

The Science of Reading Bridging the gap from knowledge to implementation







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Learning to read is the foundation of all education and the cornerstone of a literate and successful future.

Yet despite countless educational studies and reforms, only a third of U.S. fourth graders are proficient in reading. National test scores that were flat or falling before the Covid-19 pandemic have now reached their lowest point in 20 years, and achievement gaps have only widened (NAEP, 2022).

It's clear that something needs to change.

Decades of scientific research have shown us what works in literacy education. As educators, we owe it to our students to make the shift to a more scientific approach.

Building teacher knowledge is the first step, but it is not the only step. Putting knowledge into practice takes time, effort, and support.

Rigby JillE Literacy[®] builds a bridge from knowledge to implementation with built-in support that makes it easy to apply the science of reading to daily teaching practices.



What is the science of reading?

The science of reading encompasses decades of research about how children learn to read. In the words of Dr. Louisa Moats,

"The body of work referred to as the 'science of reading' is not an ideology, a philosophy, a political agenda, a one-size-fits-all approach, a program of instruction, nor a specific component of instruction. It is the emerging consensus from many related disciplines, based on literally thousands of studies.... These studies have revealed a great deal about how we learn to read, what goes wrong when students don't learn, and what kind of instruction is most likely to work the best for the most students." (Stuart & Fugnitto, 2020)

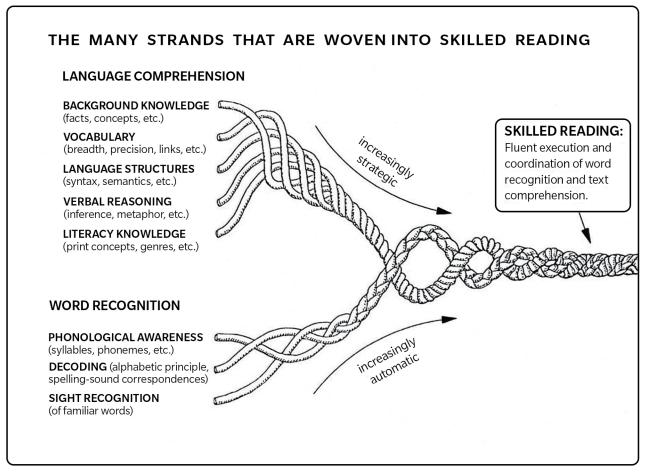
Science reveals that reading is not hardwired in the brain (Wolf, 2018). "The sheer number of youngsters who fail to learn to read—particularly those from impoverished backgrounds—underscores the fact that children do not acquire reading ability naturally, easily, or incidentally. For many children, learning to read is a monumental task that requires years of effort" (Lyon & Chhabra, 2004).

Reduced to its essence, reading requires us to convert the written words we see into speech, also known as decoding, and to use our knowledge of language to understand that speech. This is known as the **simple view of reading** (Gough & Tunmer, 1986).



(Gough & Tunmer, 1986)

The simple view of reading states that decoding and language comprehension are two equally important elements—both in learning to read and in the ongoing process of reading. The simple view is still useful today as a way of understanding how the brain learns to process the written word, but it fails to account for the complexities within each element. **Scarborough's reading rope** exposes these complexities by teasing out the knowledge and skills involved in both word recognition and language comprehension and showing how all of these elements weave together to produce skilled, proficient reading (Scarborough, 2001).



The image, used with permission from the Publisher, originally appeared in the following publication: 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 of early literacy research* (Vol. 1, pp. 97–110). Guilford Press.

In the two decades since the rope model was developed, other research has added to the body of knowledge around literacy learning.

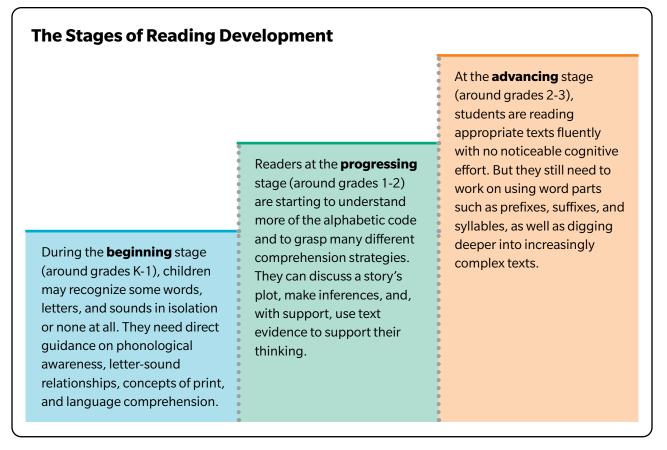
Most recently, **the active view of reading** acknowledges that word recognition and language comprehension are not entirely separate processes but have considerable overlap. Active self-regulation also plays a vital role. This model highlights the roles of strategy use (implied by the "increasingly strategic" arrow in the rope model), reading fluency (implied by "increasingly automatic"), as well as executive function, motivation, and engagement (Duke & Cartwright, 2021).

