nation, 'Ending the reading wars: reading acquisition from novice to expert', in 'Psychological Science in the Public Interest', Volume 19, 2018, page 27.↩

155. S Higgins, T Martell, D Waugh, P Henderson and J Sharples, 'Improving literacy in key stage 2: guidance report', Education Endowment Foundation, November 2021; 'Teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction – reports of the sub-groups', National Reading Panel, 2000.↩

156. 'Teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction – reports of the sub-groups', National Reading Panel, 2000.↩

157. T Shanahan, 'The national reading panel report. Practical advice for teachers', Learning Point Associates/North Central Regional Educational Laboratory, 2005; 'Teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction – reports of the sub-groups', National Reading Panel, 2000.↩

158. DT Willingham and G Lovette, 'Can reading comprehension be taught', in 'Teachers College Record', Volume 26, 2014.↩

159. Willingham, D.T., 2006. The usefulness of brief instruction in reading comprehension strategies. American Educator, 30(4), pp.39-50.↩

160. DT Willingham, 'Critical thinking: why is it so hard to teach?', in 'Arts Education Policy Review', Volume 109, Issue 4, 2008, pages 21 to 32.↩

161. ED Hirsch, 'Why knowledge matters: rescuing our children from failed educational theories', Harvard Education Press, 2016.↩

162. K Cain, 'Reading development and difficulties', Blackwell Publishing, 2010; K Cain, JV Oakhill and C Elbro, 'The ability to learn new word meanings from context by school-age children with and without language comprehension difficulties', in 'Journal of Child Language', Volume 30, Issue 3, 2003, pages 681 to 694; R Smith, P Snow, T Serry and L Hammond, 'The role of background knowledge in reading comprehension: a critical review', in 'Reading Psychology', Volume 42, Issue 3, 2021, pages 214 to 240.↩

163. D Willingham, 'Infer this…', Science & Education, May 2018.

164. M Elleman, 'Examining the impact of inference instruction on the literal and inferential comprehension of skilled and less skilled readers: a meta-analytic review', in 'Journal of Educational Psychology', Volume 109, 2017, pages 761 to 781.

165. PA Kirschner, J Sweller and RE Clark, 'Why minimal guidance during instruction does not work: an analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching', in 'Educational Psychologist', Issue 41, 2006, pages 75 to 86.

166. N Cowan, 'Working memory capacity', Psychology Press, 2005.

167. M Melby-Lervåg, T Redick and C Hulme, 'Working memory training does not improve performance on measures of intelligence or other measures of "far transfer"', in 'Perspectives on Psychological Science', Volume 11, 2016, pages 512 to 534; D Simons, W Boot, N Charness, S Gathercole, C Chabris, D Hambrick and E Stine-Morrow, 'Do "brain-training" programs work?', in 'Psychological Science in the Public Interest', Volume 17, 2016, pages 103 to 186.

168. A Castles, K Rastle and K Nation, 'Ending the reading wars: reading acquisition from novice to expert', in 'Psychological Science in the Public Interest', Volume 19, 2018, pages 5 to 51.

169. T Cremin, M Mottram, F Collins, S Powell and K Safford, 'Teachers as readers: building communities of readers', in 'Literacy', Volume 43, Issue 1, 2009, pages 11 to 19; J De Naeghel, H Van Keer, M Vansteenkiste and Y Rosseel, 'The relation between elementary students' recreational and academic reading motivation, reading frequency, engagement, and comprehension: a self-determination theory perspective', in 'Journal of Educational Psychology', Volume 104, Issue 4, 2012, pages 1,006 to 1,021; C Clark and K Rumbold, 'Reading for pleasure: a research overview', National Literacy Trust, November 2006.

