

Invited Column
Science of Reading Application to the Classroom

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Educators around the United States have been learning about The Science of Reading and how crucial it is for our students because of its evidence-based approach, focusing on the fundamental skills and processes to improve literacy and academic achievement. This research shows how the brain processes written language and identifies explicit strategies for teaching reading skills. The five key components are phonemic awareness, phonics, fluency, vocabulary, and comprehension. Not only does the Science of Reading help students to achieve academic success, but it also helps identify students who may be at risk for reading difficulties, allowing educators to intervene early to close achievement gaps. This approach helps build strong reading skills and long-term academic success in all areas.

In my first-grade classroom, I use a variety of approaches that align with research for the Science of Reading, which includes multiple programs and materials that drive my planning and instruction. Because I teach one of the foundational lower elementary grade levels, my reading instruction relies heavily on phonics instruction. The programs or tools I use in my classroom are UFLI Foundations, the “Secret Stories,” Heggerty, decodable texts, and Flocabulary. Below, I will be going more in depth about what each program is and how I utilize it in my classroom, including some sample photos of them in action.

Phonics - Secret Stories

Based on the research and the professional development I have done on the topic, I structure not only my reading block based on the Science of Reading, but also implement it cross-curricular. Since the foundational skills of literacy are so important for early learners, my first-grade team and I utilize an engaging tool called “Secret Stories” (created by Katie Garner). The great thing about “Secret Stories” is that it aligns with the science of reading by using a brain-based approach, engaging multiple senses and pathways for learning. This helps to simplify phonics instruction by connecting letter sound “behaviors” to “kid behaviors” with the use of fun and engaging stories. This not only makes learning to read more engaging for the students, but also gives them a sense of pride as they learn to navigate tricky phonics skills. Essentially, it limits guessing while reading unknown words, giving students tools to utilize and refer to. For example, the Secret to the r-controlled vowels of er, ir, and ur references them being poor drivers who always have to slam on their brakes and, thus, makes the sound /errrrrrrrrrr/!

Students get really excited when they find a “Secret” in a word! Throughout the day, “Secrets” are found and referenced wherever we see text. This helps reinforce those skills without having to block out a chunk of instruction time—you use it WITH your instruction! Secret Stories has been great for not only my classroom, but several others in my building. The use of visual cues, story cues, and weaving it into our explicit instruction makes this really stick for the kids and makes their learning intentional. Follow this [hyperlink](#) to some examples of some of the posters in my room, how I have linked them to other things, as well as an [article with some Secrets in it!](#)

Phonics - UFLI Foundations

Schoolwide, we have adopted UFLI Foundations for our explicit phonics instruction. UFLI focuses not only how we learn to read, but also decoding words and linguistic comprehension to build reading skills. There is a clear-cut scope and sequence that we follow per grade level, making it perfect for whole group instruction. UFLI lessons are typically 30 minutes long, each lesson being broken down into two days. Day one provides review instruction (e.g., phonemic awareness, visual drills, auditory drills), and then introduces the new concept. Day two of instruction reviews the concept taught the previous day, provides word work that the students manipulate using “word chains,” practices irregular words (also known as “heart words”), applies the skills to connected text reading sentences and a decodable text. UFLI is also a great resource to use for small group remediation to help close any achievement gaps that the teacher may notice.

UFLI Foundations paired with Secret Stories has been a success this year. During the 30-minute UFLI lesson, you can both review and introduce a Secret Story, making it super seamless to use while teaching. Throughout the UFLI lessons and decodables, we are constantly talking about and referencing Secrets that we see in the text and connecting them to unknown words. We annotate the text with the Secrets and even have little “codes” we draw above the Secret as a reminder. After Secrets have been found and the text has been annotated, students will do a second read of the text for fluency and comprehension of the text. Now that they have already found the Secrets and have decoded the unknown words, now they can read it more fluently, increasing their reading comprehension! Figures 1 and 2 below show how I implement UFLI and Secret Stories in an integrated fashion for phonics instruction.

Figure 1

From a UFLI Lesson (r-controlled vowels review): review, word manipulation, reading decodable sentences and pointing out Secrets in the text (my annotations on the screen), modeling fluency and then practicing with me.

