PD 1 WHY PHONICS?

English is the language of Shakespeare, Jane Austen, Charles Dickens, Mark Twain, Toni Morrison, and J K Rowling.

It is considered the main international language. Some 1.3 billion people speak (and read) English (13% of the total population of the world).

It is the language with the largest vocabulary – the common estimate is 500,000 words. Scholars believe that the average adult has a working vocabulary of about 50,000 words.[1] A five year child will know up to 10,000 words[2].

(From Ziptales *Easy Readers*, Long vowels)

So how can we teach children to read? Do we get them to memorise thousands of words? Of course not.

How to teach reading?

We are fortunate to have a code – the alphabet – which reduces the thousands and thousands of words we know to a set of just 26 graphemes (written symbols – "letters"). It is these letters that children need to learn in order to become good readers.

Admittedly, not all the sounds fit the 26 letters. English actually has 47 phonemes (basic sounds), so there's a bit of a squeeze to get the 26 graphemes to account for all sounds.

[1] Dehaene, Stanislas (2010), *Reading in the Brain, the New Science of How we Read*, Penguin
[2] Law, F. et al (2016) "Vocabulary size and auditory word recognition in preschool children", National Library of medicine

Skilful teaching (see Paper 2) manages this so that children don't get confused and learn to read the irregular words gradually.

Unfortunately, the so called "reading wars" have raged for decades. This is the conflict between proponents of the "whole word" or "whole language" philosophy and those who believe that systematic and explicit teaching of the sound-letter correspondences in words is the best way to help children master the building blocks of language and learn to read.

The confusion stems from the old but false analogy that learning to speak and learning to read are the same – a natural, instinctive process.

Speaking is an innate skill for all children. It is the foundation on which their reading skills can be built.

Reading, however, involves decoding a special man-made graphic system, a code (of just 26 letters in the Western alphabet) which *has* to be **deliberately** learnt.

As Professor Stanovich (University of Toronto), a leading expert in cognitive psychology and a specialist in reading acquisition, has said,

> "The idea that learning to read is just like learning to speak is accepted by no responsible linguist, psychologist, or cognitive scientist in the research community."[3]

And as expert in literacy studies and reading scholar Dr. Louisa Moats comments:

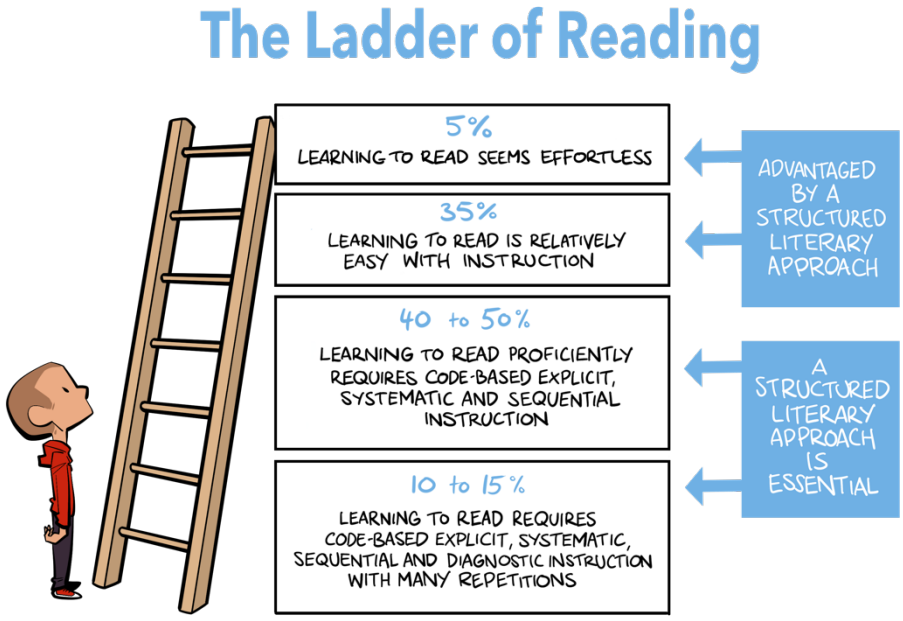
[3] Stanovich, Keith (1994). "Romance and reality". *The Reading Teacher*

"Almost every premise advanced by whole language about how reading is learned has been contradicted by scientific investigations."[4]

The Ladder of Reading

Much hinges on how teachers approach this crucial stage. Research has suggested that children face the challenge of reading with very different capacities[5].

A small percentage find learning to read effortless. Some can do it before they come to school. Others grasp the basics with relatively simple instruction in class.



Yet for a large number – estimates are well over 60% - children will only learn to read with very careful, explicit instruction.

The "reading ladder"[6] (see above) makes it clear that while *some* children require little help, a vast proportion (indeed the majority) need all the help they can get.

There have been consistently poor literacy results across several English-speaking countries in the past two decades.

