Supporting Reading Comprehension Development
From Research to Practice

by Jane Oakhill and Kate Cain

There is broad consensus that both word recognition skills and oral language comprehension skills predict reading comprehension outcomes (Gough, Hoover, & Peterson, 1996; Language and Reading Research Consortium, 2015). As a result, reading comprehension difficulties can arise because of deficits in the former (e.g., dyslexia), the latter (e.g., comprehension-specific reading disability), or both (Catts, Adlof, & Weismer, 2006). There is now a broad base of research on the difficulties underlying poor word recognition, such as weak phonological processing (Catts et al., 2006), and how best to teach these skills and intervene for children who struggle in the acquisition of this component of reading ability (Bus & van Ijzendoorn, 1999; Elbro & Petersen, 2004; Hatcher, Hulme, & Ellis, 1994). This research has also translated into practice: For example, in the UK, schools are required to use systematic phonics to teach word-reading skills (Department for Education and Standards and Testing Agency, 2014). In contrast, our understanding of how best to teach the skills to support successful reading comprehension development and how best to intervene to mitigate the consequences of reading comprehension failure is less advanced. We believe that we now have the research base to properly inform such teaching and intervention and in this article we suggest critical skills that should form the core of both literacy curricula and interventions to support poor reading comprehension.

Successful reading comprehenders have good word-reading skills, robust vocabulary knowledge, an understanding of the grammatical rules that govern their language, and the integrative- and inference-making skills that enable them to construct a mental model of what they read. There is strong empirical support for the view that, over and above word-reading ability, word-, sentence-, and passage-level language skills each contribute to reading comprehension outcomes: Vocabulary, grammar, and integrative and inference skills explain unique variance in the longitudinal prediction of reading comprehension in the beginning stages of reading development (Muter, Hulme, Snowling, & Stevenson, 2004; Oakhill & Cain, 2012; Silva & Cain, 2015). Further, we know that these skills, and also cognitive processes such as executive function and specifically working memory, are weak in children with poor reading comprehension (Cain & Oakhill, 2006; Carretti, Borella, Cornoldi, & De Beni, 2009; Locascio, Mahone, Eason, & Cutting, 2010). On this basis, effective curricula and interventions for poor comprehenders should include a focus on these skills. We provide an overview of the evidence to support the teaching and development of these skills in our review.

Intervention Studies

Intervention studies typically include instruction in skills, knowledge, and/or strategies associated with skilled performance. Theoretically, these studies can be used to test hypotheses about reading development and causal explanations for reading difficulties. Such studies also have wider implications in that they can identify the skills that provide a foundation for reading development, can determine the skills that should be taught to young readers and, ultimately, can indicate ways to *prevent* (rather than remediate) some types of reading failure. Our discussion will focus on the language skills and strategic knowledge that are important for passage-level comprehension (see the article by Cutting and colleagues for a discussion of the role of working memory and executive function in reading comprehension). We divide the review into three sections: interventions that focus on the foundational skills of vocabulary and grammar; interventions that focus on higher-level skills important for passage comprehension (inference, text structure); and interventions that focus more broadly on teaching strategies to support the construction of meaning from text.

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Intervention or training studies may include both unselected groups of readers and poor comprehenders. Most of the studies on comprehension training for poor comprehenders are small in scale, and it is clear that intervention studies on the scale of those in the field of dyslexia are needed to assess the effectiveness of different interventions for children with poor reading comprehension. Some intervention studies have focused on one or two key skills shown to be important in the construction of a coherent mental model of the meaning of a text: inference, comprehension monitoring (i.e., the ability to assess whether or not one's own understanding is progressing well), and knowledge and use of text structure. Others have focused on more general strategies to support the construction of a mental model. We have selected one or two key studies for each to provide a flavor of the types of intervention that have been conducted on specific skills and knowledge.

