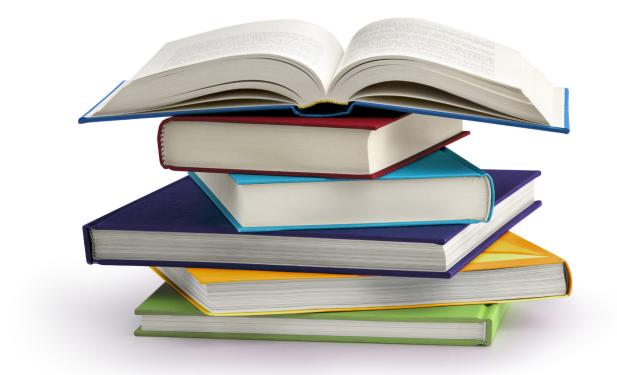






IMPROVING READING: A GUIDE FOR TEACHERS



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With special thanks to Professor Margaret Snowling, Dr Sue Stothard and Dr Bernardine King.

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INTRODUCTION

Introduction



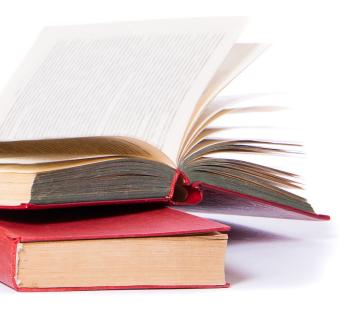
This booklet was developed for teachers by researchers at the Centre for Evaluation and Monitoring (CEM) at Durham University as part of a research project funded by the Education Endowment Foundation (EEF). It contains information and strategies for improving reading and spelling, appropriate for use with all children in Key Stage 2 which have been shown in research studies to be effective. You may like to discuss and share the information provided within this booklet with other teachers in your school. We hope that the booklet will be a useful resource for facilitating discussion in continuing professional development (CPD) sessions.

The booklet contains practical techniques to improve reading comprehension and spelling which you can use regularly with all your class with a small amount of planning. The techniques are explained in quite a simple way without elaborate detail leaving it to you to bring them to life in practice within your classroom situation thus combining research-based advice with your professional practice. They should just take a few minutes of planning to incorporate into lessons.

Throughout the booklet, you will see lightbulbs that indicate sections where there are techniques for you to use in the classroom. Each individual technique is highlighted by an orange bar. Definitions of the words highlighted in orange can be found in the Glossary on page xxx.



Towards the end of the booklet, the theory behind the process of learning to read and why some children experience reading difficulties is summarised. This is to help with understanding why the suggested techniques are important, thus relating theory and practice.





IMPROVING READING

Improving Reading

From birth, we start to acquire language and begin to understand the meaning of the spoken word. Vocabulary is important from the word go and continues to develop into adulthood. As children develop, their language skills expand from spoken to written communication and they learn to read and write. Learning to read begins by learning some letters of the alphabet and recognising a few simple words (letter and word recognition). However, simply recognising words is not an efficient way to become a fluent reader and so we generally also teach phonics methods which provide children with the means to understand words that they don't immediately recognise. Thus, children become able to read words using both recognition and decoding **strategies**. To begin with, recognising and decoding words takes up all of a child's brain processing capacity but as they become more fluent, the brain has some spare capacity to process the meaning of what is being read; **comprehension**. Although children need to be able to read some words before they can begin to understand their meaning, they do not need to have reached a high level of fluency. There is some overlap between learning to recognise and decode words, and comprehend the meaning of text.

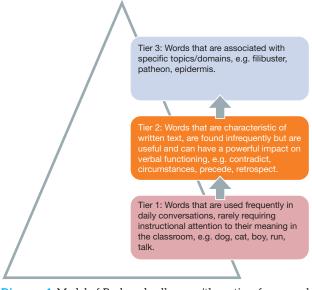
For children who have difficulties decoding text, instructional programmes that are phonics based and include training in phonological awareness have been found to be particularly effective². For a definition of phonological awareness and more information about how it is related to dyslexia, see the 'Understanding Reading Difficulties' section, page XXX of this booklet.

The National Curriculum expectation is that by the time a child reaches Year 5, s/he should be able to: read both out loud and silently from age-appropriate texts, write short stories and spell words they have learnt in previous years¹. In Years 5 and 6, pupils are expected to tackle a wide range of reading materials and at this stage, with focus on reading for meaning.

This section of the booklet describes some techniques that have been found to be effective for teaching different aspects of reading and spelling. They are grouped accordingly. We advise that you use these strategies frequently within your own classroom as teaching methods with all children, not just those with reading difficulties. The descriptions of the techniques are brief and, with your knowledge of your class and professional expertise, you are best placed to bring them to life in a practical way. The purpose of this booklet is to remind you of the techniques and perhaps to introduce you to some that you have not considered using before. This section will focus on techniques aimed at improving reading comprehension and spelling.

Vocabulary knowledge

Vocabulary is an important component of literacy and tasks that directly work towards increasing a child's understanding and use of new words can enhance reading comprehension³. Beck and colleagues⁴ suggested that an individual's vocabulary should span a 'threetiers framework' - (depicted in **Diagram 1**) and highlighted the importance of teaching tier 2 words in the classroom (the authors provide an example of how to identify tier 2 words in texts in Chapter 2 of their book⁴). The model is a nice illustration of the increasing sophistication and specialisation of vocabulary as you move up through the tiers. In Key Stage 2, most children will have reached tier 1, although it is useful to consider children who are learning English as an additional language. The aim is then to



 $\mbox{Diagram 1:}$ Model of Beck and colleagues 'three-tiers framework' of vocabulary knowledge12

expand children's general vocabulary at tier 2. Studying particular topics within the curriculum offers an opportunity to enhance more specialised vocabulary at tier 3 however at this stage it is also important to bear in mind a child's level of background knowledge. Imagine reading a very complex paper about molecular genetics. Could you understand it? Working on background knowledge will go 'hand-in-hand' with expanding vocabulary particularly at tier 3. As explained earlier, children's background knowledge needs to be considered when working on their vocabulary. Simple teaching strategies to increase children's background knowledge on a subject before asking them to read a text independently, and (2) encouraging the children to have a group discussion about the topic, without the teacher.

Do note that Beck and colleagues highlighted the importance of teaching new words by using context. That is, teaching words and associating them with a personal context is much more effective in comparison to simply teaching word definitions or asking pupils to lookup the meaning of words in a dictionary.