170. For example: J Toste, L Didion, P Peng, M Filderman and A McClelland, 'A meta-analytic review of the relations between motivation and reading achievement for K-12 students', in 'Review of Educational Research', Volume 90, 2020; M Torppa, P Niemi, K Vasalampi, M Lerkkanen, A Tolvanen and A Poikkeus, 'Leisure reading (but not any kind) and reading comprehension: a longitudinal study across grades 1 and 9', in 'Child Development', Volume 91, 2019, pages 876 to 900; J De Naeghel, H Van Keer, M Vansteenkiste and Y Rosseel, 'The relation between elementary students' recreational and academic reading motivation, reading frequency, engagement, and comprehension: a self-determination theory perspective', in 'Journal of Educational Psychology', Volume 104, 2012, pages 1,006 to 1,021; 'Reading for change: performance and engagement across countries', Organisation for Economic Cooperation and Development, 2002; JT Guthrie and E Anderson, 'Engagement in reading: processes of motivated, knowledgeable, social readers', in 'Engaged reading: processes, practices, and policy implications', edited by JT Guthrie and D Alverman, Teachers College Press, 1999, pages 17 to 45.

171. A Cunningham and K Stanovich, 'What reading does for the mind', in 'American Educator', Volume 22, 1998, pages 8 to 15.

172. A Sullivan and M Brown, ‘Reading for pleasure and progress in vocabulary and mathematics’, in ‘British Educational Research Journal’, Volume 41, Issue 6, 2015, pages 971 to 991; RA Mar and M Rain, ‘Narrative fiction and expository nonfiction differentially predict verbal ability’, in ‘Scientific Studies of Reading’, Volume 19, 2015, pages 419 to 433.↩

173. T Cremin and D Myhill, ‘Writing voices: creating communities of writers’, Routledge, 2012.↩

174. JR Toste, L Didion, P Peng, MJ Filderman and AM McClelland, ‘A meta-analytic review of the relations between motivation and reading achievement for K-12 students’, in ‘Review of Educational Research’, Volume 90, Issue 3, 2020, pages 420 to 456.↩

175. L Baker and D Scher, ‘Beginning readers’ motivation for reading in relation to parental beliefs and home reading experiences’, in ‘Reading Psychology’, Volume 23, Issue 4, 2002, pages 239 to 269.↩

176. T Cremin, M Mottram, F Collins, S Powell and K Safford, ‘Building communities of readers: reading for pleasure’, 2014, Routledge.↩

177. A Castles, K Rastle and K Nation, ‘Ending the reading wars: reading acquisition from novice to expert’, in ‘Psychological Science in the Public Interest’, Volume 19, 2018, page 27.↩

178. ‘The national literacy strategy. Framework for teaching’, Department for Education and Employment, 1998.↩

179. ‘The national curriculum in England: framework document’, Department for Education, September 2013.↩

180. ‘The national curriculum in England: framework document’, Department for Education, September 2013.↩

181. RT Kellogg, AP Whiteford, CE Turner, M Cahill and A Mertens, ‘Working memory in written composition: an evaluation of the 1996 model’, in ‘Journal of Writing Research’, Volume 5, Issue 2, 2013, pages 159 to 190.↩

182. RT Kellogg, AP Whiteford, CE Turner, M Cahill and A Mertens, ‘Working memory in written composition: an evaluation of the 1996 model’, in ‘Journal of Writing Research’, Volume 5, Issue 2, 2013, pages 159 to 190.↩

183. R Malatesha Joshi, R Treiman, S Carreker and LC Moats, ‘How words cast their spell: spelling is an integral part of learning the language, not a matter of memorization’, in ‘American Educator’, Volume Winter, 2008, pages 6 to 43; B Singer and A Bashir, ‘Developmental variations in writing’, in ‘Handbook of language and literacy’, edited by A Stone and others, Guilford Press, 2004, pages 559 to 582.↩

184. S Graham, KR Harris and T Santangelo, ‘Research-based writing practices and the common core: meta analysis and meta synthesis’, in ‘The Elementary School Journal’, Volume 115, Issue 4, 2015, pages 498 to 522.↩

185. R Malatesha Joshi, R Treiman, S Carreker and LC Moats, ‘How words cast their spell: spelling is

an integral part of learning the language, not a matter of memorization', in 'American Educator', Volume Winter, 2008, pages 6 to 43.