Foundational Skills: Vocabulary and Grammar

Vocabulary knowledge is strongly related to reading comprehension (Carroll, 1993). Clearly, words are the building

blocks for sentence- and passage-level meaning, so it is logical for researchers and educators to focus on vocabulary skills to foster good reading comprehension. Vocabulary teaching can take two forms: teaching the meaning of specific words, and teaching children how to figure out the meanings of new words when reading.

Teaching specific vocabulary words. Authors of school textbooks often overestimate the extent of children's vocabulary knowledge and children may not know the meaning of even some of the key words in a text. When the teacher is aware of such a situation, it can be helpful to explain the meanings of key words, and to activate relevant prior knowledge, even before children start to read the text. The meanings of these key words, and their related semantic networks of meaning, often provide the foundation for the meaning of the text, so it will be easier for children to build a mental model of the text if they have that foundation. There is evidence to support this assumption: For example, fifth-grade students taught relevant key vocabulary are better able to learn from and remember a social studies text (Carney, Anderson, Blackburn, & Blessing, 1984), and vocabulary instruction prior to reading has been shown to help eighth-grade students (both those of average and of higher ability) to make causal connections in text (Medo & Ryder, 1993).

Vocabulary can be taught in many different ways, and the current research base is equivocal on which would be the best method or whether, indeed, there is a best method (National Institute of Child Health and Human Development [NICHD], 2000). However, there are some consistent findings. First, the successful teaching of vocabulary targets deeper levels of vocabulary knowledge so that children are not simply taught definitions of words (which they will likely rapidly forget), but are taught to relate new meanings to a broader context of meaning associations and words that they are already familiar with (Beck, Perfetti, & McKeown, 1982; NICHD, 2000). Second, repetition of new vocabulary items also supports learning (Stahl & Fairbanks, 1986). For younger children, this repetition might involve simply re-reading storybooks (which, fortunately, is very popular with young readers); for older children, repetition might involve the provision of opportunities to encounter the new words on multiple occasions across different texts (Biemiller & Boote, 2006).

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Teaching children to acquire new vocabulary. It is, of course, also very difficult to predict which key words children might need to know, which is why programs that aim to teach children strategies to work out the meanings of unknown words might be more beneficial in the longer term. One method is to encourage children to use the local context to derive meanings. This type of direct instruction has been shown to be helpful in improving the text comprehension of both poor and average readers (Tomesen & Aarnoutse, 1998). Another method to help children to work out word meanings is to teach them to use the morphological structure of unknown words. Morphemes are the smallest units of words that carry meaning: prefixes, roots, suffixes, inflections, e.g., *mis/read/ing/s* (Bowers & Kirby, 2010). The same root morphemes can be found in many different words. For example, from the root word *hope*, several more complex words can be derived, including: *hopeful, hopefully, hopefulness, hopeless*, and *hopelessness*. Thus, knowledge of root morphemes, and the way that various types of prefixes and suffixes change the meaning of that root, enables the reader to understand many new words in which the morpheme occurs. Teaching children about the morphological structure of words supports development of both vocabulary and reading comprehension (Bowers, Kirby, & Deacon, 2010).

Sentence-level understanding. Understanding individual sentences is necessary for understanding extended text. Specific sentence structures that are common in written text, but rare in conversation, may pose comprehension challenges because of the distance between dependent elements, as well as a lack of understanding of how they convey meaning (Scott, 2009). In addition, cohesive ties such as pronouns (*he, she, they, it,* etc.) and connectives (*before, after, because, so,* etc.) guide readers (and listeners) to make links both within and between sentences in text (Cain & Nash, 2011; Garcia, Sanchez, & Bustos, 2014; Yuill & Oakhill, 1988a). Although there is some evidence that reading comprehension difficulties are related to poor understanding of sentences (Catts et al., 2006; Stothard & Hulme, 1992) and cohesive ties (Cain, Patson, & Andrews, 2005; Yuill & Oakhill, 1988a), measures of grammatical knowledge are less powerful predictors of reading and listening comprehension than measures of vocabulary knowledge (Muter et al., 2004; Oakhill & Cain, 2012). This may be because our assessments of reading comprehension do not truly tap critical meaning-carrying aspects of grammar. Perhaps as a result of the absence of evidence for a strong link between grammatical knowledge and reading comprehension, there are few intervention studies that focus on sentence comprehension (see Scott, 2009, for a review) and interventions that focus on several language skills do not always include sentence comprehension (e.g., Clarke, Snowling, Truelove, & Hulme, 2010).

