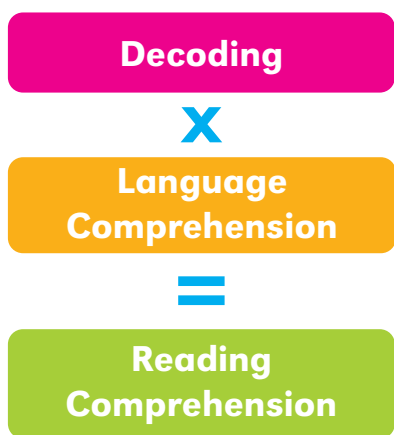




Letterland and the Science of Reading

What is the Science of Reading?

Simply put, it is the evidence base developed over decades by scientific experts on how the brain learns to read. It identifies the specific skills needed for proficient reading, how they are used, and what parts of the brain are involved. Most importantly, it provides empirical evidence that can help identify effective teaching practices. To paraphrase David Kilpatrick, we might teach reading in different ways, but children only learn to read well one way (Ordetx, 2021).



What are the implications for instruction?

For the past decade, testing data has shown that about 1/3 of US students read at or below a basic level (NAEP, 2019) meaning they struggle to read even basic grade-level text. According to the ‘Simple View of Reading,’ meaningful reading is the product of two equal elements: decoding and language comprehension (Gough & Tunmer, 1986). Students need both to be successful readers. Most students who struggle with learning to read initially lack decoding ability. That’s where Letterland’s award-winning foundational literacy program comes in. Letterland teaching utilizes the scientific evidence on teaching decoding to ensure all children get the foundation they need.

Research tells us that instruction should...

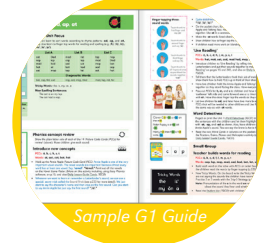
- 1 Be both sequential and cumulative** (Burkins & Yates, 2021)
 A carefully designed sequence moves from the simplest to the most complex, keeping confusing concepts apart. Skills and concepts build on each other throughout the year as well as spiral from one grade level to the next to ensure no missed skills.
- 2 Be explicit and direct** (Odegard, 2020)
 All concepts and skills are explicitly taught by the teacher through modeling and guided practice before being used independently following the “I Do, We Do, You Do” model (Shanahan et al., 2010).
- 3 Include targeted practice across multiple contexts** (Carreker, n.d)
 Initial practice in the whole group focuses on the current skill. Both current and review concepts are practiced independently and in small groups. As students gain accuracy in isolation, practice moves to connected text across disciplines.



Scope



Teaching



Sample G1 Guide

“Children who received the explicit instruction with... [Letterland] learned almost twice as many letter sounds.” Roberts, 2021, p. 7



Letterland and the Science of Reading

Research tells us that robust decoding instruction includes...

Phonemic Awareness

Research recommends daily phonemic awareness training early and extended practice through manipulation once students learn letter sounds (Kilpatrick, 2015).

Letterland immerses Kindergarten students in engaging, daily phonemic awareness activities.



Letterland embeds advanced phonemic awareness practice in blending and segmenting activities through the use word chaining in K-2.



Phonics

Research recommends intensive decoding instruction around letter-sound correspondence, orthographic patterns, syllable types and key morphemes (Foorman et al., 2016).

Letterland uses embedded picture mnemonics like ‘Clever Cat’ that tie the shape of the letter to the sound in children’s minds. Each character has a story, rich in alliterative vocabulary, to extend practice and provide a cognitive anchor for new learning.



Letterland’s ‘Live Reading’ and ‘Live Spelling’ routines guide students to actively sound out words, analyze their spelling and discuss their meaning.

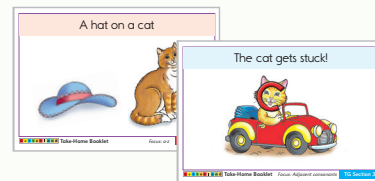
Letterland students study words using structural analysis. In Grade 3, Letterland helps students apply learned skills in spelling, word structure and morphology to improve vocabulary and comprehension.



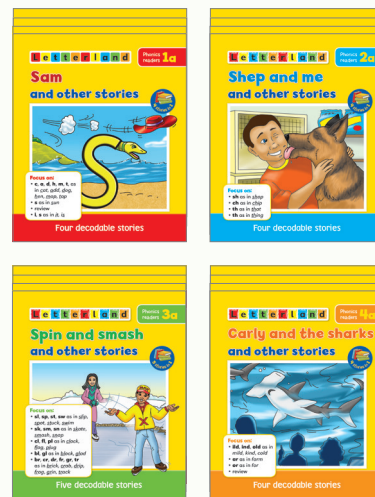
Text Reading

Research recommends ample practice of learned skills through decodable text (Burkins & Yates 2021). Activities should focus both on reading fluency and reading for meaning (Foorman et al., 2016).

Letterland embeds decodable text practice into lessons starting in Kindergarten.