Vocabulary is an important component of literacy and directly increasing a child's understanding and use of new words can enhance reading comprehension⁵. Findings from research suggests that large individual differences in vocabulary size exist early in school⁶, particularly among learners from different ability or socio economic groups⁷.

IMPLEMENTING IN THE CLASSROOM

Trivial Pursuit:

Children should work in pairs and together develop a set of questions (and answers) related to a particular topic to build up their background knowledge. Each pair then swap their set of questions with another pair of children, and then play the game. This way, the children learn about the definitions in their own set of questions, as they have to provide the answers, and they get to see another set of questions, perhaps containing different words and information to the ones that they thought of.

Semantic Mapping Technique:

The Semantic Mapping Technique is an effective strategy for enhancing vocabulary development by encouraging children to derive meaning from written text⁸. An example of the Semantic Mapping Technique is provided in **Diagram 2**. Here, a target word highlighted in a piece of written text forms the focus of a map and related words located within the text are written in boxes connected to it. Children should work in small groups (maximum of six) to discuss and develop the word map.

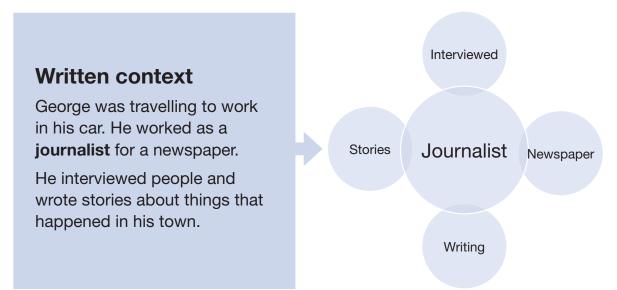


Diagram 2: Using the Semantic Mapping Technique (a blank printable version of this diagram can be found at the back of the booklet)

In addition to the Semantic Mapping Technique, the 'York Reading for Meaning' project, described later in the booklet (on page XXX), incorporated several different vocabulary activities (described fully in their book 'Developing Reading Comprehension'⁹) within their sessions. These are now briefly described.

Teach the 'Word of the Day':

- 1. Tell the children the Word of the Day.
- 2. Write the word on the board and circle it.
- 3. Encourage the children to repeat the word.
- **4.** Ask the children if anyone has heard the word before, and discuss the content of the word, e.g. What might the word mean? When might we use the word?
- 5. Provide the definition.
- 6. Give your own experiences of the word, and ask the children to talk about their own.

Mind Mapping:

Mind maps are a useful and effective way of providing context for a new word, which helps to foster the child's understanding of it. An example of a mind map is shown in **Diagram 3**. Following on from the 'Word of the Day' activities detailed above, encourage your pupils to help you create a mind map of the new word on the white board, using sentences and drawings, or encourage them to draw one of their own.

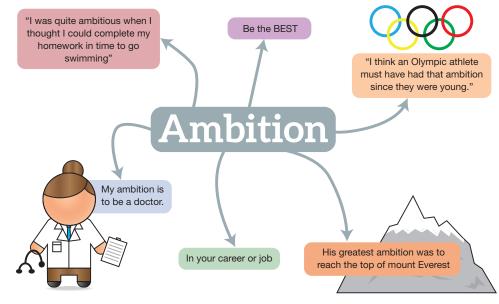


Diagram 3: An example of a Mind Map⁹

Memory Aids:

Memory aids draw upon a child's imagination to aid the recall of new words. An example is provided in **Diagram 4.** This activity could be incorporated into the 'Word of the Day' and 'Mind Mapping' activities detailed on page 13. Encourage pupils to develop a memory aid for the 'Word of the Day'.



Diagram 4: An example of a Memory Aid

Pictures and Photographs:

Picture prompts are helpful contextual cues that support word learning. Pictures, from a number of contexts, help to stimulate discussion and increase the likelihood that one of the pictures will prompt the child to reflect on their own experiences of the word. **Diagram 5** details a picture prompt card for the word admire.

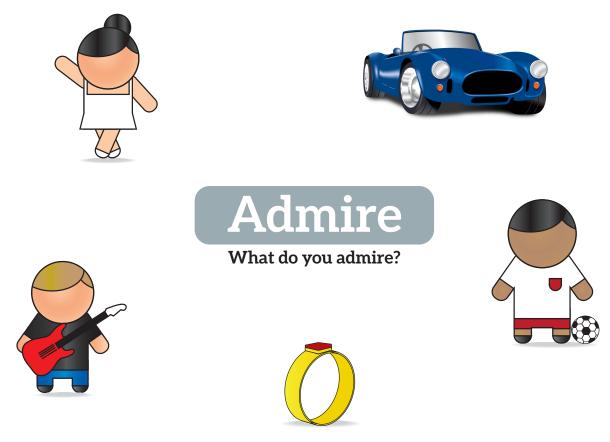


Diagram 5: An example of a Pictures and Photographs prompt⁹

Cognitive and Metacognitive Strategies

Thinking about your own thinking

Proficient readers use both cognitive and **metacognitive** strategies in the process of text comprehension. Cognitive strategies are activities such as re-reading difficult phrases or paragraphs, utilising background knowledge and adjusting reading speed when a difficult word or phrase is encountered. Metacognitive strategies include self-monitoring activities, which means having an awareness of the skills, strategies and resources necessary to succeed, and self-regulation strategies, which control those skills, strategies and resources so that effective performance is achieved. One key element of using metacognitive strategies includes the reader deciding whether or not s/he understands about what s/he is reading and the subsequent decision about the use of particular strategies.

Metacognitive strategies are useful for children to monitor and evaluate their comprehension, with some studies suggesting that they can help teachers identify successful readers from less successful ones¹⁰. Metacognitive strategies are valuable when developing reading comprehension in an array of areas, including (but not limited to) knowledge of text structures and understanding non-fiction text.

IMPLEMENTING IN THE CLASSROOM

For the following suggestions to be successful, the teacher will need to describe the reason for each part of the strategy to the child at the start and then demonstrate the strategy. The child then practices the strategy with the teacher until they fully understand what is expected. The teacher continues to support the child and provide feedback about the way that the child is implementing a strategy and the child's understanding of the text itself. Although these strategies have been shown to be effective when the teacher provides specific guidance, it does not necessarily mean that children will employ them on their own. They may well need reminders.