186. LC Moats, 'How spelling supports reading and why it is more regular and predictable than you may think', American Federation of Teachers, 2005.

187. S Graham and T Santangelo, 'Does spelling instruction make students better spellers, readers, and writers? A meta-analytic review', in 'Reading and Writing', Volume 27, 2014, pages 1,703 to 1,743.

188. 'National curriculum in England: English programmes of study. English appendix 1: spelling, Department for Education, September 2013.

189. R Malatesha Joshi, R Treiman, S Carreker and LC Moats, 'How words cast their spell: spelling is an integral part of learning the language, not a matter of memorization', in 'American Educator', Volume Winter, 2008, pages 6 to 43.

190. T Shanahan, 'The national reading panel report. Practical advice for teachers', Learning Point Associates/North Central Regional Educational Laboratory, 2005, page 13.

191. S Higgins, T Martell, D Waugh, P Henderson and J Sharples, 'Improving literacy in key stage 2: guidance report', Education Endowment Foundation, November 2021; A Quigley and R Coleman, 'Improving literacy in secondary schools', Education Endowment Foundation, 2019.

192. A Quigley and R Coleman, 'Improving literacy in secondary schools', Education Endowment Foundation, 2019.

193. S Higgins, T Martell, D Waugh, P Henderson and J Sharples, 'Improving literacy in key stage 2: guidance report', Education Endowment Foundation, November 2021; VW Berninger, K Vaughan, RD Abbott and others, 'Language-based spelling instruction: teaching children to make multiple connections between spoken and written words', in 'Learning Disability Quarterly', Volume 23, Issue 2, 2000, pages 117 to 135; 'Early years foundation stage profile pilot', Education Endowment Foundation, October 2019.

194. Y Petscher and others, 'How the science of reading informs 21st century education', in 'Reading Research Quarterly, Volume 55, Issue 1, 2020, pages 1 to 25.

195. S Higgins, T Martell, D Waugh, P Henderson and J Sharples, 'Improving literacy in key stage 2: guidance report', Education Endowment Foundation, November 2021.

196. A Quigley and R Coleman, 'Improving literacy in secondary schools', Education Endowment Foundation, 2019.

197. LC Moats, 'How spelling supports reading and why it is more regular and predictable than you may think', American Federation of Teachers, 2005, page 17.

198. SC Pan, TC Rickard and RA Bjork, 'Does spelling still matter—and if so, how should it be taught? Perspectives from contemporary and historical research', in 'Educational Psychology Review', 2021.

199. KR Harris, S Graham, AA Aitken, A Barkel, J Houston and A Ray, 'Teaching spelling, writing, and reading for writing: powerful evidence-based practices', in 'Teaching Exceptional Children', Volume 49, Issue 4, 2017, pages 262 to 272; SC Pan and TC Rickard, 'Transfer of test-enhanced learning: meta-analytic review and synthesis', in 'Psychological Bulletin', Volume 144, 2018, pages 710 to 756.

200. D Myhill and R Fisher, 'Editorial: writing development: cognitive, sociocultural, linguistic perspectives', in 'Journal of Research in Reading', Volume 33, 2010, pages 1 to 3.

201. S Graham, K Harris and T Santangelo, 'Research-based writing practices and the common core', in 'The Elementary School Journal', Volume 115, 2015, pages 498 to 522; R Andrews, C Torgerson, S Beverton, A Freeman, T Locke, G Low, A Robinson and D Zhu, 'The effect of grammar teaching on writing development', in 'British Educational Research Journal', Volume 32, 2006.

