Building Long-Term Reading Skills through Explicit Encoding and Decoding Phonics Instruction



Mary Jo Fresch, PhD

Academy Professor and Professor Emeritus Department of Teaching and Learning The Ohio State University

There is no greater responsibility for a teacher than to ensure that students become confident, independent readers and writers. Learning to read, unlike learning oral language, is not a "natural" event and it is not a guessing game. While humans are naturally wired to learn, remember, and reproduce oral language, reading is different. Our brain must create an interface between our visual system and spoken language. Helping students make these connections is a crucial role of literacy instruction.

The recent Science of Reading movement (Castles, Rastle, & Nation, 2018) brings attention to how teachers must provide a scope and sequence of purposeful literacy instruction for our youngest learners. Accurate and efficient recognition of words has major implications for comprehension. When we competently recognize words, we maintain our train of thought, thus improving our comprehension. "Science suggests specific ways to promote reading success" (Seidenberg, 2017, p. 9)—effective decoding leads to improved comprehension. But simply adding phonics to a curriculum doesn't guarantee that students will be able to break down and put together sounds. Rather, explicit and sequenced phonics instruction is necessary to thoughtfully provide a foundation so students build skills to read and comprehend. **Discover Phonics** guides student progress along a research-supported continuum of learning. Researchers have known for some time that reading and writing are parallel processes, "each having its own special sets of subskills" (Kucer, 1985, p. 318). Addressing reading, writing, vocabulary, spelling, and handwriting helps students make powerful literacy connections (Fresch, 2016).

The National Reading Panel (2000), comprised of experts across the literacy field, examined hundreds of studies of how students can be successful. They found five pillars to instruction that must be addressed: (1) phonemic awareness, (2) phonics, (3) fluency, (4) vocabulary, and (5) comprehension. **Discover Phonics** provides kindergarten through third-grade teachers an organized and dynamic approach for teaching all five critical subskills

"Explicit and sequenced phonics instruction is necessary to thoughtfully provide a foundation so students build skills to read and comprehend." Addressing writing, reading, vocabu-lary, spelling, and handwriting helps students make powerful literacy connections (Fresch, 2016). The National Reading Panel (2000), comprised of experts across the literacy field, examined hundreds of studies of how students can be successful. They found five pillars to instruction must be addressed: that (1) phonemic awareness, (2) phonics, (3) fluency, (4) vocabulary, and (5) comprehension. Discover Phonics provides kindergarten through thirdgrade teachers an organized and dynamic approach for teaching all five critical subskills.



Scarborough (2001) further illustrated the complexities of reading with her "Reading Rope." In order to become a skilled reader, a learner must become increasingly strategic in language comprehension (background knowledge, vocabulary, language structures, verbal reasoning, and literacy knowledge) and increasingly automatic in word recognition (phonological awareness, decoding, and sight recognition).

The scope and sequence of instruction in **Discover Phonics** ensures that students through third grade have the needed skills to transition from learning to read to reading to learn. Through purposeful instruction, students weave the many "strands" of the reading rope, preparing them for a lifetime of reading (Scarborough, 2001). Students understand how to "use reading as a tool for learning, as texts begin to contain new words and ideas beyond their own language and their knowledge of the world" (Chall & Jacobs, 2003, paragraph 3).

Only **Discover Phonics** provides the support students need through third grade to give them skills and confidence as they move into upper elementary grades.

			Date
Fluen	су		
fat	fit	hit	top
hot	cap	cob	sob
not	tip	fan	him
as	Ι	if	an
in	the	a	is
see	it	at	and
Is the p The pot	t is hot!		3
	man. e if it is Tim. Tim.	-	



<section-header>

Discover Phonics Grades K–3 Scope and Sequence





Phonemic Awareness

As young learners discover the sounds of language, phonemic awareness is one of the most crucial skills to develop. "Correlational studies have identified [phonemic awareness] and letter knowledge as the two best school-entry predictors of how well children will learn to read during the first two years of school" (National Reading Panel 2000, 1-2). After reviewing 235 studies, Melby-Lervåg et al (2012) also found "the pivotal role of phonemic awareness" (p. 322) and letter knowledge as strong predictors of "individual differences in early word reading skills" (p. 325). Such profound evidence demonstrates the imperative role of students learning to manipulate the sounds of English in oral blending and segmenting. While engaging in phonemic awareness activities, students are also learning the letters of the alphabet, both for their visual elements and their role in representing the sounds of language. Accurately writing the letters connects auditory and visual learning. Graham et al (2000) found that students instructed in handwriting "were more accurate in naming and writing the letters of the alphabet" (p. 630).