TELLS Advanced Organiser:

Through early experiences, children naturally develop a sense of how stories are typically structured. They will be able to tell from the structure of the first paragraph or two that a passage is likely to be a story and they can then predict how the structure will unfold. Much of this knowledge will be acquired by listening to others reading stories to them before they begin to learn to read for themselves. When the knowledge of narrative text structure is familiar, children are then aware of what features are likely to be useful for understanding a story. **Diagram 6** shows the steps in the 'TELLS' advanced organiser¹¹ which is a useful strategy.

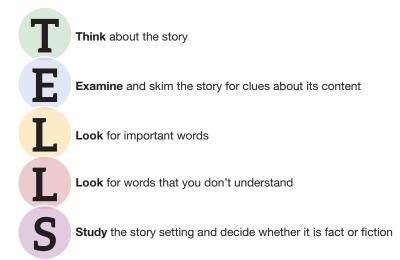
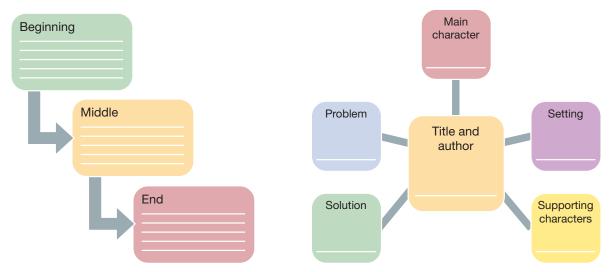


Diagram 6: The 'TELLS' Advanced Organiser (a printable version of this diagram can be found at the back of the booklet).

When the children get used to using an advanced organiser like TELLS above, the benefits extend to listening comprehension as well as reading comprehension.

Story Maps:

A story map uses a graphic organiser to help children learn and comprehend different elements of a book or story. By encouraging children to identify and record the setting (character, time and place), problem, goal, action and outcome, it enables them to learn detail. Research has found the use of story maps to be an effective means of increasing narrative text comprehension (see Duke and Pearson¹⁰ for a summary). There are many different types of story maps that vary in complexity. Below are two examples (**Diagram 7**), which require pupils to write notes in each section.





The 'MULTIPASS' Strategy for Non-Fiction Text:

Non-fiction text can sometimes be challenging. Any prior knowledge that a child has, which is relevant to the text, will make it easier to understand. Metacognitive strategies seem to be effective for understanding. The MULTIPASS strategy¹² shown in **Diagram 8** requires the child to read a passage three times:

- During the first time through, advise the children that they should become familiar with the main ideas and the organisation of the text by reading the title, the introductory paragraph and the subtitles. Encourage your pupils to look at the illustrations and diagrams, read the summary paragraph and then make notes of the information acquired from all of these processes. Before reading the text for the second time, encourage the pupils to formulate questions about the text.
- 2. Second time through find the specific information to answer the questions.
- **3.** Third time through the pupils test themselves by checking that they can answer their earlier questions immediately.

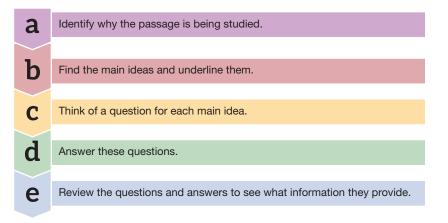


Diagram 8: The MULTIPASS Strategy for Non-Fiction Text (a printable version of this diagram can be found at the back of the booklet).

TOP TIP: Clarke and colleagues¹⁴ recognised that people's thought processes differ and suggested providing children with a variety of metacognitive strategies so that they could draw upon the ones they find most useful.

Cross-Age Peer Tutoring: The 'Paired Reading Technique'

Thinking about your own thinking

What is that noise? It is like a buzz. Let us go investigate. Down the corridors of the school we go. Getting nearer. It does indeed sound like a beehive. But louder! By the classroom door now – and what do we find? Instead of the regular similar-age children, there is a mix of older and younger pupils, a couple of years between them. They are all matched up in pairs, older with younger. Each pair has their own book, each quite different to any other pair in the class. And each pair is reading – sometimes one out loud, sometimes both. That is where the buzz is coming from! How is the teacher coping with this chaos? Actually, where is the teacher? Oh, there she is – down low with a pair. Coaching I guess – then she moves on to another pair. Seems unflustered. But there is more buzz than just one classroom – sure enough, the next classroom is at it as well. And the next! So many children reading at the same time, in an interactive way, without the expense of additional resources. And it seems relatively easy to implement, although a bit of work is needed to get differently aged classes together. This is cross-age peer tutoring'¹³.

Cross-age peer tutoring is a specific form of peer learning, and generally involves two pupils, of different ages, working as a pair in the roles of tutor and tutee. There are different forms of peer tutoring, such as pairing children of the same age with differing abilities; however studies suggest that cross-age peer tutoring produces the greatest academic benefit^{14,15}. For example, the Fife Peer Learning Project¹⁴ found that cross-age tutoring in reading, in which pupils in Years 5 and 6 tutored children two years younger in Years 3 and 4 respectively made a significant impact on the reading comprehension of both older and younger pupils. The benefits of cross-age peer tutoring are also reported to extend beyond academic gains, to include improvements in attitudes¹⁶ and self-esteem^{17,18}. In addition, if a child has problems with attention or task persistence, working alongside another child will help. The input from the other child will help to maintain focus. This is especially useful for children with behavioural characteristics of attention deficit hyperactivity disorder (ADHD).

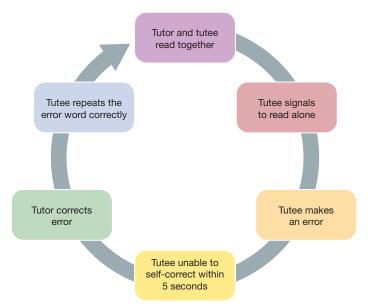
The Fife Peer Learning Project, described above, found one session of cross-age peer tutoring per week, for two terms to be sufficient to increase reading attainment among participating children. The Paired Reading Technique is described below. Full details can be found in a paper written by the researchers of the Fife Peer Learning Project, Peter Tymms and colleagues¹⁴.