When we consider the role of grammar in curricula and interventions, it seems that activities to show *how* cohesive devices work and those that *contrast* the meanings of similar looking sentences might be particularly effective. For example, *before* and *after* both signal the temporal order of two events, but their meanings are distinct and will influence the inferences that we might draw from a two-clause sentence linked by a connective (e.g., *"Rob was feeling unwell before/after he ate the chicken sandwich"*). A comparison of the meanings of two clauses joined by different connectives can illustrate why connectives matter and how they work in text. Passive and active forms of sentences contain the same words, but their word

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order differs. Relative clauses can be critical for disambiguating meaning, for example identifying a particular protagonist in a text (e.g., *"the man who is wearing the monocle is a spy"*). Contrasting sentences with these forms can alert children to pay attention to syntactic structure and its role in conveying meaning (see Table 1 for examples). Teaching grammar in this way may also help to raise awareness that these (often quite small) words or differences between sentences matter. Indeed, one study of 10- and 12-year-olds found improvements in comprehension when the researchers had simply underlined the connectives in the texts to draw attention to their presence (Geva & Ryan, 1985).

Summary. Both vocabulary and grammar are critical to passage comprehension, but there has been far more research on the effects of vocabulary than grammar training on reading comprehension. A meta-analysis of 37 studies found that vocabulary instruction was beneficial not only to vocabulary knowledge, but also to passage-level comprehension when assessed with customized measures, and that it was particularly effective for poorer readers (Elleman, Lindo, Morphy, & Compton, 2009). Given the theoretical link that can be made between sentence comprehension and passage-level comprehension, and the links between poor sentence processing and specific language impairment, sentence comprehension should be considered in future research studies on interventions to support reading comprehension, particularly for older readers who will be more likely than younger children to come across complex sentences in text (Scott, 2009).

Passage-level Comprehension: Teaching Higher-level Skills and Extraction of Meaning from Text

Inference skills. Poor comprehenders generate fewer inferences than their more skilled peers and are less likely to engage in integrative processing (Cain & Oakhill, 1999; Oakhill, 1982) so teaching them how to make inferences and integrate information has been the goal of several intervention studies. One way to train inference making is to ask children to look for clues to work out critical pieces of information that are not stated explicitly in the text. This simple technique has been shown to be successful in improving comprehension with groups of 7- to 8-year-old good and poor comprehenders (Yuill & Joscelyne, 1988). The children read stories in which not all details were stated. An example story, about a boy sitting in the bath reading a book, is provided in Table 2. The children were instructed to

TABLE 1. Examples of materials that could be used to teach the function of cohesive devices and differences between different sentence structures

Cohesive devices: Interclausal connectives *Tom was late for school. He caught the bus.* Plausible connectives to combine these two sentences into a single two-clause sentences include: *because* and *so*, which create sentences with different meanings.
Sentence structure: Actives vs. passive *The monkey chased the dog. vs. The dog was chased by the monkey.* This comparison demonstrates how word order alone is insufficient for sentence comprehension.
Sentence structure: Restrictive vs. nonrestrictive relative clause *The car that is in the garage is red. vs. The car, which is in the garage, is red.* This comparison demonstrates how a restrictive relative clause (in the first sentence) provides essential meaning, in this case defining the car in question; the information provided by a nonrestrictive relative clause (as in sentence two) can be omitted and the sentence would still make sense (the car is red).

