OUTLOOK 2023:
What Matters and What Works in Literacy Instruction

Istation

Understanding the Science of Reading

To transform students into skilled readers, schools must understand the science of reading and align their literacy instruction to it. The science of reading is a cumulation of research in the fields of education, psychology, linguistics, and neuroscience. This paves the way for *what students need to learn and how they need to learn it.*


Use this guide to understand the foundations that shape and support this research, and help educators put the science of reading into practice.

3 Things to Know About the Science of Reading

Explore The 5 Pillars of Literacy or the "Big Five"

The National Reading Panel Report identifies five foundational areas of literacy instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Research suggests that each of these components play a key role in increasing literacy skills for students. These concepts must be taught explicitly.

5 PILLARS OF LITERACY

Phonemic Awareness · Phonics · Fluency · Vocabulary · Comprehension
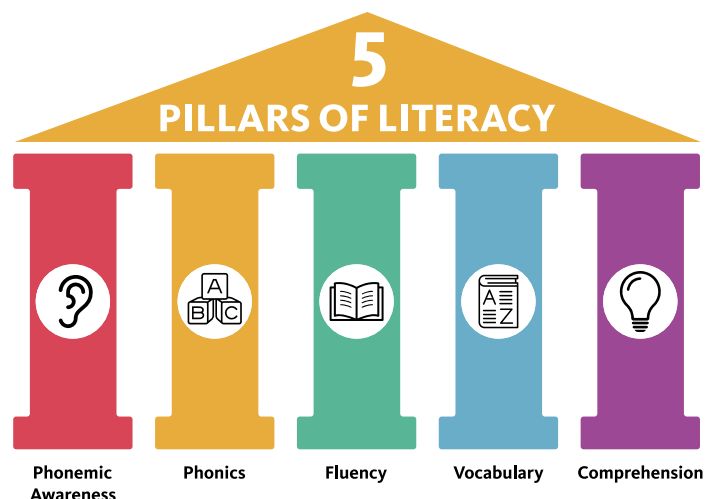
When taught together, the 5 Pillars of Literacy create the foundation for students' reading education.

The Simple View of Reading Explained

Developed by psychologists Gough and Tunmer in 1986, the Simple View of Reading states that reading comprehension is the product of decoding and language comprehension.

Decoding is the ability to apply sound-symbol relationships in order to read words. Language comprehension is the ability to understand spoken language. A lack of knowledge in either skill leads to a deficit for readers.

Decoding Ability to apply sound-symbol relationship to read words	X	Language Comprehension Ability to understand spoken language	=	Reading Comprehension

Decoding and language comprehension should be taught in conjunction in reading education programs.

Understanding Scarborough's Rope

Hollis Scarborough expanded on the Simple View of Reading by dividing skilled reading into two overall components: language comprehension and word recognition. Each component is an umbrella category with various skills falling under it. Language comprehension is a cumulation of background knowledge, vocabulary knowledge, language structures, verbal reading, and literacy knowledge.

Word recognition is a cumulation of phonological awareness, decoding, and sight recognition.

Then Scarborough created a metaphor of a rope (pictured), known as Scarborough's Rope to explain his paradigm. The rope illustrates the idea that each small component of reading education must be present to form a skilled reader.

Language Comprehension

Background Knowledge
Vocabulary Knowledge
Language Structures
Verbal Reasoning
Literacy Knowledge

Word Recognition

Phonological Awareness
Decoding (and Spelling)
Sight Recognition

Skilled Reading

Fluent execution and coordination of word recognition and text comprehension.

Increasingly Strategic

Increasingly Automatic
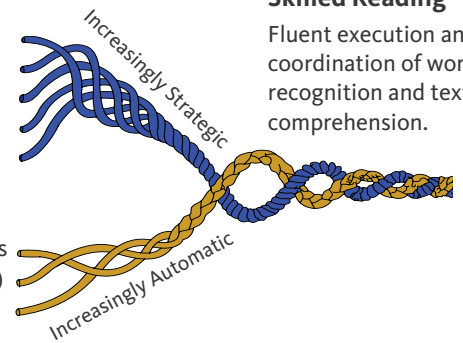
Scarborough, H. 2001. Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. Pp. 97-110 in S.B. Neuman & D.K. Dickinson (Eds.) Handbook of Early Literacy. NY: Guilford Press.

Scarborough's rope illustrates the idea that each small component of reading education must be present to form a skilled reader.

How To Deliver Effective Reading Instruction

One way educators effectively infuse the science of reading into instruction is by using the structured literacy approach.