Matching pairs: A two-year age gap is most appropriate. Order the children in both the older and younger classes from highest to lowest in reading attainment. The top-attaining child in the older class should be paired with the top-attaining child in the younger class; the second top-attaining child in the older class should be paired with the second top-attaining child in the younger class, and so on. Tutor-tutee pairs should remain together for the duration of the school year; changes to pairs can be made if it is clear the children will not form an effective working partnership with one another but it is good to give each pair a chance to settle and get to know and trust each other rather than making frequent changes.

Deciding the difficulty level of a book: The pair should choose a book of interest. To check that it is of appropriate difficulty (just above the independent reading level of the younger child), the tutee closes his/ her eyes and places their outstretched hand on the pages of the open book, opens their eyes and reads the words that appear at the end of their finger-tips. Do this four times, on four different pages. If the tutee can read between 13-19 words, the book is at the right level of readability. You can double check the level of difficulty by monitoring the progress of the pairs.



The process: The tutor and tutee start by reading together, the tutee should be advised to signal to the tutor when they are ready to read alone. Upon an error, the tutor allows the tutee 4-5 seconds to self-correct, if unsuccessful, the tutee is to be corrected by the tutor. The tutee repeats the error word correctly, and the pair read together again until the tutee signals to read alone; this cyclical process is shown in **Diagram 9**.



The pairs continue to read in this way for about 20 minutes. The older child should be monitoring the reading of the younger child and at the same time be thinking of questions to ask the younger child towards the end of the session. After 15–20 minutes, the reading stops and the older pupil asks the younger pupil questions about what they have just read. Frequent praise and support from the tutor throughout the session are a critical part of the process. It is also useful to encourage the younger pupil to give feedback to their tutor about how they have found the session.

You will need to prepare the tutors in

s of the Paired Reading Technique (A printable advance. Talk to them beforehand about

Diagram 9: The cyclical process of the Paired Reading Technique (A printable version of this diagram can be found at the back of the booklet)

how it will help their reading and that of the younger child. Stress the responsibility of their role and let them know what is expected of them. It is a good idea to set up some practice sessions for the tutors. Since praise is so important, ask the tutors to think of different ways of praising their tutees in advance of the sessions. They could make reminder cards and prompts for themselves. The questions are also important so talk to them about different kinds of questions they might think to ask such as about the characters' feelings and questions that require the younger child to make inferences. Give examples. You should also talk to the tutees beforehand so that they too know what to expect. Reports from the Fife project were very positive – tutors, tutees and teachers enjoyed the process but it does take time to bed in and organisation to make it run smoothly. A plentiful supply of books of a range of difficulties needs to be available and if these are grouped by difficulty, it will make the process of choosing a book simpler!

Keith Topping and colleagues' article 'Peer tutoring and reading in Scotland'¹³ provides further detail on the Paired Reading Technique.

Spelling

Charles Read¹⁹ and Edmund Henderson²⁰ were first to report that children develop spelling skills in stages, as detailed in **Diagram 10**.

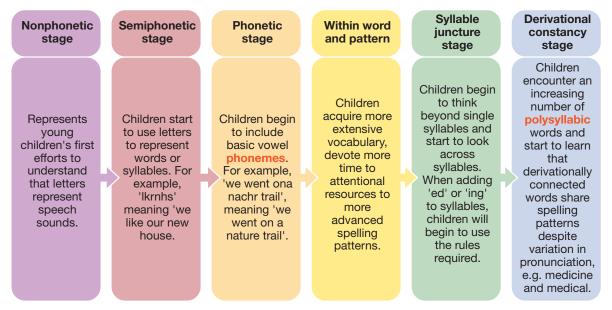


Diagram 10: A Framework for Spelling Development

Through their work with children, Read and Henderson began to understand that children who were taught to spell new words by applying the knowledge of letter-sound relationships and vowel patterns, and analysing the smaller units within those words, were more successful than children who were taught to memorise whole words. The phonological approach to spelling seems to be a necessary step towards mastery. Children should be encouraged to develop these skills of analysis when learning to spell words

of increasing difficulty. If longer and unfamiliar words are tackled phonetically, most parts are likely to be correct and attention can be focused on particular parts, and the common rules that they follow.

Spelling instruction should include identifying which stage a child is at, and build upon a child's word knowledge, enabling them to move to the next stage. Learning spelling at the appropriate developmental level helps children to make sense of the conventions of various patterns. Teaching beyond that level learning to the mechanical memorisation of words, which is an inefficient process and often results in only tempor learning.

IMPLEMENTING IN THE CLASSROOM

Cued Spelling:

The Centre of Peer Learning at Dundee University has developed a programme called Cued Spelling. Here children can work in pairs, or with an adult. Information and downloadable resources are available from: www.dundee.ac.uk/eswce/research/resources/thinkingreadingwriting/#d.en.158378

The Cued Spelling method is also detailed in Keith Topping's paper, 'Cued Spelling: A powerful technique for parent and peer tutoring'²¹.



UNDERSTANDING THE READING PROCESS

Understanding the Reading

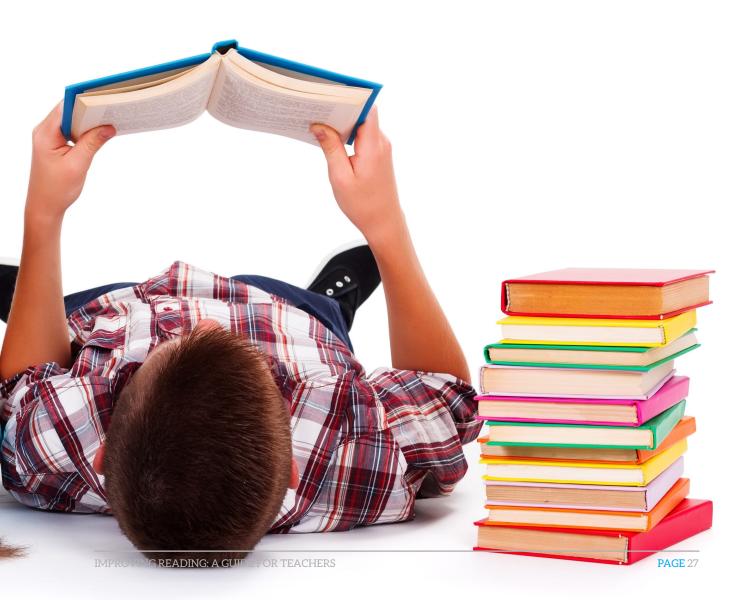
Learning to read is a complex process and the theoretical understanding of that process has been hotly debated and continues to evolve. The 'simple view of reading'²² is one theory that helps to explain the skills and processes required to comprehend written text. The model proposed that reading comprehension is underpinned by two skills: decoding and listening comprehension. The decoding process begins as children learn some letters of the alphabet and recognise a few simple words (letter and word recognition). However, simply recognising words is not an efficient way to become a fluent reader and so we generally also teach phonics methods which provide children with the means to understand words that they don't immediately know. Thus, children become able to read words using both recognition and decoding strategies.