202. S Graham, A Bollinger, C Booth Olson, C D'Aoust, C MacArthur, D McCutchen and N Olinghouse, 'Teaching elementary school students to be effective writers: a practice guide', National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, 2012; B Saddler and S Graham, 'The effects of peer-assisted sentence-combining instruction on the writing performance of more and less skilled young writers', in 'Journal of Educational Psychology', Volume 97, 2005, pages 43 to 54.

203. T Shanahan, K Callison, C Carriere, NK Duke, PD Pearson and others, 'Improving reading comprehension in kindergarten through 3rd grade: a practice guide', What Works Clearinghouse, 2010.

204. B Saddler and S Graham, 'The effects of peer-assisted sentence-combining instruction on the writing performance of more and less skilled young writers', in 'Journal of Educational Psychology', Volume 97, Issue 1, 2005, pages 43 to 54.

205. S Graham and D Perin, 'Writing next: effective strategies to improve writing in adolescents in middle and high schools – a report to Carnegie Corporation of New York', Alliance for Excellent Education, 2007.

206. S Graham, 'Changing how writing is taught', in 'Review of Research in Education', Volume 43, 2019, pages 277 to 303.

207. S Graham and others, 'Evidence-based practice and writing instruction', in 'Handbook of writing research' edited by C MacArthur, S Graham and J Fitzgerald, Volume 2, Guilford Press, pages 211 to 226.

208. N Olinghouse, S Graham and A Gillespie Rouse, 'The relationship of discourse and topic knowledge to fifth graders' writing performance', in 'Journal of Educational Psychology', 2014, pages 107 to 115; L DeGroff, 'The influence of prior knowledge on writing, conferencing, and revising', in 'Elementary School Journal', Volume 88, 1987, pages 105 to 118.

209. N Olinghouse, S Graham and A Gillespie Rouse, 'The relationship of discourse and topic

knowledge to fifth graders' writing performance', in 'Journal of Educational Psychology', 2014, pages 107 to 115.

210. S Graham, K Harris and T Santangelo, 'Research-based writing practices and the common core', in 'The Elementary School Journal', Volume 115, 2015, pages 498 to 522; S Graham, D McKeown, SA Kiuhara and K Harris, 'A meta-analysis of writing instruction for students in the elementary grades', in 'Journal of Educational Psychology', Volume 104, 2012, pages 879 to 896; S Graham and D Perin, 'A meta-analysis of writing instruction for adolescent students', in 'Journal of Educational Psychology', Volume 9, 2007, pages 445 to 476.
211. C Bereiter and M Scardamalia, 'The psychology of written composition', Routledge, 1987.
212. C Bereiter and M Scardamalia, 'The psychology of written composition', Routledge, 1987.
213. For example, S Graham and D Perin, 'A meta-analysis of writing instruction for adolescent students', in 'Journal of Educational Psychology', Volume 9, 2007, pages 445 to 476; S Graham, K Harris and T Santangelo, 'Research-based writing practices and the common core', in 'The Elementary School Journal', Volume 115, 2015, pages 498 to 522; S Graham, A Bollinger, C Booth Olson, C D'Aoust, C MacArthur, D McCutchen and N Olinghouse, 'Teaching elementary school students to be effective writers: a practice guide', National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, 2012.
214. S Graham and K Sandmel, 'The process writing approach: a meta-analysis', in 'Journal of Educational Research', Volume 104, Issue 6, 2011, pages 396 to 407.
215. S Graham and K Sandmel, 'The process writing approach: a meta-analysis', in 'Journal of Educational Research', Volume 104, Issue 6, 2011, pages 396 to 407.
216. S Graham, KR Harris and T Santangelo, 'Research-based writing practices and the common core: meta analysis and meta synthesis', in 'The Elementary School Journal', Volume 115, Issue 4, 2015, pages 498 to 522.
217. S Graham and D Perin, 'Writing next: effective strategies to improve writing in adolescents in middle and high schools – a report to Carnegie Corporation of New York', Alliance for Excellent Education, 2007.
218. S Graham, D McKeown, SA Kiuhara and K Harris, 'A meta-analysis of writing instruction for students in the elementary grades', in 'Journal of Educational Psychology', Volume 104, 2012, pages 879 to 896; K Harris, S Graham, B Friedlander and L Laud, 'Bring powerful writing strategies into your classroom! Why and how', in 'Reading Teacher', Volume 66, Issue 7, 2013, pages 538 to 542.
219. S Graham and D Perin, 'Writing next: effective strategies to improve writing in adolescents in middle and high schools – a report to Carnegie Corporation of New York', Alliance for Excellent Education, 2007.
220. S Graham, X Liu, A Aitken, C Ng, B Bartlett and others, 'Effectiveness of literacy programs balancing reading and writing instruction: a meta-analysis', in 'Reading Research Quarterly',