How does reading develop over time?

Learning to read starts very early in children's development, before they begin formal schooling (Lyon & Chhabra, 2004). By the time students enter kindergarten, their vocabulary, language, and foundational reading skills span a wide range of developmental levels.

But even at-risk students can achieve reading success if they are identified early and given systematic, intensive instruction in phonemic awareness, phonics, reading fluency, vocabulary, and reading comprehension strategies (Lyon et al., 2001; Torgesen, 2002).

For all students, becoming a proficient reader takes years of instruction and practice, which changes at every stage of a student's reading development (Stuart & Fugnitto, 2020). With explicit and comprehensive literacy instruction, young readers can be expected to progress through these predictable developmental stages.



(Eggleton, 2020)

Making the shift

Research shows that given systematic, comprehensive, and evidence-based reading instruction, the vast majority of students can become successful readers (Torgesen, 2002). To that end, many districts are implementing training programs to build teacher knowledge in the science of reading.

While this is undoubtedly a positive step, teachers are often left uncertain about how to apply this new knowledge in the classroom (Schwartz, 2022b). Studies have found that "Training increases teacher knowledge and can change practice given the right conditions—but these shifts don't always translate into higher student achievement" (Schwartz, 2022a).

For many teachers, making the shift to more scientific reading instruction can be difficult and overwhelming. And without the support of intensive coaching, it's easy to fall back on familiar materials and methods.

In short, knowing better does not always mean doing better.



How can *JillE Literacy* help teachers implement the science of reading?

JillE Literacy is dedicated to supporting teachers with practical, easy-to-use resources that help them make the crucial shift to evidence-based reading instruction.

Teacher support is built into every resource, in lesson plans and teaching panels that show exactly what, where, and when to teach essential skills across all strands of literacy. Much like Scarborough's reading rope, all of the elements are woven together, providing comprehensive support that leaves nothing to chance.

An intentional sequence of instruction and review takes the guesswork out of scaffolded support and allows students to systematically expand their skills as they advance through the stages of reading development.

Using *JillE Literacy* is like having an experienced literacy coach beside you every step of the way.

Explicit Support in JillE Literacy Texts			
Decoding & Word Recognition Phonological Awareness, Decoding, Sight Recognition Reading Fluency		rry Cards	ersions
Fluency, Prosody, Increasingly Automatic Reading Language Comprehension Background Knowledge, Vocabulary, Language Structures, Verbal Reasoning, Literacy Knowledge		l Books and Poetry	with Teaching Versions
Strategy Use Active Self-Regulation, Increasingly Strategic Reading Social-Emotional Learning	Read Aloud Books	Whole-Class Shared	Small-Group Books with
Executive Function, Motivation, Engagement, Core SEL Competencies	Rea	Whe	Sma

How does *JillE Literacy* support decoding and word recognition?

This section of the reading rope includes everything from phonological and phonemic awareness to the alphabetic principle, sound-spelling correspondences, decoding skills and strategies, and the automatic recognition of familiar words all of the skills and understandings children need to "crack the code" of written language.

A large body of research demonstrates the critical role phonological knowledge plays in literacy learning (Duffy, 2009; Pressley, 2006). Explicit and systematic instruction helps students develop these fundamental understandings, but it should be contextualized and incorporated into daily literacy activities rather than teaching skills in isolation (Cunningham, 2005).

JillE Literacy makes any explicit phonics instruction more effective by providing systematic reinforcement, application, and practice of phonemic awareness and phonics skills in the context of whole-class and small-group reading.

Phonological skills and strategies spiral in a developmental sequence using a speech-to-print approach. Prompts for practicing and reinforcing phonological skills are built into every book and poem. This systematic instruction, application, and practice bridges the gap between skills learned in isolation and the transfer to authentic reading and writing.



Take & Teach Book: Dad's Boot, Realistic Fiction

Decoding and word analysis strategies progress from initial sounds to CVC words to blends, digraphs, other spelling patterns, and word parts and patterns. These strategies scaffold and accelerate reading by helping students apply decoding skills appropriate for their stage of reading development. Additional practice activities are also included in the back of each book. Decoding and word analysis strategies in JillE Literacy

BEGINNING STAGE

- using the initial letter
- thinking of a word that would fit that starts with the sound
- checking for sense

PROGRESSING STAGE

- blending sounds from left to right
- looking for known letters, blends, and digraphs
- applying syntax and meaning clues
- monitoring accuracy

ADVANCING STAGE

- using familiar spelling patterns
- using word parts, such as prefixes, suffixes, and syllables
- rereading for meaning clues

How does JillE Literacy support reading fluency?