As well, James and Engelhardt (2012) found that writing by hand supports development of reading skills. Throughout kindergarten and first grade, **Discover Phonics** provides a sequence of engaging instruction to develop students' competence in phonemic awareness, letter knowledge, and handwriting. Second and third grades solidify that competence. Just as learning how to decode (or read) our language, students also need to fluently encode (or write). By mastering letter formation, they learn that letters and their sounds work together, thus giving students control to express their ideas in print. **Discover Phonics**' purposeful practice in handwriting aids in spelling and writing words

QUES	TION 1 OF 1
Drag and drop each	letter into the correct box.
fH	H F h
Uppercase	Lowercase
0	o
C	c

Letter Recognition Online Activity



Handwriting Video

Week 3 DAY 2 🕙	*		* * * *
MATERIALS Provide Video Carlo Carlo Carlo Send Segling Carlo C An Webster Andrea Carlo Might Progeneties Web Carlo Carlo Might Progeneties (Carlo Carlo Might Progeneties) C Carlo Carlo Might Progeneties (Carlo Carlo Might Progeneties) Contained Might Progeneties Might Progeneties	Reviews Sound/Spellings (M. / HR), MN, do Ido Charlen (M. / M.	Spell Words with c f, h, a Understanding Resolution 11 is have children write some children are writig and who wild carectly.	Read Connected Tact: Bob The stand of the stand of the stand of the bob connected the bot of the bob connected the bot of the stand of the bot of the stand of the bot of the stand of the stand of
Phonemic Awareness	Say the sound: /// Have children repeat: £ fan, ///.	children understand the meanings of words. For example, show Picture Card fish and say:	- Daily Writing
studie Frank Zesenerge State Marchard Learner Marchard State State State State State State State Marchard State State State State Marchard State State State State Marchard State State Marchard State State Marchard State State Marchard State State Marchard State State Marchard State	<text><text><text><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></text></text></text>	<text><text><text><section-header><text><text></text></text></section-header></text></text></text>	<text><list-item><list-item><list-item><list-item><section-header><text></text></section-header></list-item></list-item></list-item></list-item></text>
Hay Phonics Videos "Cc," "FI," "Hh," and "Do," invite hildren to write each letter in the air as they watch.		Challenge children by additional word	

Discover Phonics Teacher's Guide, Grade 1, Week 3, Day 2



Phonics

Explicit, systematic phonics instruction demonstrates how the sounds of our language map onto letters or letter combinations (International Literacy Association, 2019). Understanding the English language "code" is one of the most empowering skills we can give young learners. By discovering the logic of the system, students have self-directed tools to construct meaning from print. Consistent opportunities to explore sound/letter relationships are key to helping students become competent readers.

Discover Phonics provides a scope and sequence of phonics instruction that supports students as they are introduced to and review orthographic knowledge. The Teacher's Edition provides educators with easy-to-follow explanations and visuals to plan successful lessons. Students will have fun reading the high-interest decodable texts that align to phonics instruction. These decodable texts take the guessing out of reading and allow students to immediately apply learning in context while experiencing reading success. Eldredge (2005) found that phonics knowledge influences word recognition, which effects fluency, which has major implications regarding comprehension. Therefore, instruction must improve phonics knowledge and word recognition.

As kindergarten through third grade students move through learning the spellings of our language, they read the appropriate decodable texts. **Discover Phonics** seamlessly orchestrates students' learning of the alphabet, mapping sounds onto letters, writing in response to reading, and analyzing how to spell words correctly. **Discover Phonics** recognizes that students need support to learn how to decode and encode through third grade. The series provides students with tools and skills they will carry for a lifetime.