Volume 53, Issue 3, 2018, pages 279 to 304.

221. S Graham, KR Harris and A Chambers, 'Evidence-based practice and writing instruction: a review of reviews', in 'Handbook of writing research', edited by C MacArthur, S Graham and J Fitzgerald, Guilford Press, 2016, pages 211 to 226.

222. J Sweller, P Ayres and S Kalyuga, 'Cognitive load theory', Springer, 2011; S Kyun, S Kalyuga and J Sweller, 'The effect of worked examples when learning to write essays in English literature', in 'Journal of Experimental Education', Volume 81, Issue 3, 2013, pages 385 to 408.

223. N Olinghouse, S Graham and A Gillespie Rouse, 'The relationship of discourse and topic knowledge to fifth graders' writing performance', in 'Journal of Educational Psychology', 2014, pages 107 to 115.

224. S Gibbons, '"Death by PEEL?" The teaching of writing in the secondary English classroom in England', in 'English in Education', Volume 53, 2019, pages 36 to 45.

225. For example, see: R Slavin, C Lake, A Inns, A Baye, D Dachet and J Haslam, 'A quantitative synthesis of research on writing approaches in key stage 2 and secondary schools', Education Endowment Foundation, 2019; S Graham, C MacArthur and J Fitzgerald, 'Best practices in writing instruction', Guilford Press, 2019; K Harris, S Graham, and LH Mason, 'Improving the writing, knowledge, and motivation of struggling young writers: effects of self-regulated strategy development with and without peer support', in 'American Educational Research Journal', Volume 43, 2006, pages 295 to 340.

226. S Graham, C MacArthur and J Fitzgerald, 'Best practices in writing instruction', Guilford Press, 2019; S Graham, K Harris and T Santangelo, 'Research-based writing practices and the common core', in 'The Elementary School Journal', Volume 115, 2015, pages 498 to 522.

227. J Hattie, 'Visible learning: a synthesis of meta-analysis relating to achievement', Routledge, 2009; J Scheerens and R Bosker, 'The foundations of educational effectiveness',' Pergamon, 1997.

228. 'Knowledge for 2030', Organisation for Economic Co-operation and Development, 2019, page 4.

229. 'Knowledge for 2030', Organisation for Economic Co-operation and Development, 2019.

230. See also C Atherton, A Green and G Snapper, 'Teaching English literature 16–19', Routledge, 2013.

231. A Standish, 'School subjects', in 'What should schools teach: disciplines, subjects and the pursuit of truth', edited by M Pettet, A Sehgal Cuthbert and A Standish, second edition, UCL Press, 2021, pages 38 to 53.

232. K Anders Ericsson, RT Krampe and C Tesch-Römer, 'The role of deliberate practice in the acquisition of expert performance', in 'Psychological Review', Volume 100, Issue 3, 1993, pages 363 to 406.