To begin with, recognising and decoding words takes up all of a child's brain processing capacity but as these skills become more fluent, the brain has some spare capacity to process the meaning of what is being read; the comprehension of text. Although children need to be able to read some words before they can begin to understand their meaning, they do not need to have reached a high level of fluency. There is some overlap between learning to recognise and decode words, and comprehend the meaning of text.



Process

Keith Stanovich²³ proposed that the overlapping process of becoming fluent in decoding and recognising words as well as comprehending the meaning of text is an 'interactive-compensatory' process. That is, the amount of processing allocated to word decoding and comprehension is variable and dependent on the difficulty of the text and the ability of the reader. When good readers read a simple passage, the process of word recognition is an automatic and unconscious action that requires little effort, leaving plenty of the brain's processing capacity for the higher level task of interpreting the meaning of text. The process is 'compensatory' because more processing capacity can be allocated to decoding when required.





UNDERSTANDING READING DIFFICULTIES

Understanding Reading Difficulties

Through research, we know a lot about the mental processes that occur when reading and writing, and why some children have difficulties. Some children have other learning difficulties, the acquisition of literacy being just one of them. Others experience specific difficulty in learning to read and write despite being of at least average ability and having access to appropriate education. Below we explain the two most common learning difficulties associated with reading; dyslexia and reading comprehension impairment. Such problems are found at all levels of abilities and like many other developmental disorders (including, for example, problems with mathematics), form a continuum of severity rather than falling into discrete groups.

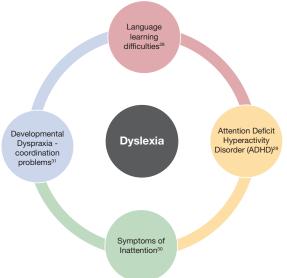
Dyslexia

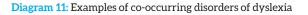
The defining characteristic of dyslexia is a problem with decoding words (and hence reading fluency), and spelling. Children who have dyslexia also have problems with:

1. **Phonological awareness** – This ability to discriminate between the individual sounds which make up spoken words.

Children who experience difficulty in discriminating between the individual sounds within spoken words also tend to have trouble decoding words, and spelling.

- Verbal memory This is the inability to recall verbal information primarily over short periods of time. The difficulty affects the ability to learn letter sounds, numbers, symbols (such as +,-) and other verbal labels (including the days of the week, months of the year, and people's names). It can also be expected to have an impact on remembering the spoken forms of printed words and hence delay the development of a sight vocabulary.
- 3. Verbal word processing speed The speed with which it is possible to recall names and lables. Typically this is seen as a slowness in verbal labelling recognising and decoding words²⁴. Many children with dyslexia experience difficulties with all the above processes. However, in practice the symptoms vary in severity: some children will have all of the symptoms described above at a





severe level, others will experience milder difficulties²⁵.

Visual problems are also associated with dyslexia. While this booklet focuses on phonological aspects of dyslexia. Stein²⁶ and Eden and colleagues²⁷ provide further details on this.

It is also important to recognise that children with dyslexia often have other developmental difficulties. Common examples of co-occurring disorders are detailed in **Diagram 11**.

The Diagnosis of Dyslexia

Previously, a commonly used method for diagnosing dyslexia was to look for a discrepancy between a child's IQ score and his or her performance on standardised reading and spelling tests; this definition and diagnosis measure is no longer in use. Some current practices of screening for dyslexia include assessments of a wide range of skills such as visual and auditory perception, integration of different types of sensory information and aspects of motor development. However, while such problems might be expected to affect some aspects of learning, it is not proven that such difficulties are indicators of dyslexia per se.

One early pre-school indicator of dyslexia is a child's inability to repeat words accurately after they have been heard and to detect rhyming words, skills that are usually acquired at an early age. Later, while the majority of children start to acquire reading fluency others are left behind in their ability to decode, spell, and make sense of text and so on. It is useful to assess these key features directly. In the first instance, teachers can check as to whether or not their pupils have good word recognition and decoding skills, whether there are discrepancies between these or whether both are lower than expected. Then teachers can see whether or not children have good word recognition and decoding skills, but poor reading comprehension skills. This information can be used to decide how best to help improve a child's reading ability. If a child has not reached fluency in recognising and decoding words, strategies to improve these areas should be used as well as strategies to improve comprehension. Stanovich's^{9,23} model of the reading process, described earlier in the booklet, explains why it is important to work particularly on word recognition and decoding to move towards fluency.

Poor Comprehension

When a child has dyslexia, they may also find it difficult to comprehend text; a result of slow and inaccurate word recognition and decoding. However, some children have good word recognition and decoding skills yet still struggle to comprehend text. Children with such a profile are described as having a reading comprehension impairment, and are also known as 'poor comprehenders'. Being a poor comprehender is very different to dyslexia. As noted earlier in this booklet, according to the 'the simple view of reading'²², reading comprehension depends critically upon two skills: decoding and listening (or language) with which it is possible to recall names and labels.

Although children with reading comprehension impairment are not always well recognised by teachers, data collected for the 'York Assessment of Reading and Comprehension' study^{32,33} highlighted that approximately 5% of participating primary school children have such a profile³⁴.

Clarke and colleagues^{9,35} conducted a study (referred to as the 'York Reading for Meaning' project) to evaluate the efficacy of three interventions on reading comprehension in poor comprehenders aged 8-9 years old. Twenty UK primary schools were **randomly allocated** to one of four groups, three of which included intervention programmes that contained different teaching components aimed at improving reading comprehension. Schools which were allocated to the **control** group continued with 'business as usual' for the duration of the trial. The **intervention programmes** were delivered consistently by the same teaching assistant within each school via three 30-minute sessions per week, for 20 weeks. The results supported the idea that weaknesses in oral language skills are a factor in reading comprehension difficulties. The pupils in the oral language and combined programme made significant gains in vocabulary, suggesting a crucial role for vocabulary knowledge in reading comprehension.



