SCIENCE OF READING, SYSTEMATIC PHONICS, AND THE ROLE OF DECODABLE BOOKS

What is the Science of Reading?

The Science of Reading is a body of research conducted across several disciplines (cognitive psychology, neurology, linguistics, and education) and across many languages, that has led to an understanding of how the brain learns to read, and as a result, how best to teach reading.

What does the Science of Reading say about reading?

The Science of Reading tells us that reading, a new evolutionary human activity, harnesses the visual system in the brain (used for face recognition) and the language system. As children learn to read, the pathways between these parts of the brain are activated and developed.

Why the sudden discovery of the Science of Reading?

For many decades, a consensus has existed in the scientific community about the Science of Reading, but this has been ignored by teacher preparation courses and by districts. This means that most teachers are not familiar with the most effective ways of teaching reading. What has changed?

Several elements have converged to bring the Science of Reading to the fore of education policy:

- In 2019, the NAEP (National Assessment of Educational Progress—the Nation's Report Card) showed that only one third of American students achieved proficient reading levels
- Learning loss during the COVID pandemic has dropped reading attainment further in 2021
- Several high-profile litigation cases brought by parents against districts have highlighted poor provision for struggling readers
- Parents observing remote learning have realized how poorly their children were reading
- Several large online platforms have created a movement called "The Science of Reading"
- Poor reading achievement has become an equity issue, as children from low-income families are most likely to struggle with reading, suffer learning loss due to the pandemic, and as a result, drop out of education
- Unlike in previous "Reading Wars", the issue of poor reading attainment in the USA is now being reported to the wider public, beyond the community of educators

As of July 2022, 30 states have passed laws or implemented new policies related to evidence-based reading instruction since 2013.

Reading = Language comprehension × word recognition

In broad strokes, reading entails language comprehension and word recognition (decoding). Both elements are essential for reading comprehension. An illustration of this can be seen in the Scarborough "Reading Rope" model, published in 2001.

Background knowledge facts, concepts, etc.

Vocabulary breadth, precision, links, etc.

Language structures syntax, semantics, etc.

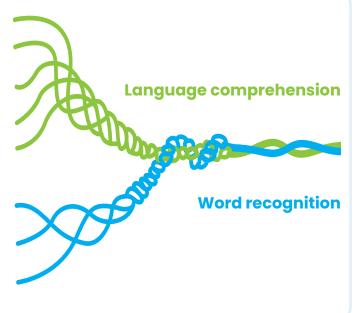
Verbal reasoning inference, metaphor, etc.

Literacy knowledge print concepts, genres, etc.

Phonological awareness syllables, phonemes, etc.

Decoding alphabetic principle, spelling-sound correspondences

Sight recognition of familiar words



After Hollis S. Scarborough 'Reading Rope' diagram from Peggy McCardle, Hollis S. Scarborough and Hugh W Catts: 'Predicting, Explaining and Preventing Children's Reading Difficulties', Learning Disabilities Research & Practice 16:4 (2001), copyright © 2001 The Division for Learning Disabilities of the Council for Exceptional Children.

As children learn language naturally, and begin their education with spoken language, the missing part of reading instruction is **word recognition**. This must be taught explicitly through a systematic introduction of letters and their corresponding sounds (the Alphabetic Code). In addition, children are taught how to "blend sounds" (push sounds together) into words for reading and to "segment sounds" (separate sounds) in words for spelling. These are called phonemic awareness skills. This approach to reading instruction is called **Systematic Phonics** or **Structured Literacy**.

Elements in Systematic Phonics

The National Reading Panel (NRP) report in 2000 identified five elements that are key to reading success:

Phonics

- Vocabulary
- Phonemic Awareness
- Fluency
- Comprehension

Systematic Phonics differs from "Whole Word" or "Balanced Reading", which are prevalent teaching methods in classrooms. These approaches assume that reading comes naturally to all children. They do not emphasize the importance of learning to decode words on the page. Children read "Leveled Readers" and are encouraged to memorize words as whole units (without breaking them down into sounds) and to use several reading strategies including guessing words from picture and context cues.

The role of decodable books in Systematic Phonics

As in Math, each time a new concept or skill is taught, the teacher provides the student with practice. Decodable books provide this practice for beginner readers at each stage, as they learn more of the Alphabetic Code. These "controlled texts" allow the reader to read independently using the phonics that has been taught. Research has shown that decodable books benefit beginner readers because they:

- provide consolidation of letter/sound correspondences
- develop good decoding habits—when I see a new word, I sound it out!
- allow the reader instant success—I can do this!
- enable the reader to read the text independently—I am a reader!
- develop trust in Systematic Phonics because it works
- provide phonics teaching with a purpose—we learn phonics to read a fun book

About Phonic Books

Phonic Books is a specialist publisher of decodable books. Based on many years of reading instruction experience, the founders developed a range of decodable books, workbooks, and games, for beginner and struggling readers. They sought to combine stair-step introduction of the Alphabetic Code and exciting stories and illustrations that would engage and enthuse their students. The founders recognized that some children need more practice than others and have provided multiple books at each level. As the USA teaching community learns about the Science of Reading, Phonic Books decodable books can be used to supplement any phonics program a school is using.

Phonic Books for beginner readers

Phonic Books has two ranges of books for beginner readers: Dandelion Launchers and Dandelion Readers.

Dandelion Launchers introduce the sounds of the alphabet and consonant digraphs (ch, sh, ck, th, and ng). The books have one line of text to help the beginner reader come to grips with decoding.

Dandelion Readers VCe series is a set of six books that introduces the VCe spellings a-e, e-e, i-e, o-e, and u-e. Dandelion Readers Vowel Spellings are three series that introduce vowel teams. (Vowel teams consist of more than one letter that represent a vowel sound, e.g., <ay> for the sound /ae/.) Each series comprises 12 books. Level 1 introduces one vowel team for each of the 12 vowel sounds. Level 2 introduces 2/3 alternative vowel teams for the 12 vowel sounds. Level 3 introduces 4/5 alternative vowel teams for the 12 vowel sounds.

Phonic Books Catch Up range for older struggling readers

Phonic Books has a unique range of decodable books for older struggling readers. These series follow the same scope and sequence as the series for young beginner readers, but the illustrations and stories are age respectful. All too often, older struggling readers are given "babyish" looking books and this can affect their motivation and self-esteem. Phonic Books has published a large range of books that engage and enthuse older readers. The authors/illustrator have combined Systematic Phonics with exciting, motivating stories which provide the practice older students need to become confident and fluent readers. These books are of special relevance and importance for struggling readers who have suffered from learning loss during the COVID pandemic.

