

Bringing the Science of Reading to Life with Footsteps2Brilliance® Curriculum

*A Summary of The Science of Reading
and How the Footsteps2Brilliance
Curriculum Aligns*

RESEARCH EVIDENCE BASE



Footsteps2Brilliance® and the Science of Reading

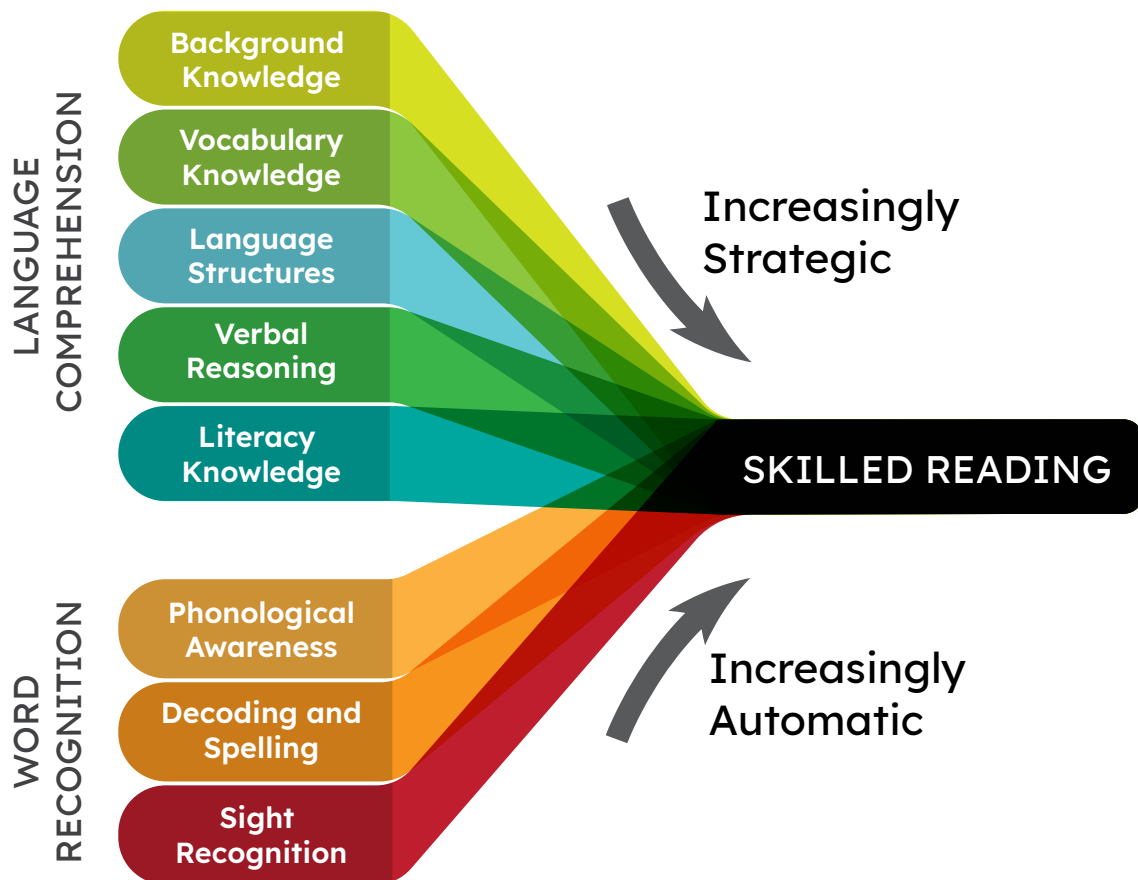
There has been an increased focus recently on which methods are most effective to teach young children how to read. The 2022 NAEP results showed a decline in fourth graders reading on grade level. In fact, in spite of new standards and increased high-stakes assessment, reading scores have been stagnant since the early 1990s. More than half of students nationwide leave the third grade unable to read at grade level. The question, of course, is why. Thousands of research studies by cognitive scientists and reading researchers outline effective teaching methods for reading. This body of knowledge is being referred to as “the Science of Reading.” Unfortunately, many classrooms use programs and methods that do not align with the science. In order to improve reading outcomes, it is imperative that the Science of Reading makes its way into every classroom.