GLOSSARY, RESOURCES, REFERENCES & CLASSROOM MATERIALS

Glossary

Comprehension – The ability to understand a passage of text and answer questions from it; to read for meaning.

Control group – In a research trial, a control group is a group of participants who continue using the most common or 'normal' practice.

Decoding – To decipher or translate; in literacy this refers to producing a sound for a word by deciphering it.

Intervention group – In a research trial, an intervention group is a group of participants who research the intervention being tested.

Metacognitive– Being aware of your own thought processes and understanding how they work.

Phonemes – A sound made through speech that cannot be broken down into smaller sounds but has the effect of changing the meaning or a word, for example (p)at and (b)at.

Polysyllabic – A word consisting of several syllables.

Randomly allocated – In a research trial (referred to as a randomised controlled trial), participants are allocated to a group at random in order to assess the effect of an intervention.

Resources

Elliott, J.G. and Grigorenko, E.L. 2014. The Dyslexia Debate. New York: Cambridge University Press.

Education Endowment Foundation, Toolkit: 'Peer Tutoring' http://educationendowmentfoundation.org.uk/ toolkit/peer-tutoring/

Education Endowment Foundation (EEF). Meta-cognition and self-regulation. http://educationendowmentfoundation.org. uk/toolkit/meta-cognitive-and-self-regulationstrategies/

References

¹Department for Education. 2013 'National curriculum in England: primary curriculum.' https://www.gov.uk/ government/publications/national-curriculum-inengland-primary-curriculum

²Brooks, G. 2013. What works for children and young people with literacy difficulties? The effectiveness of intervention schemes. Fourth Edition. The Dyslexia-SpLD Trust.

Available at: http://www.interventionsforliteracy.org. uk/widgets_GregBrooks/What_works_for_children_ fourth_ed.pdf

³Ellman, A.M., Lindo, E.J., Morphy, P. and Compton, D.L. 2009. 'The impact of vocabulary instruction on passage-level comprehension of school-age children: A meta-analysis'. Journal of Research on Educational Effectiveness, 2 (1): 1-44.

⁴Beck, I.L., McKeown, M.G. and Kucan, L. 2013. Bringing words to life: Robust vocabulary instruction. Second edition. New York: Guilford Press.

⁵Fricke, S., Bowyer-Crane, C., Haley, A. J., Hulme, C., and Snowling, M. J. (2013). 'Efficacy of language intervention in the early years'. Journal of Child Psychology and Psychiatry, 54 (3): 280-290.

⁶Beimiller, A. 2005. Size and Sequence in vocabulary development: Implications for choosing words for primary grade vocabulary instruction. In A. Hilbert & M. Kamil (Eds), Teaching and learning vocabulary: Bringing research to practice. Pp223-242. Mahwah, NJ: Erlbaum.

⁷Graves, M.F. and Slater, W.H. 1987. 'The development of reading vocabularies in rural disadvantaged students, inner-city disadvantaged students, and middle-class suburban students'. Paper presented at the annual meeting of the American Educational Research Association, Washington DC.

⁸Nash, H. and Snowling, M. 2006. 'Teaching new words to children with poor existing vocabulary knowledge: A controlled evaluation of the definition and context methods'. International Journal of Language and Communication Disorders, 41 (3): 334-354.

⁹Clarke, P.J., Truelove, E., Hulme, C. and Snowling, M.J. 2014. Developing Reading Comprehension. Chichester: Wiley Blackwell.

¹⁰Duke, N.K. and Pearson, P.D. 2002. Effective practices for developing reading comprehension. In Farstrup, A.E. and Samuels, J. What research has to say about reading instruction? Third Edition. Chapter 10. Newark: International Research Association, Inc.

¹¹Idol-Maestas, L. 1985. 'Getting ready to read: Guided probing for poor comprehenders'. Learning Disability Quarterly, 8 (4): 243-254.

¹²Schumaker, J., Deshler, D., Denton, O., Alley, G., Clark, F. and Warner, M. 1981. Multipass: A learning strategy for improving reading comprehension. University of Kansas Centre for Research on Learning. Laurence, KS.

¹³Topping, K., Miller, D., Thurston, A., McGavock, K. and Conlin, N. 2011. 'Peer tutoring in reading in Scotland'. Literacy 45 (1): 3-9.

¹⁴Tymms, P., Merrell, C., Thurston, A., Andor, J., Topping, K. and Miller, D. 2011. 'Improving attainment across a whole district: School reform through peer tutoring in a randomized controlled trial'. School Effectiveness and School Improvements, 22 (3): 265-289.

¹⁵Jun, S.W., Ramirez, G. and Cumming, A. 2010. 'Tutoring adolescents in literacy: A meta-analysis. Journal of Education, 45 (2): 219-238.

¹⁶Cohen, P.A., Kulik, J.A. and Kulik, C.C. 1982. 'Educational outcomes of tutoring: A meta-analysis of findings'. American Educational Research Journal, 19 (2): 237-248.

¹⁷Topping, K. 1988. The peer tutoring handbook: Promoting cooperative learning. London: Croom Helm.

¹⁸Utley, C.A. and Mortwe et, S.L. 1997. 'Peer-mediated instruction and interventions'. Focus on Exceptional Children, 29: 1-23.

¹⁹Read, C. 1971. Pre-school children's knowledge of English phonology. Harvard Educational Review, 41: 1-34.

²⁰Henderson, E.H. 1981. Learning to read and spell: The child's knowledge of words. DeKalb, IL: Northern Illinois Press.

²¹Topping, K. 1995. 'Cued Spelling: A powerful technique for parent and peer tutoring'. The Reading Teacher, 48 (5): 374-383.

²²Gough, P.B. and Tumner, W.E. 2000. 'Decoding, reading and reading disability'. Remedial and Special Education, 7: 6-10.

²³Stanovich, K.E. 1980. 'Toward an interactivecompensatory model of individual difference in the development of reading fluency'. Reading Research Quarterly, 16 (1): 32-71.

²⁴Beimiller, A. 2005. Size and Sequence in vocabulary development: Implications for choosing words for primary grade vocabulary instruction. In A. Hilbert & M. Kamil (Eds), Teaching and learning vocabulary: Bringing research to practice. Pp223-242. Mahwah, NJ: Erlbaum.