TABLE 2. Example text used in inference training studies

Tommy was lying down looking at a reading book. The room was full of steam. Suddenly Tommy got some soap in his eye. He reached wildly for the towel. Then he heard a splash. Oh no! What would he tell his teacher? He would have to buy a new one. Tommy rubbed his eye and it soon felt better.

work out "where Tommy was and what he was doing." The story does not explicitly state the setting (that the boy was lying in the bath) nor the main consequence of the story (the wet book would have to be replaced) but there were several clues that could be used to infer this information, such as *"splash," "he would have to buy a new one," "soap," "towel,"* and *"steamy."* The children who were trained to look for clues were subsequently better at making inferences than a control group.

Other inference training studies have focused on raising awareness of when an inference is needed, as well as how to make an inference by analyzing the text for clues as described above. To raise awareness, children are taught to generate questions (*who? where? why?* and *when?*) and use the surrounding context to work out the likely content of a missing sentence (McGee & Johnson, 2003; Yuill & Oakhill, 1988b). These interventions have resulted in significantly greater improvements, not only in inference making but also on standardized reading comprehension tests for the inference-trained children compared to control groups. The control groups undertook typical comprehension exercises (reading texts and answering questions about the text) (McGee & Johnson, 2003; Yuill & Oakhill, 1988b) or were trained in rapid word decoding (Yuill & Oakhill, 1988b).

Comprehension monitoring. Good readers evaluate their understanding of text both during and after reading. In doing so, they can identify when a failure to understand has occurred, and if they have the strategic knowledge they can engage in fix-up processes to repair comprehension failures. There are no studies to our knowledge that have targeted comprehension monitoring in isolation. However, studies in which children are taught to generate questions to evaluate their understanding clearly include an element of tuition in comprehension monitoring. We return to the discussion of whether instruction and intervention should focus on skills in isolation or with other skills below.

Knowledge and use of text structure. Knowledge of text structure may be used by readers and listeners to guide their understanding. The key elements of a simple, yet well structured, narrative include information about the setting, characters, an initiating event, problem, and its resolution; whereas more complex stories may also include predictions and explicit themes (Paris & Paris, 2003; Shapiro & Hudson, 1991). This knowledge about text structure can be taught successfully to young readers. For example, A. H. Paris and S. G. Paris (2007) taught children how to understand stories through easy-to-remember "tricks." The "five fingers trick" helped children to identify and understand narrative structure by linking each of the five main elements of a story grammar (setting, characters, initiating event, problem, resolution-ending) to the five fingers on the child's right hand. Other "tricks" supported summarizing and sequencing stories, and generating inferences to understand characters' actions. Children who followed this five-week program showed improved comprehension and retelling of narratives, and the benefits were evident across the ability range: Not only children with poor language and reading-related skills, but also those with good skills, showed improvements.

The range of different structures that expository or information texts can follow is quite varied: description, sequence, compare-contrast, problem-solution, and causation, although a particular text will sometimes include more than one of these formats and also elements of narrative (Meyer & Freedle, 1984). Because expository texts typically relate unfamiliar content, knowledge about these different structures may be particularly useful for understanding and learning from such texts.

Graphic organizers help readers organize the information in the text, and their use can be combined with other activities to support comprehension such as generating inferences. Children taught this knowledge not only show better learning from texts, but later apply this new knowledge to learn from new texts.

Graphic organizers have been used to support the teaching of narrative and expository text structure. Different types of graphic organizer can be used, such as Venn diagrams, decision trees, spider organizers, etc., and their use is not exclusive to expository text. Examples of graphic organizers for expository texts are shown in Figure 1. They help the reader to organize the information in the text, and their use can be combined with other activities to support comprehension such as generating inferences (Elbro & Buch-Iverson, 2013). Williams and colleagues have demonstrated that graphic organizers can be

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	Habitat	Appearance	Diet	Behavior characteristics	Hazard to humans
Lion					
Leopard					
Gazelle					
Zebra					
Ostrich					

The organizer above can be used with a text about two (or more) animals. Questions can accompany the organizer to guide thinking and identification of key information, for example: What are the two things in this paragraph about? How are they similar? How are they different?