What Does the Science of Reading Recommend?

Reading is the product of an amazingly complex combination of knowledge, strategies and understandings. All readers, even beginning readers, need to use and integrate various kinds of skills, strategies, and background knowledge to create meaning from texts. Hollis Scarborough, a senior scientist at Haskins Laboratories, summarized the complexities involved in learning to read in her now-famous Reading Rope (below). The Reading Rope weaves two critical skills: word recognition and language comprehension. In the Word Recognition strand, students learn relationships between speech sounds and letters. In other words, they learn to decode text. In order to make meaning of decoded text, students must bring their vocabulary, language, background knowledge, and critical thinking skills to the task as represented in the Language Comprehension Strand. Instruction based on the Science of Reading must address all of the threads of the Reading Rope.

Scarborough's Reading Rope



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.

Footsteps2Brilliance curriculum is aligned to the Science of Reading.

Footsteps2Brilliance supports teachers in implementing the Science of Reading. We recognize that the path to literacy starts well before the first day of kindergarten. Our pre-reader curriculum enables preschool parents and teachers to create a strong foundation for literacy with an emphasis on language, print, alphabet knowledge, and phonemic awareness. As students continue in the program, they experience a systematic and explicit phonics curriculum as well as a rich library of eBook units that develop language and critical thinking skills. With Footsteps2Brilliance, schools can provide equitable access to the Science of Reading. The following guide outlines how.



Decoding

Programs aligned to the Science of Reading teach phonics skills explicitly in a way that students can generalize and apply immediately to reading and writing. The most effective phonics approach teaches children to convert letters or letter combinations into sounds and then to blend the sounds together to form recognizable words. This is called synthetic phonics. Synthetic phonics instruction should follow a systematic scope and sequence with built-in review and repetition. Children should apply newly acquired phonics skills to reading real books and writing.

Footsteps2Brilliance provides systematic and explicit phonics instruction.

With our synthetic phonics approach, students hear and pronounce a target phoneme so that they can link that sound to a written letter or letters (grapheme). In our Clever Kids University program, letter sounds are presented to students in a research-based sequence where the first sounds learned are the easiest for students to discriminate. Students can work at their own pace through the phonics sequence. With each lesson, students learn targeted letter sounds, word patterns, and sight words in order to read a decodable book and write about it. Children immediately apply phonics skills they are learning.

Sample Weekly Unit

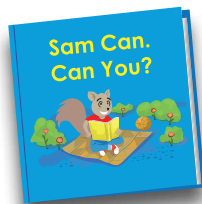
Systematic Phonics

Letter Sounds

Word Families

Sight Words

Read a book



Writing

Write about it

Skill Building

Print Concepts



Phonemic Awareness



Grammar

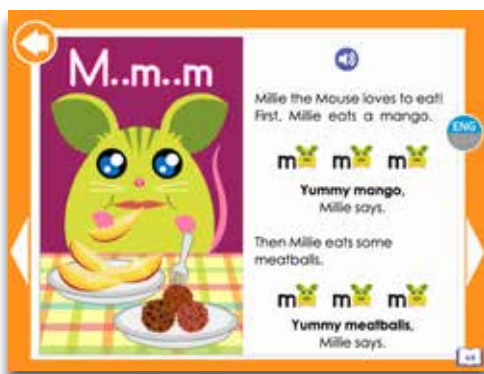
Comprehension & Vocabulary



Read along and play games

At the heart of Footsteps2Brilliance phonics instruction, the Mega Mouth Decoder books and songs introduce fun and memorable characters designed to help students hear and pronounce the 44 sounds in the English language. Each character's name, story, and personality emphasize the target sound in an unforgettable way. Students read along to a Mega Mouth Decoder storybook and sing along to a song introducing the character. Next, they trace the target letter and practice matching the letter to the sound. Finally, they use the new grapheme to build words and decode text.