Reading fluency refers to increasingly accurate and automatic reading that integrates phonological skills with attention to punctuation, phrasing, and expression.

Research suggests that fluency is the bridge between decoding and comprehension (Pikulski & Chard, 2005). When students can read a text with fluency, their cognitive load shifts away from the work required to decode the text to the important task of understanding what it means (Castles et al., 2018).

JillE Literacy supports reading fluency through modeled reading, repeated oral reading of books and poems, and scaffolded support during small-group lessons.

Big books for shared reading are modeled the first day, then read together over the course of five days, with day three entirely dedicated to building reading fluency. Explicit prompts are built into the texts themselves, making it easy to support fluency at specific points in each text.



Shared Book: Monkey's Mistake

Small-group lessons provide differentiated fluency practice with a variety of text types, all with embedded teacher support appropriate to each student's stage of reading development.

How does JillE Literacy support language comprehension?

Language comprehension weaves together many different strands of knowledge and skills needed to understand oral or written language. These include background knowledge, understanding of vocabulary, syntax, and semantics, the ability to remember and make connections between ideas, and knowledge of print concepts.

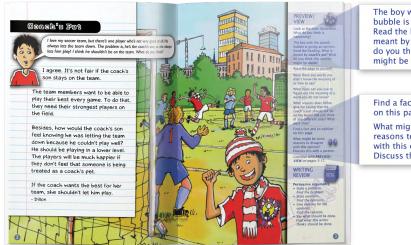
Every child comes to school with a unique combination of background knowledge, vocabulary, and language proficiency (Golinkoff et al., 2018). Teachers can help level the playing field by filling language gaps and

building on what children already know. This happens through deliberate and scaffolded encounters with new words and concepts and through listening, reading, and talking to others (Connor & Morrison, 2012).

JillE Literacy creates an equitable learning environment that embraces the mutually supportive relationship between oral language and literacy.

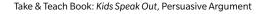
Students build background knowledge and vocabulary by reading diverse genres and topics, responding to higherorder questions, practicing verbal reasoning skills, and asking their own questions. Whole-class, small-group, and partner discussions get all children talking, building critical thinking skills and deeper language comprehension.

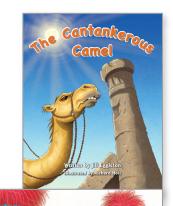
Built-in teaching panels simplify differentiation with scaffolded support for vocabulary, idioms, and speaking and listening skills, such as asking and answering questions, expressing and justifying opinions, and citing text evidence.



Read the heading. What is meant by coach's pet? What do you think this opinion might be about?

Find a fact and an opinion on this page. What might be some reasons to disagree with this opinion? Discuss this with a partner.





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The Great Big

Enormous Sneeze

The boy with the speech bubble is giving an opinion.

Truggle Truggle tree monsters

hang by their knees way up high in

giggling and wiggling their monstrous toes.

Hooting and howling and smacking their lips

and crunching on bugs and truggle tree chips.

A Place

to Live

speak Peek in

red trugale trees Hanging in bunches, hanging in rows,

How does JillE Literacy support strategy use?

In order to achieve the end goal of skilled reading with comprehension (and to perform well on standardized tests), readers must be able to integrate all areas of language comprehension in increasingly strategic ways. This requires active self-monitoring and the ability to choose and apply the appropriate comprehension strategies to any given text.

A great deal of research has focused on direct instruction in comprehension strategies, such as making predictions, visualizing, making inferences, and summarizing. Research shows that strategy instruction improves reading outcomes, even among young students and students with learning disabilities (Berkeley et al., 2010; Okkinga et al., 2018; Shanahan et al, 2010).

But simply learning these strategies is not enough. Students also need to learn why, how, and when to apply them. Teachers must not only teach comprehension strategies but also give students ample opportunities to practice using them (Lai et al., 2009).

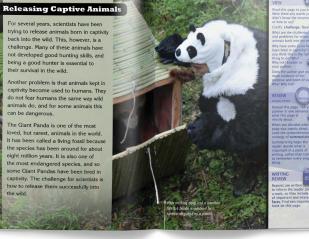
Comprehension is at the heart of **JillE Literacy** because understanding the meaning of text is at the heart of reading. In even the earliest texts, the process of decoding is clearly in service to the ultimate goal-to read for understanding and enjoyment.

JillE Literacy provides explicit instruction in comprehension strategies as well as teacher-guided application and practice in the context of authentic reading. The instructional prompts and support built into the whole-class and small-group materials help students build an expanding bank of comprehension strategies as they practice applying them to a wide range of increasingly complex texts.