233. K Anders Ericsson, RT Krampe and C Tesch-Römer, 'The role of deliberate practice in the acquisition of expert performance', in 'Psychological Review', Volume 100, Issue 3, 1993, pages 363 to 406.↩

234. A Tharby, 'Round and round we go: teaching English in spirals', Reflecting English, September 2014.↩

235. M Appel and T Richter, 'Persuasive effects of fictional narratives increase over time', in 'Media Psychology', Volume 10, 2007.↩

236. V Elliott, 'Knowledge in English: canon, curriculum and cultural literacy', Routledge, 2021.↩

237. D Lemov, C Driggs and E Woolway, 'Reading reconsidered: a practical guide to rigorous literacy instruction', Jossey-Bass, 2016.↩

238. C Counsell, 'Senior curriculum leadership 1: the indirect manifestation of knowledge: (B) final performance as deceiver and guide', The Dignity of the Thing, April 2018.↩

239. C Stoneman, 'Thinking through transition 2020: English', Birmingham Teacher, April 2020.↩

240. D Didau, 'Making meaning in English: exploring the role of knowledge in the English curriculum', Routledge, 2021.↩

241. J Westbrook, J Sutherland, J Oakhill and S Sullivan, '"Just reading": the impact of a faster pace of reading narratives on the comprehension of poorer adolescent readers in English classrooms', in 'Literacy', Volume 53, Issue 2, 2019, pages 60 to 68.↩

242. A Sehgal Cuthbert, 'English literature', in 'What should schools teach? Disciplines, subjects and the pursuit of truth', edited by A Sehgal Cuthbert and A Standish, second edition, UCL Press, 2021.↩

243. A Sehgal Cuthbert, 'English literature', in 'What should schools teach? Disciplines, subjects and the pursuit of truth', edited by A Sehgal Cuthbert and A Standish, second edition, UCL Press, 2021.↩

244. A Applebee, 'Curriculum as conversation', University of Chicago Press, 2008.↩

245. I Warwick and R Speakman, 'Redefining English for the more able: a practical guide', Routledge, 2018.↩

246. A Applebee, 'Curriculum as conversation', University of Chicago Press, 2008.↩

247. L Nelson-Addy, V Elliott and G Snapper, 'Changing the narrative in the literature classroom', in 'Teaching English', Issue 23, 2020, pages 34 to 40.↩

248. D Didau, 'Do young adult novels have a place in the English curriculum?', Learning Spy, July 2021.↩

249. J Hattie and H Timperley, 'The power of feedback', in 'Review of Educational Research', Volume 77, Issue 1, 2007, pages 81 to 112; B Wisniewski, K Zierer and J Hattie, 'The power of feedback revisited: a meta-analysis of educational feedback research', in 'Frontiers in Psychology',

Volume 10, Issue 3,087, 2020, pages 1 to 14.

250. P Black and D Wiliam, 'Assessment and classroom learning', in 'Assessment in Education: Principles, Policy & Practice', Volume 5, Issue 1, 1998, pages 7 to 74.

251. D Christodoulou, 'Making good progress? The future of assessment for learning', Oxford University Press, 2016.

252. S Graham, M Hebert and K Harris, 'Formative assessment and writing: a meta-analysis', in 'The Elementary School Journal', Volume 115, Issue 4, 2015, pages 523 to 547.

253. B Butterfield and J Metcalfe, 'The correction of errors with high confidence', in 'Metacognition Learning', Volume 1, 2006, pages 69 to 84.

254. P Black, C Harrison, C Lee, B Marshall and D Wiliam, 'Working inside the black box: assessment for learning in the classroom', in 'Phi Delta Kappan', Volume 86, Issue 1, 2004, pages 8 to 21.

255. B Wisniewski, K Zierer and J Hattie, 'The power of feedback revisited: a meta-analysis of educational feedback research', in 'Frontiers in Psychology', Volume 10, 2020, page 3,087; A Kluger and A DeNisi, 'The effects of feedback interventions on performance: a historical review, a meta-analysis, and a preliminary feedback intervention theory', in 'Psychological Bulletin', Volume 119, 1996, pages 254 to 284.