Sample activities:



Learn the /m/ sound by reading and singing along to a book about Millie the Mouse



Practice forming the letter m while saying the /m/ sound.



Identify words that begin with the /m/ sound.



Combine the recently learned vowel (a) with the new m sound to make words that follow the -am pattern.

Programs aligned to the Science of Reading include phonemic awareness instruction.

The skill of understanding spoken language develops naturally from birth. By age 4, children have been so focused on communicating that they lose awareness of the individual sounds in words. Students must become aware of how sounds in words work before they can learn to associate those sounds with letters in print. Research demonstrates that phonemic awareness can be taught and learned.

Footsteps2Brilliance includes a wealth of multi-sensory games designed to improve phonemic awareness.

Phonological and phonemic awareness instruction in Footsteps2Brilliance ensures that students have the ability to recognize (1) words that rhyme, (2) words that begin with the same sound, and (3) that words are made up of discrete sounds. Games are presented in a research-based order that starts with understanding chunks of sounds in syllables and rhyming. Next, students begin to explore initial sounds. Students isolate initial, medial and final sounds, and work on blending, and segmenting. Finally, students practice adding and deleting sounds in fun riddle games.

Sample activities:



Identify the first sound in a word.



Match words that rhyme.



Listen to and count syllables in multi-syllabic words.



Delete the last sound in a word and add a new sound.

Programs aligned to the Science of Reading employ multisensory learning for decoding instruction.

Educational researchers have found that multisensory activities can teach students to associate letters with sounds faster. Multi-sensory reading activities can include visual, auditory, kinesthetic, tactile, and oral participation.

Multisensory learning is integrated into the entire Footsteps2Brilliance experience.

Unlike workbooks or activity sheets, Footsteps2Brilliance offers students a way to actively engage with language, sounds, and print. For example, Footsteps2Brilliance has invented a series of multi-sensory phonics games based on the Elkonin boxes, where children explore sounds, build words, and blend sounds using interactive phoneme tiles. Because the tiles represent graphemes instead of just letters, and because the tiles play audio as students work with them, these activities create a powerful experience for children to understand and use the alphabetic principle. Students can also touch any word or picture in order to hear it spoken. Some activities have children record themselves and listen to their recording.

Sample activities:



Build words using interactive grapheme tiles.



Trace letters that make a target sound in a word.



Build word families using interactive grapheme tiles.



Apply phonics skills through writing and illustrating.

Programs aligned with the Science of Reading include Formative Assessment.

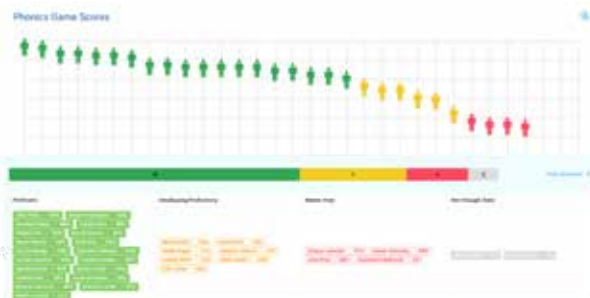
Assessment should inform instruction. Through assessment, teachers can identify where students are struggling in order to reteach or provide additional practice before an area of weakness negatively affects a student's reading growth.

Footsteps2Brilliance automatically provides real-time insight into each student's development as a reader. As students read, play, and write on the programs, their performance and proficiency are automatically monitored. There is no need for teachers to interrupt important instructional time with frequent assessments. Using sophisticated scoring algorithms that evaluate a student's performance within the context of millions of scores nationwide, we are able to present teachers with the insight they need to easily differentiate learning, target interventions, and monitor progress.