Figure 1. An example of a simple compare and contrast matrix to show similarities and differences between animals that live in the African savannah.

taught to beginner readers, aged 6 to 7 years, to teach specific text structures. Critically, children taught this knowledge not only show better learning from texts, but later apply this new knowledge to learn from new texts (Williams et al., 2005).

Multistrategy training. Some research studies have considered the effects of training several of the comprehension-related skills mentioned above in combination. These have been effective in improving performance not only on the skills targeted in the training, but also on standardized assessments of reading comprehension. We briefly consider those that have focused on children identified with poor reading comprehension.

An early study in the UK by Yuill and Oakhill (1988b) showed that training in inference making, prediction, and question generation (using a reciprocal teaching methodology) was effective in improving reading comprehension scores on a standardized test (compared with training in rapid word decoding). A much larger study by Clarke, Snowling, Truelove and Hulme (2010) compared three interventions: text comprehension training, which focused on metacognitive strategies and inference skills, and was taught using written texts; oral language training, which emphasized vocabulary and figurative language and exclusively used spoken language; and a combination of text comprehension and oral language training, which integrated components from both training programs. Each program had an element of narrative training in the relevant modality (i.e., written or spoken).

Each program resulted in gains in reading comprehension, but the largest long-term gains occurred for children in the oral language training group. These findings do not necessarily support the view that training of oral language skills is better than training using written materials. A more recent study showed the opposite pattern: training in reading comprehension resulted in greater gains than the same training delivered in the oral modality (Carretti, Caldarola, Tencati, & Cornoldi, 2014). However, Clarke et al.'s findings do support the view that the particular skills taught to the oral language group (i.e., vocabulary and figurative language) may be more crucial in the longer term for overcoming reading-comprehension difficulties than the skills taught to the text comprehension group (metacognitive strategies and inference). Of course, the precise skills that are beneficial to a particular child are likely to depend on that child's profile of comprehension skill strengths and weaknesses. In particular, a child who has weak vocabulary may need to improve his or her basic vocabulary skills before he or she is able to take advantage of other comprehension-related skills (like inference making and comprehension monitoring).

Teacher-generated questions. In the section above, we discussed studies in which children were trained to generate their own questions. In contrast to this, other interventions have used teacher questions to focus children's attention on the extraction of meaning from text. Teacher-generated questions, applied skillfully, could be used to activate and develop a variety of comprehension strategies in children. For instance, "how do you know" questions might prompt inferences, comprehension monitoring, or text structure understanding, depending on the specific context. In an intervention delivered by teachers to struggling comprehenders, different types of teacher questions have been compared: wh-questions, *who*, *what*, *when*, and *where*; causal inference questions, which were specific to each of the texts taught in the intervention; and also a general questioning technique in which students were asked *"How does the sentence you just read connect with something that happened before in the story?"* every 5 to 6 questions (McMaster et al., 2012). In general, each of these methods led to improvements in text comprehension.

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Teacher-generated questioning has also been the approach favored in another teaching intervention designed by McKeown and colleagues. Children in the "content approach" condition were encouraged to focus on meaning by the use of general questions posed by teachers during group reading. At specified points in the text, the teacher would ask open-ended questions to initiate a discussion, for example *"What's going on here?"* and *"How does all this connect with what we read earlier?"* In the other "strategies approach" condition, children were stopped and encouraged to apply a particular strategy that had been taught, for example summarizing, making inferences, and generating questions. The content approach group had better recall of narrative text and learned better from expository texts (McKeown, Beck, & Blake, 2009).