Discover Phonics Decodable Readers (32 per grade)



Discover Phonics Teachers' GUide Grade 1, Week 3, Day 3



Fluency

Automaticity helps readers construct meaning as they read words. Fluency is not as much about speed as it is about using less "mental energy" to decode words. The fewer interruptions we have as we read, the better our comprehension will be. Each time we pause to ponder a word, we are likely to lose our threads of thought. Therefore, by effortlessly using our knowledge of phonics and tapping into our sight vocabulary, fluency aids in comprehension.

Discover Phonics provides opportunities for students to develop fluency by reviewing introduced phonic elements in supportive texts and instantly recognizing high-frequency words. The decodable texts aid in this fluency. Designed to review phonic elements already learned, the texts aid in long-term memory. The intent of the texts is to give students the opportunity to apply learning in real reading situations. By easily moving and begin to understand how to rely on previous lessons as they apply their knowledge to new texts. **Discover Phonics** provides teachers with texts where students can demonstrate their developing skills. Listening to young learners as they read gives teachers a window into how they are transferring and solidifying their phonic knowledge. Being able to access these internalized skills aids in fluency and good comprehension.



Bob (Decodable Reader, Grade 1, Week 3)

	Ċ.	Fluency 1 Click and listen. Then say the words.	
Show Audio Text	top		
Listen	Record		
		NEXT 🌩	

Discover Phonics Digital Resources



Vocabulary

Depth of vocabulary assists learners as they encounter new texts. Reutzel and Cooter (2009) explain that word identification (or decoding) is the ability to sound out words, but word recognition connects the word's pronunciation with its meaning. Knowing word meanings is a critical part of a student's comprehension. Words that were part of their listening vocabulary become meaningful when students can decode and identify them when reading. "Findings show that when spellings attach to pronunciations and meanings in memory, they enhance memory for vocabulary words" (Ehri, 2020, p. S45).

Orthographic mapping, or the ability to store and recall print, helps readers quickly identify words, which, in turn, frees up cognitive resources to maintain comprehension. Depth and breadth of vocabulary assist in reading. We can read more fluently (thus maintaining our comprehension) when we can quickly recognize words or word parts. Discover Phonics provides ample practice in expanding students' word knowledge. Knowing the meaning of words is important for reading in content areas and during independent reading. Discover Phonics includes Sound-Spelling Cards, Picture Cards, Word-building Cards, and High-frequency Word Cards to engage learners in a variety of interconnected ways to support vocabulary learning.

Comprehension

High-quality, intentional instruction helps students develop the crucial skills needed for the most essential element of reading—comprehension. There are significant differences in simply identifying a word as opposed to recognizing a word. Students typically experience comprehension difficulties if they do not automatically recognize the majority of words in texts

(Kieffer & Christodoulou, 2020). Those students fall further behind their peers in both reading abilities and content knowledge. Struggling students in third grade often demonstrate an absence of understanding how the language works. **Discover Phonics** recognizes the necessary continued development of literacy learners through third grade, giving them opportunities to expand their strategies and feel success. Providing a scope and sequence of word building strategies, deepening vocabulary, and offering engaging texts all give students the skills to read and understand. **Discover Phonics** was designed to give learners parallel experiences in reading, writing, spelling, vocabulary, and handwriting to scaffold their learning in multiple ways. Through these experiences, growth is enhanced and independence is gained.