With Footsteps2Brilliance, teachers and administrators have ongoing real-time data analytics to monitor academic achievement, classroom and home use, and family engagement.

Identify which students need help.

The Class Dashboard provides quick insight on which students need help in foundational skills, including Phonological Awareness, Phonics, Language Development, Comprehension, and Logic & Reasoning.



Track progress through the systematic decoding sequence.

Teachers can quickly identify which students need support making progress through the systematic phonics sequence.



Create flexible groups.

Class Dashboards enable teachers to identify which students have shared areas of difficulty in order to create small groups for targeted instruction.



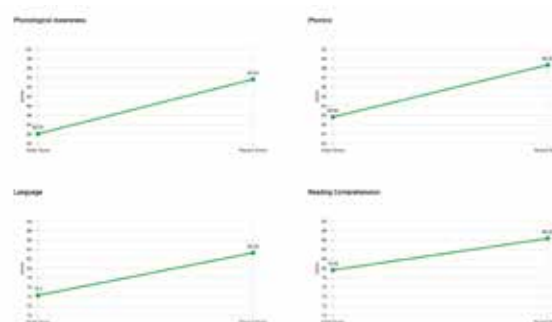
Identify students' strengths and weaknesses.

For each student, teachers can access a comprehensive view of performance on skills in order to create a personalized learning plan that addresses the student's unique strengths and weaknesses.



Monitor learning growth.

Teachers can monitor student and class growth in the foundational skills of Phonics, Phonological Awareness, Language Development, Comprehension, and Logic & Reasoning.



Access a portfolio of authentic student writing.

As students create books and writing in the system, teachers automatically collect a digital portfolio of authentic writing as evidence of student progress.

The screenshot shows a table of student writing activities and two examples of student work. The table has columns for 'Picture', 'Title', 'Activity name', and 'Date Created'. The examples include a drawing of a girl dancing with the text 'I am really good at dance. that is what I am good at.' and a drawing of a rabbit with the text 'he thinks he is gona win the rase today he is so egg sited eh eh eh woho woho'.

Picture	Title	Activity name	Date Created
	My Journal	Write About It: Our Tree Not	Mar 3, 2021
	My Journal	Write About It: The Snake Skin	Jan 26, 2021
	My Drawing	Write It: Comic book	
	My Journal	Write About It: Sid Go	
	My Drawing	Write It: Idea	

Monitor assignments, daily activity and performance.

Teachers can easily provide assignment links to students and track assignment completion. Daily activity is also presented in a log that allows teachers to analyze where students are spending time and how that is impacting their overall performance.



Monitor daily engagement.

Teachers can easily monitor where and when students are using the program.



Language Comprehension

Programs aligned with the Science of Reading develop deep levels of language competencies.

Comprehension is the purpose of reading. If students do not understand what they are decoding, then they are not really reading. It takes more than decoding skills to become a fluent reader with adequate comprehension. Good readers rely on their knowledge of words, language, and background content knowledge in order to make sense of a text.

Footsteps2Brilliance provides thousands of books, games and writing activities to develop vocabulary and content knowledge

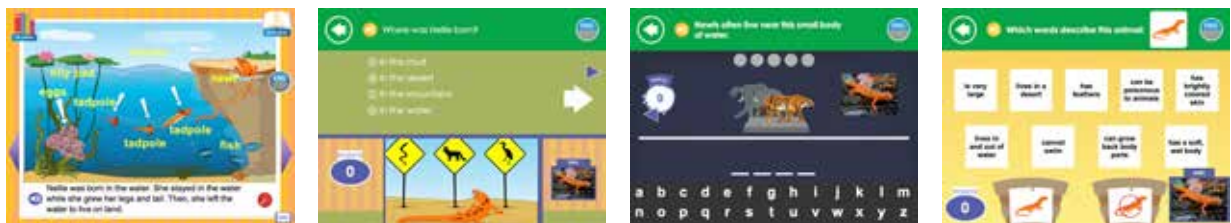
Students experience rich instruction and practice targeting background knowledge and Tier 2 vocabulary words in both English and Spanish. Footsteps2Brilliance designers referenced the work of Margaret G. McKeown and Isabel L Beck, in addition to reviewing the Fry and Education Development Laboratory's (EDL) word lists to ensure that targeted vocabulary is both rigorous and high-utility.