Letterland’s Phonics Readers provide additional decodable text support for small group instruction.



“This finding suggests that... [Letterland] was protective against low performance.” Roberts, 2021, p. 16



Letterland and the Science of Reading

Selected Bibliography

Burkins, J., & Yates, K. (2021). *Shifting the Balance*. Portsmouth, NH: Stenhouse Publishers.

Carreker, Ph.D., CALT-QI, S. (n.d.). *Structured Literacy: Applying the Science of Reading in the Classroom*. Lexia. Retrieved from: <https://www.lexialearning.com/resources/white-papers/structured-literacy-applying-science-reading-classroom-0>

Ehri, L. C. (2020). The science of learning to read words: A case for systematic phonics instruction. *Reading Research Quarterly*, 55(S1), S45–S60.

Foorman, B., Beyer, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade* (NCEE 2016-4008). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education.

Graham, S. (2020). The sciences of reading and writing must become more fully integrated. *Reading Research Quarterly*, 55(S1), S35–S44.

Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *RASE: Remedial & Special Education*, 7(1), 6–10.

Kilpatrick, D. A. (2015). *Assessing, Preventing, and Overcoming Reading Difficulties*. Hoboken, NJ: John Wiley & Sons.

Loewus, L., & Hanford, E. (2019, March 11). What Teachers Should Know About the Science of Reading [Video file]. Retrieved from: <https://www.edweek.org/teaching-learning/video-what-teachers-should-know-about-the-science-of-reading/2019/03>

Moats, L. (2020). Evidence challenges teaching words “by sight.” *Perspectives on Language and Literacy*, Winter, 27–30.

NAEP - National Assessment of Educational Progress (2019). Retrieved from: <https://www.nationsreportcard.gov/reading/nation/achievement/?grade=4> on June 17, 2021.

Odegard, T. N. (2020). Structured literacy is exemplified by an explicit approach to teaching. *Perspectives on Language and Literacy*, Winter, 21-23.

Ordex, Ph.D, K. (2021). What is the Science of Reading? *IMSE Journal*. Retrieved from: <https://journal.imse.com/what-is-the-science-of-reading/>

Roberts, T. A. (2021). Learning letters: Evidence and questions from a science-of-reading perspective. *Reading Research Quarterly*, 56(S1), S171-S192.

Seidenberg, M. S., & Borkehenagen, M. C. (2020). Lost in translation? Challenges in connecting reading science and educational practice. *Reading Research Quarterly*, 55(S1), S119–S130.

Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010). *Improving reading comprehension in kindergarten through 3rd grade: A practice guide* (NCEE 2010-4038). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from the NCEE website: <http://ies.ed.gov>

Shanahan, T. (2020). What Constitutes a Science of Reading Instruction? *Reading Research Quarterly*, 55(S1), S235–S247.



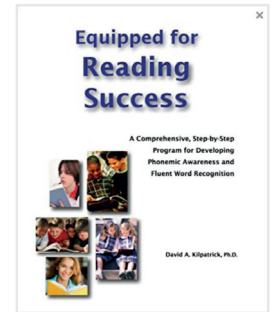
Letterland and the Science of Reading

Suggested Reading for Further Study

Equipped for Reading Success (2016)

by David Kilpatrick

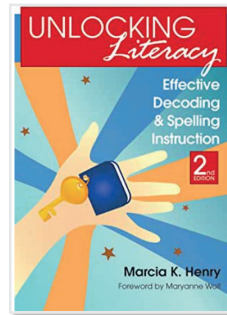
The bridge between the science and teaching by one of the country's foremost researchers



Unlocking Literacy, 2ndEd (2010)

by Marcia Henry

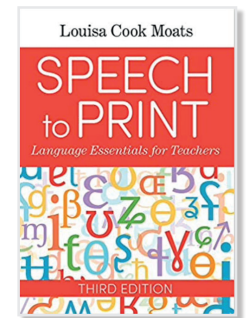
The classic guide for teachers of decoding from early letter acquisition to morphology



Speech to Print, 3rdEd (2010)

by Louisa Cook Moats

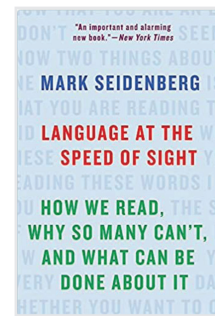
The seminal guide to the English language for teachers of reading



Language at the Speed of Sight (2017)

by Mark Seidenberg

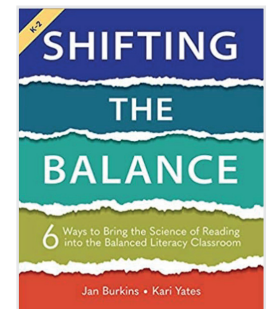
A user-friendly explanation of the brain science and reading



Shifting the Balance

by Jan Burkins and Kari Yates

A guide to help teachers using balanced literacy move towards instruction using the science of reading



Essentials of Assessing, Preventing and Overcoming Reading Difficulties (2015)

by David Kilpatrick

An excellent meta-analysis of the research around reading instruction