Evidence-based elements **+** Evidence-based teaching principles **=** Effective reading instruction
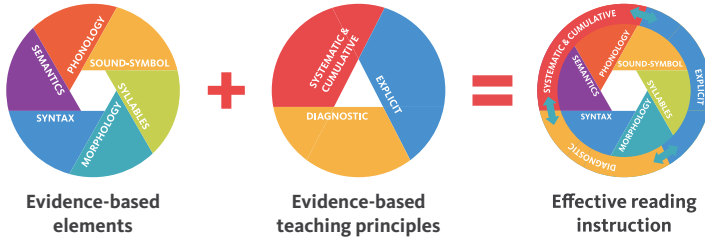
The combination of evidence-based elements and evidence-based teaching principles results in effective reading instruction.

The structured literacy approach focuses on three evidence-based reading principles: : explicit, systematic and cumulative, and diagnostic.

1. Explicit Teaching

Explicit teaching is clear-cut, direct, and very teacher-centric. It means directly and intentionally teaching a skill to students with continuous teacher-student interaction. This is done with the assumption that the concept you are teaching is not something students will naturally pick up on their own.

2. Systematic & Cumulative

When a curriculum is systematic, it considers progression, sequencing, from lesson to lesson. A systematic curriculum orders lessons in a way that follows the logical order of language. Lessons should progress with difficulty over time. Cumulative programs build on each lesson or concept as students progress.

3. Diagnostic

In a program that focuses on being diagnostic, ongoing assessment is key. The assessments can be both formal and informal but should ultimately monitor students' growth.

The diagnostic aspect is important because it allows teachers to see where their students are performing in order to help them differentiate instruction.

Putting the Science of Reading into Practice

Here are four steps to help align literacy instruction to the science of reading and accelerate learning.

1. Choose a curriculum that supports the science of reading

Istation's digital reading program is based on scientific evidence and measures the Big Five. Adaptive curriculum focuses on direct, explicit teaching instruction in one seamless platform of assessment, instruction, and intervention.

Discover Istation Reading

2. Frequently measure student strengths and needs

With Istation, students are engaged with game-like assessments that don't feel like a test. These assessments save teachers time by automatically screening students in 30 minutes or less at the beginning of every month. Educators get real-time insights and a view of students' growth over time.

3. Give educators access to actionable data

After assessing an entire classroom or grade level with Istation, educators can view data reports to plan what's next in their instruction. When looking at reports, school and district leaders can ask themselves several questions to guide planning:

- Can my teachers easily understand these reports?
- How are students grouped for instruction?
- What type of intervention resources are available after assessments?

Personalized data profiles for every student include performance and progress indicators for each specific literacy component.

Reporting can be viewed at the student, classroom, school, or district level. Educators can use these reports to reflect on and improve their small- and whole-group reading instruction.
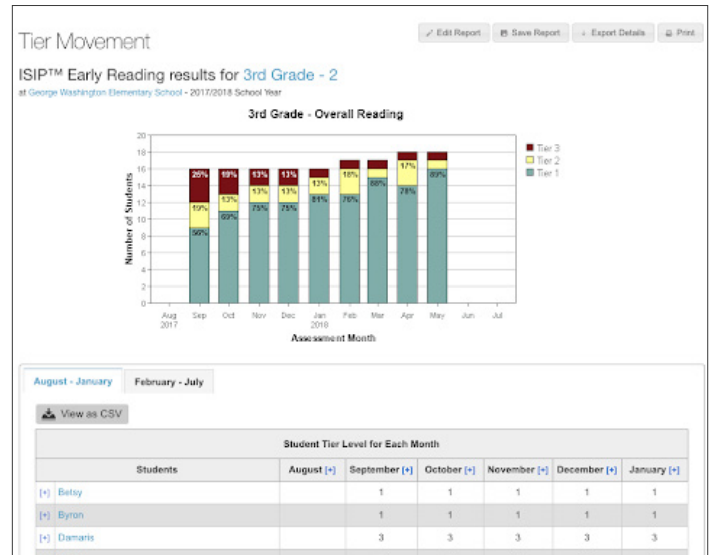
Istation's Tier Movement Report can be used for leading interventions. This provides a detailed look at which students are in which tier group.

4. Customize professional development

Istation offers several different types of professional development opportunities. Sessions can be conducted in person or virtually, providing schools with customizable content ranging from informational sessions on the science of reading to technical training on navigating the program's digital resources. **Istation's professional development** is interactive, hands-on, and help schools succeed.

Hear the experts weigh in our on-demand webinar. Watch now: "**Putting the Science of Reading into Practice**."

Ready to try Istation for free?

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