256. D Wiliam, 'Embedded formative assessment', Solution Tree Press, 2018.

257. B Wisniewski, K Zierer and J Hattie, 'The power of feedback revisited: a meta-analysis of educational feedback research', in 'Frontiers in Psychology', Volume 10, Issue 3,087, 2020, pages 1 to 14; J Hattie and H Timperley, 'The power of feedback', in 'Review of Educational Research', Volume 77, Issue 1, 2007, pages 81 to 112.

258. B Wisniewski, K Zierer and J Hattie, 'The power of feedback revisited: a meta-analysis of educational feedback research', in 'Frontiers in Psychology', Volume 10, Issue 3,087, 2020, pages 1 to 14; J Hattie and H Timperley, 'The power of feedback', in 'Review of Educational Research', Volume 77, Issue 1, 2007, pages 81 to 112.

259. B Wisniewski, K Zierer and J Hattie, 'The power of feedback revisited: a meta-analysis of educational feedback research', in 'Frontiers in Psychology', Volume 10, Issue 3,087, 2020, pages 1 to 14; J Hattie and H Timperley, 'The power of feedback', in 'Review of Educational Research', Volume 77, Issue 1, 2007, pages 81 to 112.

260. CL Watkins and TA Slocum, 'The components of direct instruction', in 'Journal of Direct Instruction', Volume 3, Issue 2, 2004, pages 75 to 110.

261. NC Soderstrom and RA Bjork, 'Learning versus performance', in 'Oxford bibliographies online: psychology', edited by DS Dunn, Oxford University Press, 2015.

262. J Scheerens and R Bosker, 'The foundations of educational effectiveness', Pergamon, 1997.

263. B Marshall and D Wiliam, 'English inside the black box', Letts Educational, 2006.

264. D Wiliam, 'Embedded formative assessment', Solution Tree Press, 2018, page 59.

265. B Agricola, F Prins and D Sluijsmans, 'Impact of feedback request forms and verbal feedback on higher education students' feedback perception, self-efficacy, and motivation', in 'Assessment in Education: Principles, Policy & Practice', Volume 27, 2020, pages 6 to 25.

266. D Wiliam and C Christodolou 'Assessment, marking and feedback', in 'What does this look like in the classroom: bridging the gap between research and practice', edited by C Hendrick and R Macpherson, John Catt, 2017; D Wiliam, 'Embedded formative assessment', Solution Tree Press, 2018.

267. J Sweller, JJG van Merrienboer and FGWC Paas, 'Cognitive architecture and instructional design', in 'Educational Psychology Review', Volume 10, Issue 3, 1998, pages 251 to 296; S Kyun, S Kalyuga and J Sweller, 'The effect of worked examples when learning to write essays in English literature', in 'Journal of Experimental Education', Volume 81, Issue 3, 2013, pages 385 to 408.

268. 'Marking consistency metrics', Ofqual, 2018, pages 1 to 49.

269. Q He, S Anwyll, M Glanville and A Deavall, 'An investigation of the reliability of marking of the key stage 2 national curriculum English writing tests in England', in 'Educational Research', Volume 55, Issue 4, 2013, pages 393 to 410.

270. 'Making data work: report of the teacher workload advisory group', UCL Institute of Education Centre for Education Improvement Science and Department for Education, November 2018.

271. BM Moskal and JA Leydens, 'Scoring rubric development: validity and reliability', in 'Practical Assessment, Research & Evaluation', Volume 7, Issue 10, 2000, pages 71 to 81; WJ Popham, 'The instructional consequences of criterion-referenced clarity', in 'Educational Measurement: Issues and Practice', Volume 13, Issue 4, 2005, pages 15 to 18.