²⁵Rose, J. 2009. 'Identifying and teaching children and young people with dyslexia and literacy difficulties'. An independent report from Sir Jim Rose to the

Secretary of State for Children, Schools and Families. Available at: http://webarchive.nationalarchives.gov. uk/20130401151715/http://www.education.gov.uk/ publications/eorderingdownload/00659-2009dom-en. pdf

²⁶Stein, J. 2001. 'The magnocellular theory of development dyslexia. Dyslexia, 7 (1): 12-36.

²⁷Eden, G.F., Stein, J.F., Wood, H.M. and Wood, F.B. 1996. 'Differences in visuospatial judgment in readingdisabled and normal children'. Perceptual and Motor Skills, 82 (1): 155-177.

²⁸McArthur, G.M., Hogben, J.H., Edwards, V.T., Heath, S.M. and Mengler, E.D. 2000. 'On the "specifics" of specific reading disability and specific language impairment'. Journal of Child Psychology and Psychiatry and Allied Disciplines, 41 (7): 869-74.

²⁹McGrath, L.M., Pennington, B.F., Shanahan, M.A., Santerre-Lemmon, L.E., Barndard, H.D., Willcutt, E.G. et al. 2011. 'A multiple deficit model of reading disability and attention deficit hyperactivity disorder: Searching for shared cognitive deficits'. Journal of Child Psychology and Psychiatry, 52 (5): 547-557.

³⁰Carroll, J., Maughan, B., Goodman, R. and Meltzer, H. 2005. 'Literacy difficulties and psychiatric disorders: Evidence for co-morbidity'. Journal of Child Psychology and Psychiatry, 46 (5): 524-532.

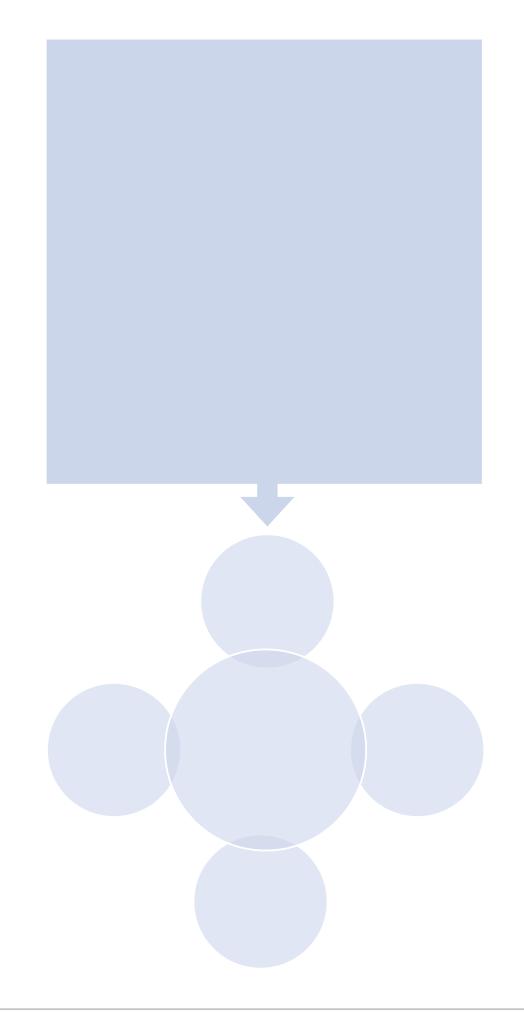
³¹Rochelle, K.S.H. and Talcott, J. 2006. 'Impaired balance in developmental dyslexia: A meta-analysis of the contending evidence'. Journal of Child Psychology and Psychiatry, 47 (11): 1159-66.

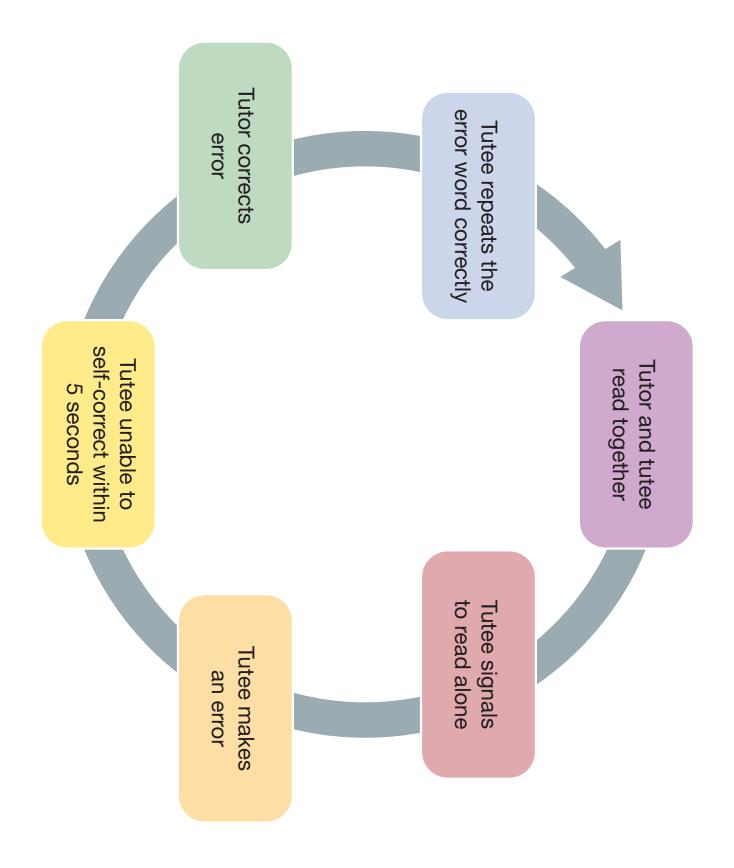
³²Snowling, M.J., Stothard, S.E., Clarke, O., Bowyer-Crane, C., Harrington, A., Truelove, E. and Hulme, C. 2009. York Assessment of Reading for Comprehension. London: GL Assessment.