In Australia, in 2023, *one in three* children fail to meet the minimum literacy standards in Grade 3.[7] These are the children who have failed to grasp the code. As the Education

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[4] Moats, Louisa. *"Whole Language Lives On: The Illusion of Balanced Reading Instruction"* *LD Online*. WETA Public Television (2019)
[5] Nancy Young (2012), based on Lyon (1998), NRP (2000), Hempenstall (2016)
[6] Dr Jan Hasbrouck, "The Science of Reading: An Overview", *The Reading League*, 2019, https://www.youtube.com/watch?v=YTvHSgoTeZE
[7] Smail, J. (2023) "NAPLAN test scores reveal one in three participants below expectations", *The Australian*

Minister said, "We can't accept that children who fall behind when they're eight years old are going to stay behind for the rest of their lives."

Teaching reading is far too important to accept so many children being left behind.

The Science and what it tells us

Fortunately for teachers, the science now fully endorses the phonics approach as the best solution for beginning readers.

How do we know?

Sir James Rose led a vast systematic study of the research for the Department of Education in the UK, which reported in 2006. His conclusion:[8]

> "[We concluded] that the systematic approach, which is generally understood to be 'synthetic' phonics, offers the vast majority of young children the best and most direct route to becoming skilled readers and writers."

The National Inquiry into the Teaching of Literacy of 2004 (Australia)[9] had much the same to say:

> "In sum, the incontrovertible finding from the extensive body of local and international evidence-based research is that for children during the early years (and subsequently if needed), to be able to link their knowledge of spoken language to their knowledge of written language, they must first master the alphabetic code – the system of grapheme-phoneme correspondences that links written words with their pronunciations. Because these are both foundational and essential skills for the development of competence in reading, writing and spelling, they must be taught explicitly, systematically, early and well."

The biggest review of the reading literature ever done in the world, a survey of 115,000 studies, by the National Reading Panel in the US (2000)[10], concluded:

> **Does phonemic awareness instruction assist children in learning to read? If so, which students benefit?**
>
> Yes. Results of the meta-analysis showed that teaching children to manipulate the sounds in language helps them learn to read. … Effects of PA [phonemic awareness] training on reading lasted well beyond the end of training. … [It] was effective in boosting reading comprehension … [It] helped all types of children … including

[8] Rose Report: Rose, Jim, Great Britain. Department for Education and Skills, (2006) *Independent review of the teaching of early reading: final report*

[9] *National Inquiry into the Teaching of Literacy* (2005) by Rowe, K., Department of Education Science and Training

[10] National Reading Panel *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*, (2000) NICHD

normally developing readers, children at risk … disabled readers, preschoolers, kindergartners, 1st graders, children in 2nd through 6th graders, children across various SES levels and non English speaking children learning to read in English. [2-6]

Does systematic phonics instruction help children learn to read more effectively than non systematic phonics instruction or instruction teaching no phonics?

[The report's] findings provided solid support for the conclusion that systematic phonics instruction makes a bigger contribution to children's growth in reading than alternative programs providing unsystematic or no phonics instruction. [2-92]

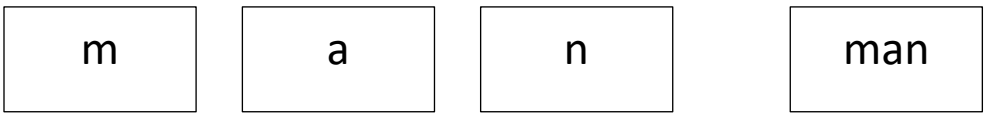
What sort of phonics instruction?

All the science now comes down on the side of two initial strategies:

(1) developing "phonemic awareness" (sensitivity to how words consist of sounds) and

(2) implementation of a "synthetic" systematic phonics program. The word "synthetic" does not mean fake – it means showing children how to identify sound units (phonemes) and then learning to put them together (to *synthesise* the sounds).

"In *synthetic phonics*, teachers build up phonics skills from their smallest unit (graphemes). In a synthetic program, the processes of blending ("What word do these sounds make when we put them together … mmm – aaa - nnn?"), and segmenting ("Sound out this word for me") are also taught. It is little value knowing the building blocks of our language's structure if one does not know how to put these blocks together appropriately to allow written communication, or to separate them to enable decoding of a letter grouping."[11]



"After letter-sound correspondence has been taught, phonograms (such as: er, ir, ur, ear, she, ee, th) are introduced, and more complex words can be introduced into reading activities. In conjunction with this approach "controlled vocabulary" stories may be used - books using only words decodable using the student's current knowledge base. This is intended to reduce the memory load on beginning readers that follows from having too large a range of words at a time."[12]

[11] Hempenstall, K. (2016) *Read About It: Scientific Evidence for Effective Teaching of Reading*, Centre for Independent Studies
[12] Hempenstall, K. (2016)