Vocabulary exposure in Footsteps2Brilliance is not a passive experience. Children see and hear the word in the context of an engaging story. Interactive illustrations add a deeper level of word understanding. Footsteps2Brilliance naturally peaks students' interest and inspires repeated readings. Audio support helps all levels of readers to engage with the rich language of the books and games. Moreover, children can toggle between English and Spanish at any point in the book to enrich their bilingual understanding of the story.

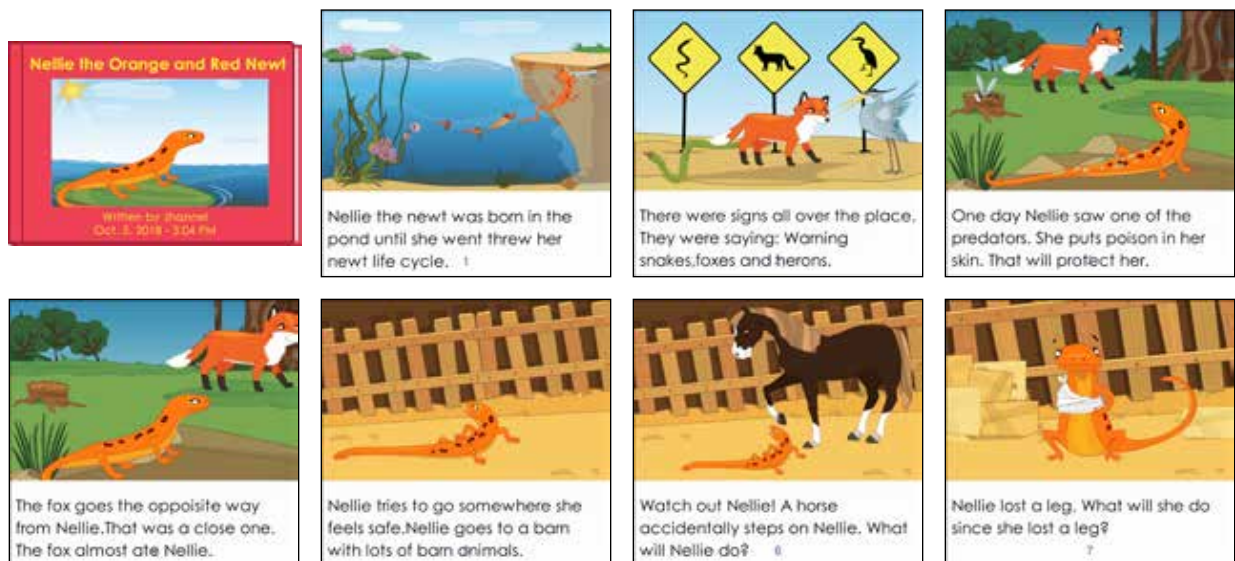
Each Footsteps2Brilliance book is part of a book unit that includes activities to develop comprehension, vocabulary, and other foundational skills. Each book unit culminates in an opportunity for students to write.



Sample activities from the “Nellie the Newt” book unit:



Below is an example of a Create-a-Book written by a second-grade ELL student after completing the activities in the book unit above:



Finally, the Footsteps2Brilliance Model Innovation City Program provides districts with the strategies, tools, and frameworks to effectively engage with their community.



F2B Kindergarten Readiness Curriculum, F2B Foundation Literacy Curriculum, and F2B Summer School

Browse our library at
www.myf2b.com/research_library