Training children to construct a mental model through imagery. Children with poor reading comprehension have a language-based problem. For that reason, a nonverbal intervention or support might be preferred to those described above. A popular technique is the use of mental imagery. Many readers create images that represent what they are reading and the number of images reported by young readers is related to the ability to recall key story details (Sadoski, 1985). Mental imagery may help readers (and listeners) to organize information, for example, by serving as "pegs" on which to "hook" associated information (Sadoski & Paivio, 2001) and by creating the need to integrate information (Oakhill & Patel, 1991). The process of creating images of a text—like a movie in your head—provides a durable representation and fosters the need to integrate information from different parts of a text. In this way, it may also

help readers to evaluate the adequacy of their understanding, and so could support comprehension-monitoring skills.

Training children to generate mental images based on the text is simple and generally quick. For example, children are told that "a good way to remember things is to make up pictures in your head" and are given practice in this technique often with increasingly complex phrases, sentences, and text. Pictures can be used in the initial phase of training to provide an explicit example of what the image could include (Pressley, 1976). Mental imagery has been taught to 9- to 10-year-old children with poor listening comprehension and found to improve their ability to answer questions about short texts (Oakhill & Patel, 1991) and their ability to resolve pronouns (e.g. "Harry lent a jacket to Becky… because he was caring. Who was caring? Becky/Harry") (Francey & Cain, 2015). The effects of training in mental imagery are extensive, leading to gains not only in memory for text, but also in narrative production and comprehension monitoring (Center, Freeman, Robertson, & Outhred, 1999; Gambrell & Koskinen, 2002).

Summary. Several higher-level language skills—inference making, comprehension monitoring, and knowledge and use of text structure—can be taught either alone or in combination with others, and result in gains on standardized assessments of reading comprehension. Other interventions that either teach children to use mental imagery or to focus on the content and the meaning of the text are also effective in raising attainment. The benefits may extend to different texts and reading situations. However, teaching children how to make inferences by searching for clues in the text extends beyond specific skill instruction: Searching for clues involves comprehension monitoring and engages the reader in the construction of meaning. Such interventions may work by teaching children to focus on content rather than through the application of specific strategies. As with inference training, programs that teach children about text structure and how to use it may influence the reading process more generally. These programs help children to evaluate their understanding and to integrate information from different parts of a text into a coherent whole. In this way, training that is focused on specific skills may help children to become generally more engaged with the process of meaning construction in a similar way to mental imagery and teacher-generated questions that focus attention on content.

Programs to Improve Reading Comprehension: Training Teachers and Development of Curricula

In some cases, the research findings and experimental training programs outlined above have led to larger-scale training programs and interventions for teaching reading comprehension. One such program is *Inference Training* (Whatmuff & Leicester City Council, 2015), which provides training in teaching strategies and comprehension materials for class teachers, to help them provide not only successful interventions, but also general strategies that the pupils can use in their reading and learning more broadly. There is an emphasis on teachers' understanding of the background research and the evidence base for the strategies and skills they are being encouraged to teach, and the program requires a minimum of 15 hours of teacher training prior to use. Although the efficacy of the program has not been demonstrated in an independent evaluation, Brooks' (2013) overview of the effectiveness of intervention schemes that target literacy difficulties describes "remarkable" gains in comprehension for children using *Inference Training*, although this evaluation is based on unpublished data.

The *Inference Training* intervention is targeted at poor comprehenders specifically, and takes place at the individual or small-group level (see also the randomized controlled trial by Clarke et al., 2010). However, there is no reason why many of the strategies could not be taught at a whole-class level, since they would be likely to improve comprehension skills more broadly (and not only in children who have specific problems with comprehension). In fact, such a training program (*LEE Comprensivamente*), which was also inspired by the same research base as *Inference Training* (e.g., Cain & Oakhill, 1999; Oakhill & Cain, 2012; Oakhill, Cain, & Bryant, 2003), has been developed for whole-class use in Argentina. The unique and innovative difference in the LEE approach is that delivery of teaching to foster reading comprehension can take place at the whole-class level and is applicable to, and effective for, all children, not just poor comprehenders.