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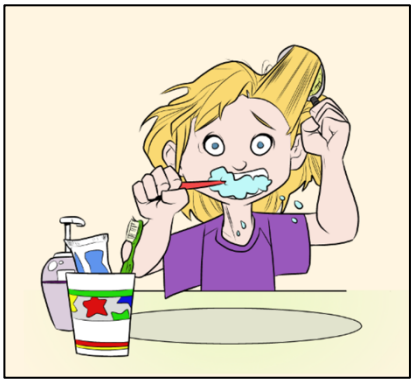
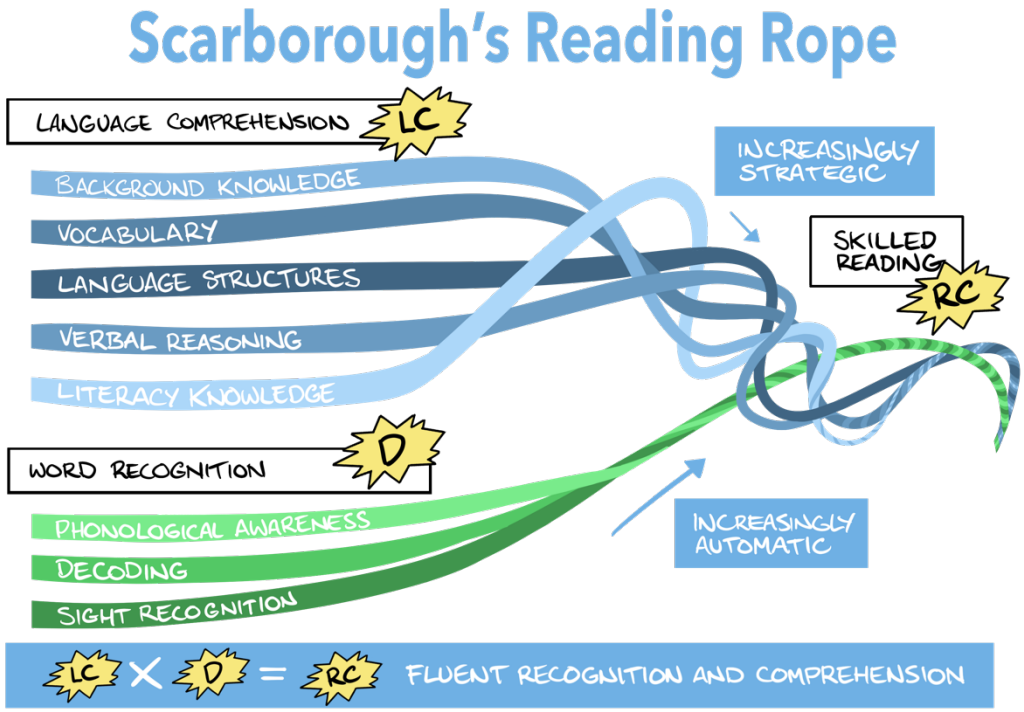


(From Ziptales *Easy Readers*, Simple Vowel Digraphs)

It is important to note that building phonemic awareness and instruction in phonics are ***not*** the whole story. They are only the beginning of explicit teaching of reading.

The whole story is far more involved.

The Reading Rope



This diagram shows what is known as Dr. Scarborough's "Reading Rope"[13].

It is a model now widely accepted by scientists and researchers. You will see under the title **Word recognition (D)** the three elements involving sound-letter relationships: phonological awareness, decoding (sound-letter recognition, ie phonics) and recognition of familiar words.

These phonological elements intertwine with all the background knowledge a child needs to bring to the task of **Language Comprehension (LC)**: general knowledge, vocabulary, understanding of language forms (genre etc) and so on.

So phonics, or decoding, is only a part of a much more sophisticated process – all acknowledged clearly by the scientists.

Once the child is reading, however hesitantly, he will be exposed to fragments of real text, the beginnings of what we can call literature. Phonics is not the end – but it is the means.

> "Phonics instruction is never a total reading program."[14]
>
> "Ultimately, the goal of phonics instruction is to equip children with knowledge and strategies to be used generatively; that is, for them to be able to read and spell words that they may not have encountered before in print, and, through repeated exposure and orthographic [spelling] mapping, add these words to their sight vocabularies. The goal of phonics instruction is not memorization of correspondences and spellings … Contrary to criticisms that phonics instruction involves only "skill and drill", phonics instruction can and should involve children in higher level tasks such as reflecting on words, grapheme-phoneme correspondences, and orthographic patterns; analysing how words sound and are spelled and how these relate to meaning; and evaluating their own decoding and spelling to see whether and why their attempts are successful or unsuccessful."[15]

To sum up

The "science of reading" has now been exhaustively studied in at least three major English speaking countries: the US (NRP), the UK (Rose) and Australia (National Inquiry into the Teaching of Literacy).

All reports have endorsed, for beginning readers, a systematic explicit program of phonics. (This is explained in greater detail in Paper 2: The Science of Reading.)

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[13] Scarborough, H. S. (2001). "Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice" In S Neuman & D Dickinson (Eds), *Handbook for research in early Literacy* Guilford Press

[14] National Reading Panel (2000)

[15] Piasta, S and Hudson, A (2022), "Key Knowledge to Support Phonological Awareness and Phonics Instruction", *The Reading Teacher*, ILA

No one is suggesting that phonics is the *only* process involved in a child learning to read. The "Reading Rope" makes clear that it is one element (albeit a vital one) of a greater whole.

However, when combined with all the other reading inputs a child brings to the task, it will lead, with careful teaching, to the fully-developed skill of reading.