For several years, scientists have been trying to release animals born in captivity back into the wild. This, however, is a challenge. Many of these animals have not developed good hunting skills, and being a good hunter is essential to their survival in the wild. Another problem is that animals kept in

captivity become used to humans. They do not fear humans the same way wild animals do, and for some animals this can be dangerous.

The Giant Panda is one of the most oved, but rarest, animals in the world loved, but rarest, animals in the world. It has been called a living fossil becaus the species has been around for about eight million years. It is also one of the most endangered species, and so some Giant Pandas have been bred in captivity. The challenge for scientists is how to release them successfully into



Take & Teach Book: Out of Nature, Informational Report

Comprehension strategies in JillE Literacy

BEGINNING STAGE

- making predictions
- retelling stories
- recalling information
- asking and answering questions
- using prior knowledge
- making text-to-self connections
- giving a simple opinion

PROGRESSING STAGE

- checking predictions
- retelling events/facts in sequence
- identifying characters and setting
- making inferences
- justifying opinions
- using evidence to support thinking

ADVANCING STAGE

- identifying main ideas, causes and effects, problems and solutions, themes, and author's purpose
- comparing and contrasting
- visualizing
- summarizing
- making text-to-text connections
- analyzing and synthesizing
- evaluating

EHEN REVIEW RATEGI DIGGING DEEPER

Reread this page. Tell your

partner in one sentence what this page is mostly about. When you decided what the page was mainly about, you used the comprehension strategy of summarizing. Summarizing helps the reader decide what is important in a piece of writing, rather than trying to remember every single thing.

6

How does JillE Literacy support social-emotional learning?

Any teacher or parent of a growing reader can confirm that reading is not just a cognitive process. It is also social and emotional.

For most students, learning to read is challenging and time-consuming. Putting in the time and effort needed takes motivation, engagement, and perseverance. Comprehending text also requires perspective-taking, empathy, and executive function skills (Duckworth et al., 2007; Hughes & Kwok, 2007).

The Covid-19 pandemic took a toll on the social-emotional development of our youngest students as well as those in the most need. According to U.S. Secretary of Education Miguel Cardona, "We can't unlock students' potential unless we also address the needs they bring with them to the classroom each day. As educators, it's our responsibility to ensure that we are helping to provide students with a strong social and emotional foundation so that they also can excel academically" (U.S. Department of Education, 2021).

When we support social-emotional learning, we support all learning.

JillE Literacy helps children develop crucial social-emotional understandings in the safe context of fictional stories and situations, with embedded support for key competencies in every fiction title.

Throughout the program, the keys to progress are practice, success, and enjoyment. The whole-class resources create joyful reading experiences that allow all students to be successful. In turn, the scaffolded small-group resources help students develop reading proficiency without struggle or frustration, building the mindset that they can and will succeed.



• Why it is important not to give up when something doesn't work out the first time.

Invite each group to share what they discussed with the class.

SEL competencies in JillE Literacy

SELF AWARENESS

- identifying emotions
- accurate selfperception
- recognizing strengths and limitations
- self-confidence
- self-efficacy

SELF MANAGEMENT

- regulating emotions and impulses
- stress management
- self-discipline
- goal setting
- organizational skills
- openness and flexibility
- perseverance

SOCIAL AWARENESS

- perspective-taking
- empathy
- appreciating diversity
- respect for others
- respect for social rules
- recognizing social supports

RELATIONSHIP SKILLS

- communication
- social engagement
- building relationshipscooperation and
- teamworkkindness and
- consideration
- seeking and offering help
- conflict resolution

RESPONSIBLE DECISION-MAKING

- analyzing situations and choices
- problem-solving
- evaluating consequences
- making ethical choices
- resisting social pressure

Read Aloud Book. The Liformous reliow cloud

Conclusion

Reading may seem simple, but teaching it is not.

"Teaching reading *is* rocket science. But it is also established science, with clear, specific, practical instructional strategies that all teachers should be taught and supported in using." (Moats, 2020)

Intensive training programs are becoming more widespread, teaching what many educators never had the opportunity to learn in their teacher preparation programs—the science of reading instruction.

But without the practical support of aligned materials and teacher coaching, knowing better does not always mean doing better.

Through many years as a classroom teacher, administrator, trainer, and coach to thousands of educators around the world, author Jill Eggleton knows firsthand how hard teachers work to help all their students develop into skillful and proficient readers. She created *JillE Literacy* to reduce the burden on teachers and to help them implement the principles of reading instruction validated by decades of scientific research.

Just as students deserve effective instruction aligned with the science of reading, teachers deserve the support needed to put that research into practice.

With powerful coaching and explicit support for all strands of literacy built into every resource, **JillE Literacy** helps teachers bridge the gap from knowledge to implementation.

Learn more

Explore sample materials and additional downloadable resources at jillelit.com.



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