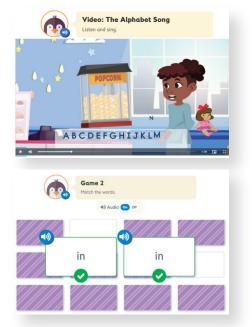
Discover Phonics Picture Cards



Discover Phonics Grade 1

Final Thoughts – Learning and Technology

Without doubt, technology is part of today's learning experiences. Recent educational experiences have shown that technology is no longer a novelty to students (Haydarovna, 2022). Students need quality digital interactions that connect to small and whole group instruction. Technology should enhance, but not replace instruction, thus allowing students to have individualized learning experiences. Discover Phonics offers seventy-one animated media assets that engage learners. Such digitized experiences require students to use "real-time thinking skills" (Eshet, 2012, p. 272) as they listen to songs, watch videos, record and play back their own voices, follow highlighted narrated text, and feel confident as they engage in interactive practice. **Discover Phonics** provides the instructional framework needed to teach the foundational literacy skills that give kindergarten through third grade students confidence and independence.



Discover Phonics Digital Resources

Dr. Mary Jo Fresch is an academy professor and professor emeritus in the Department of Teaching and Learning at The Ohio State University. She began her teaching career as a third grade teacher in Kent, Ohio and has spent the last thirty years teaching a range of literacy methods courses for pre-service and in-service teachers at the University of Nebraska (Lincoln), the Royal Melbourne Institute and Deakin University (both in Melbourne, Australia), and The Ohio State University. Her research articles have appeared in Language Arts, Journal of Literacy Research, The Reading Teacher, Reading and Writing Quarterly, and Reading Psychology. Her twenty-two professional books include Partner Poems & Word Ladders for Building Foundational Literacy Skills: Grades K–2, Learning Through Poetry (a series for developing phonemic and phonological awareness), 7 Keys to Research for Writing Success, and Empowering Students' Knowledge of Vocabulary. She offers free resources to teachers on her website, maryjofresch.com.



REFERENCES

Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, 19(1): 5–51.

Chall, J. S., & Jacobs, V.A. (2003, Spring). The classic study on poor children's fourth-grade slump. *American Educator*. https://www.aft.org/periodical/american-educator/spring-2003/-classic-study-poor-childrens-fourth-grade-slump

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

Eldredge, J. L. (2005). Foundations of fluency: An exploration. Reading Psychology, 26(2), 161–181.

Eshet, Y. (2012). Thinking in the digital era: A revised model for digital literacy. *Issues in Informing Science and Information Technology*, 9, 267–276.

Fresch, M.J. (2016). Strategies for effective balanced literacy. Shell Education.

Graham, S., Harris, K.R., & Fink, B. (2000). Is handwriting casually related to learning to write? Treatment of handwriting problems in beginning readers. *Journal of Educational Psychology*, 92(4), 620–633.

Haydarovna, D. R. (2022). Digital information environment – as a natural cultural environment for children of the new generation. *European Journal of Innovation in Nonformal Education*, 2(5), 292–294.

International Literacy Association. (2019). *Meeting the challenges of early literacy phonics instruction* [Literacy leadership brief]. https://www.literacyworldwide.org/docs/de-fault-source/where-we-stand/ila-meeting-challenges-early-literacy-phonics-instruction.pdf

James, K.H., & Engelhardt, L. (2012). The effects of handwriting on functional brain development in pre-literate children. *Trends in Neuroscience and Education*, 1(1), 32–42.

Kieffer, M.J., & Christodoulou, J.A. (2020). Automaticity and control: How do executive functions and reading fluency interact in predicting reading comprehension? Reading Research Quarterly, 55(1), 147–166.

Kucer, S.L. (1985). The making of meaning: Reading and writing as parallel processes. *Written Communication*, 2(3), 317–336.



REFERENCES

Melby-Lervåg, M., Lyster, S. H. L, & Hulme, C. (2012). Phonological skills and their role in learning to read: A meta-analytic review. *Psychological Bulletin*, 138(2), 322–352.

National Reading Panel. (2000). *Report of the National Reading Panel: Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction: Reports of the Subgroups*. Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health. https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf

Reutzel, D. R., & Cooter, R. B., Jr. (2009). *The essentials of teaching children to read: The teacher makes the difference*. (2nd ed.). Pearson Education, Inc.

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* (pp. 97–110). Guilford Press.

Seidenberg, M. (2017). Language at the speed of sight: *How we read, why so many can't, and what can be done about it.* Basic Books.