272. T Bramley and S Vitello, 'The effect of adaptivity on the reliability coefficient in adaptive comparative judgement', in 'Assessment in Education: Principles, Policy & Practice', Volume 26, Issue 1, 2018, pages 43 to 58; S Verhavert, R Bouwer, V Donche and S De Maeyer, 'A meta-analysis on the reliability of comparative judgement', in 'Assessment in Education: Principles, Policy & Practice', Volume 26, Issue 5, 2019, pages 541 to 562; T Benton and T Gallacher, 'Is comparative judgement just a quick form of multiple marking?', in 'Research Matters: A Cambridge Assessment Publication', Volume 24, 2018, pages 37 to 40; 'Marking reliability studies 2017: rank ordering versus marking – which is more reliable?', Ofqual, 2018.

273. M Lesterhuis, T van Daal, R Van Gasse, L Coertjens, V Donche and S De Maeyer, 'When teachers compare argumentative texts. Decisions informed by multiple complex aspects of text quality', in 'L1-Educational Studies in Language and Literature', Volume 18, 2018, pages 1 to 22; T van Daal, M Lesterhuis, L Coertjens, V Donche and S De Maeyer, 'Validity of comparative judgement to assess academic writing: examining implications of its holistic character and building on a shared consensus', in 'Assessment in Education: Principles, Policy & Practice', Volume 26, Issue 1, 2019, pages 59 to 74.

274. J Oakhill, K Cain and C Elbro, 'Understanding and teaching reading comprehension: a handbook', Routledge, 2014.

275. 'National curriculum assessments at key stage 2 in England, 2019 (revised)', Department for Education, December 2019.

276. S Stothard, M Snowling and C Hulme, 'The rate and identification of reading difficulties in secondary school pupils in England', in 'Centre for Reading and Language, Department of Psychology, University of York', 2010.

277. H Morris, 'Developing literacy intervention for older students struggling with literacy: how does research inform our choices and decisions ?', International Literacy Centre, UCL Institute of Education, 2018; MF Hock, IF Brasseur, DD Deshler, HW Catts, JG Marquis and others, 'What is the reading component skill profile of adolescent struggling readers in urban schools?', in 'Learning Disability Quarterly', Volume 32, Issue 1, 2009, pages 21 to 38; A Talwar, D Greenberg and H Li, 'Identifying profiles of struggling adult readers: relative strengths and weaknesses in lower-level and higher-level competencies', in 'Reading and Writing', Volume 33, Issue 9, 2020, pages 2,155 to 2,171.

278. J Oakhill, K Cain and C Elbro, 'Understanding and teaching reading comprehension. A handbook', Routledge, 2015, page 28.

279. 'Education inspection framework: overview of research', Ofsted, January 2019.

280. N Bennett, P Woods, C Wise and W Newton, 'Understandings of middle leadership in secondary schools: a review of empirical research', in 'School Leadership and Management', Volume 27, Issue 5, 2007, pages 453 to 470; P Sammons, S Thomas and P Mortimore, 'Forging links: effective schools and effective departments', Sage, 1997.

281. RL Engle, ER Lopez, KE Gormley, JA Chan, MP Charns and CV Lukas. 'What roles do middle managers play in implementation of innovative practices?', in 'Health Care Management Review, Volume 42, Issue 1, 2017, pages 14 to 27; 'HMCI commentary: curriculum and the new education inspection framework', Ofsted, September 2018.

282. 'Education inspection framework: overview of research', Ofsted, January 2019.

283. R Coe, CJ Rauch, S Kime and D Singleton, 'Great teaching toolkit evidence review', Evidence Based Education, 2020.

284. B Creemers, L Kyriakides and P Antoniou, 'Teacher professional development for improving quality of teaching', Sringer, 2013.

285. P Cordingley, S Higgins, T Greany, N Buckler, D Coles-Jordan, B Crisp, L Saunders and R Coe, 'Developing great teaching: lessons from the international reviews into effective professional development', Teacher Development Trust, 2015.

286. Reid Smith, Pamela Snow, Tanya Serry & Lorraine Hammond (2021) The Role of Background Knowledge in Reading Comprehension: A Critical Review, Reading Psychology, 42:3, 214-240,

DOI: 10.1080/02702711.2021.1888348; pp 232-233.

Back to top