In order to teach with confidence and flexibility, and to be able to adapt methods to any text in any genre (and, indeed, to texts in other subject areas), teachers need to understand why particular skills and strategies are important.

The Argentinian training program has been shown to benefit a range of language skills in participating classrooms, relative to controls (Fonseca et al., 2011) though it should be noted that these evaluations have been carried out by the authors of the program. Like *Inference Training,* this intervention requires that teachers have knowledge of theory and strategies for the teaching of reading comprehension and adapt these to a range of readers in their classroom and, indeed, is accompanied by a "theoretical manual" for teachers. This emphasis on understanding the research base behind the practice is a core feature of successful commercial "Continuing Professional Development" programs for teachers in the U.S. such as *Language Essentials for Teachers of Reading and Spelling* (Moats, 2004). Unlike *Inference Training,* children taught with the LEE approach are provided with a workbook, but this is used atypically, in that the children do not work through "exercises" independently, but, rather, engage in discussion about the questions and tasks, which is then followed up with short written responses or selections in their workbook. Thus, as with *Inference Training*, the focus is on oral discussion of the texts.

Summary. Successful training of comprehension skills may require that teachers are also trained in the theory that

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underpins the program. The focus on whole-class approaches to the teaching of reading comprehension is invaluable in countries such as the UK where the teaching of comprehension skills is mandated in the National Curriculum, but where teaching of comprehension is still not well supported. The importance of teachers' understanding of the background research—both the theory and empirical findings underlying and supporting the training method they adopt—cannot be overestimated. In order to teach with confidence and flexibility, and to be able to adapt methods to any text in any genre (and, indeed, to texts in other subject areas), teachers need to understand why particular skills and strategies are important. Such understanding will often start with insights into their own comprehension skills: making the implicit and automatic explicit and strategic.

Remediation and Prevention

Word-reading skills are essential to enable reading comprehension to develop, but we have seen from the work on poor comprehenders that successful comprehension does not develop automatically once word reading is in place. Fortunately, there is now a strong research base that identifies how to teach the critical knowledge and skills that poor comprehenders need to improve their understanding and learning from text.

In addition to remediating reading comprehension failure, we also need to consider how best to prevent it. A successful comprehender cannot be a passive reader; they must strive to construct a coherent mental representation of a text's meaning. A good comprehender can only repair a comprehension failure if they are aware of it and have an adequate threshold or standard for what makes sense. Thus, teaching and encouraging children to reflect on the content of the text and their understanding of that content, and to be aware of the adequacy of their understanding, seems an essential step.

Finally, we note that there are many common skills that children and adults use to understand the relations between sequences of events in written and spoken text and other media, such as static and moving cartoons. Further, as our review has shown, successful support for reading comprehension involves discussion about text, not just reading. As a result, we do not need to wait until reading fluency is in place before we engage children in the process of constructing meaning; these skills and strategies can be nurtured through activities that do not involve reading. Indeed, given the richness of the language used in written texts, it is important to include listening to written texts in the classroom to provide opportunities for learning.

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***Jane Oakhill, D.Phil.**, is a Professor of Experimental Psychology at the University of Sussex, UK. She is an expert in reading comprehension. She has published widely (including in excess of 100 refereed journal articles), and has also co-authored and edited numerous books concerned with reading and comprehension. She can be reached at j.oakhill@sussex.ac.uk*

***Kate Cain, D.Phil.**, is Professor of Language and Literacy in the Department of Psychology at Lancaster University, UK. Her work concerns the language and cognitive processes that support reading comprehension and its development, and their role in reading comprehension difficulties. She was the recipient of the Samuel T. Orton Award in 2014. She can be reached at k.cain@lancaster.ac.uk*

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