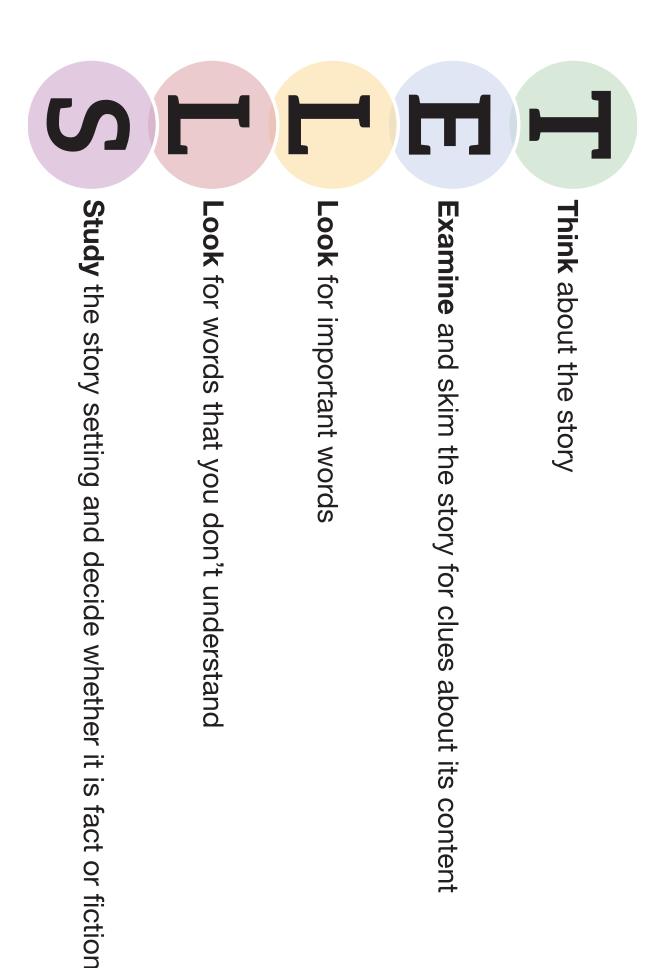
³³Stothard, S.E., Snowling, M.J., Clarke, P.J., Barnby, P. and Hulme, C. 2010. York Assessment of Reading and Comprehension: Secondary Edition. London, UK: GL Assessment.

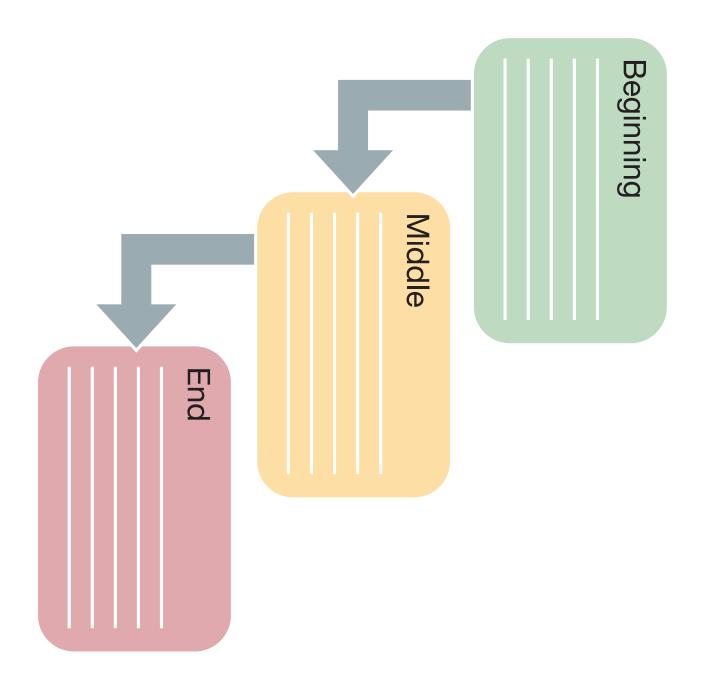
³⁴Snowling, M.J. 2013. 'Early identification and interventions for dyslexia: A contemporary view'. Journal of Research in Special Educational Needs, 13 (1): 7-14.

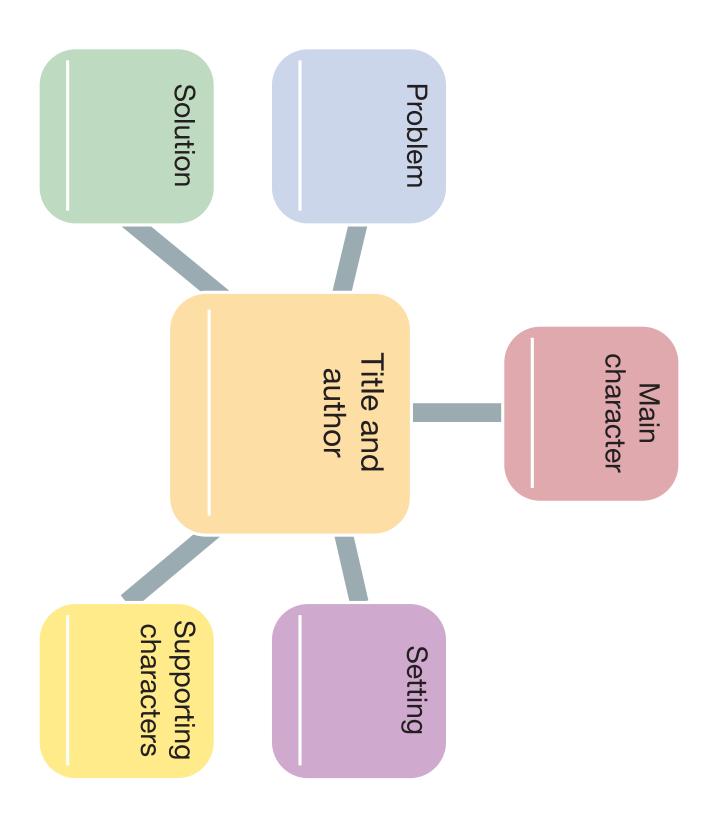
³⁵Clarke P.J., Snowling, M.J., Truelove, E. and Hulme, C. 2010. 'Ameliorating children's reading- comprehension difficulties: A randomized controlled trial'. Psychological Science, 21 (8): 1106-1116.











| J | Identify why the passage is being studied |
|---|--|
| þ | ועפוונווץ שווץ נוופ passage וא הפוווט אנועופט. |
| | |
| Ъ | Find the main ideas and underline them. |
| | |
| n | Think of a question for each main idea. |
| | |
| മ | Answer these questions. |
| | |
| Φ | Review the questions and answers to see what information they provide. |
| | |

We hope that you have found the information provided in this booklet useful. Please take this knowledge forward and implement within your classroom to improve literacy among your pupils.

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