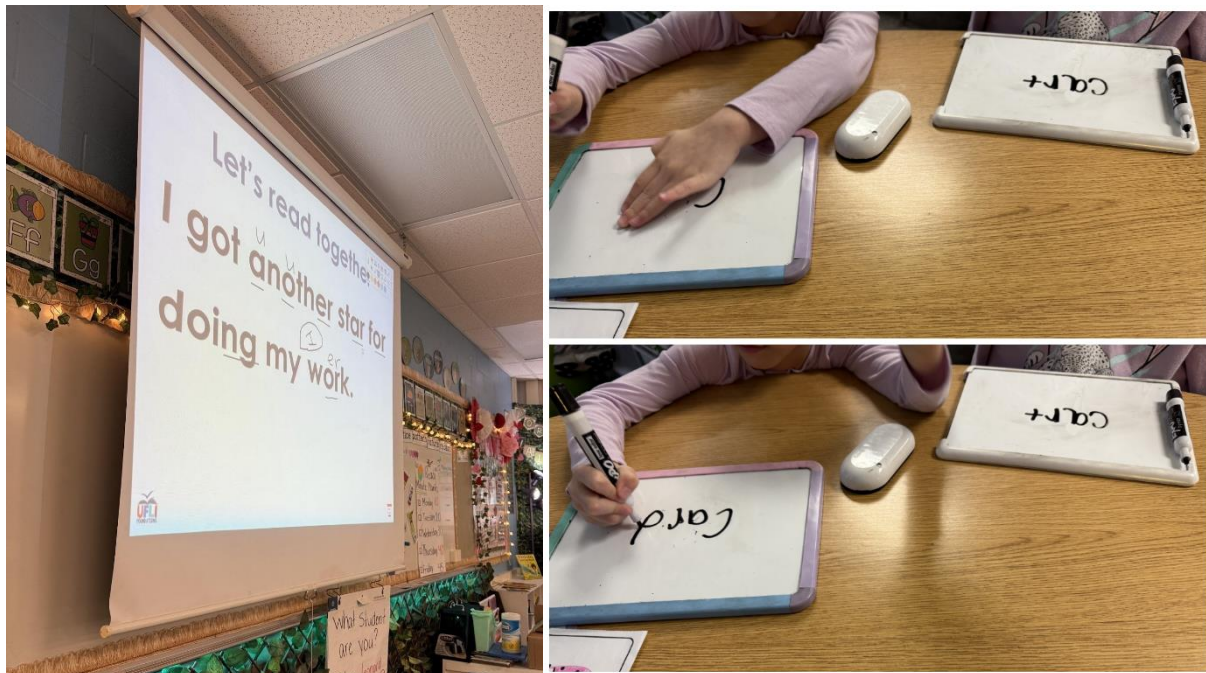
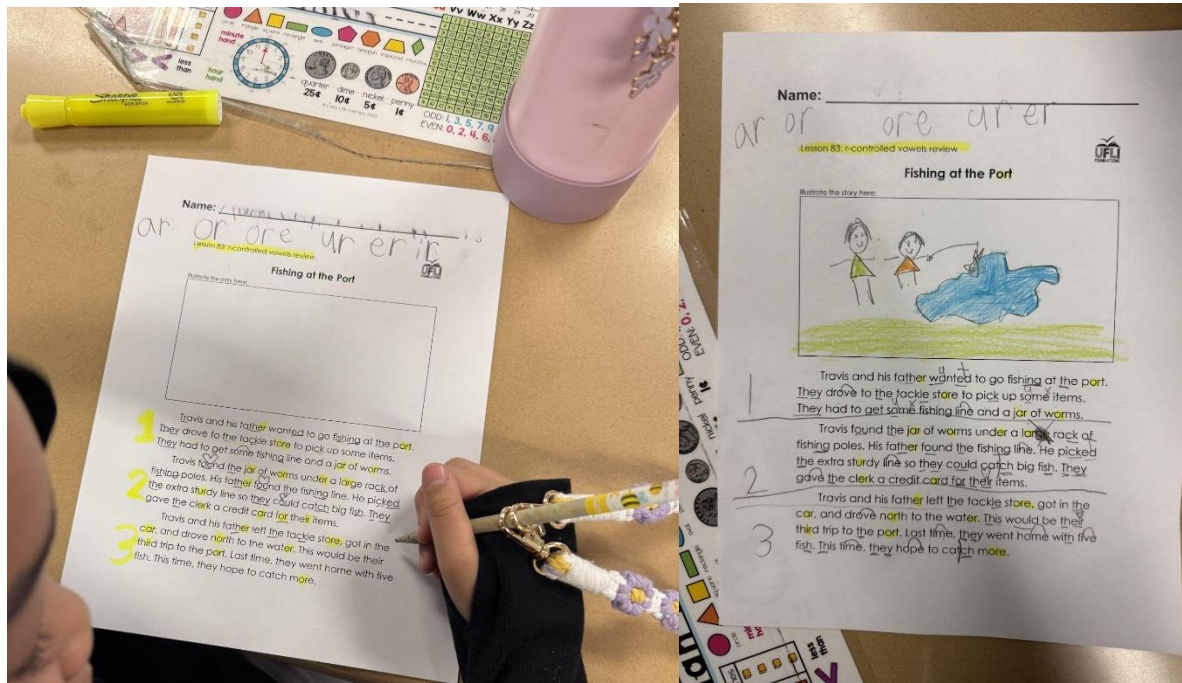


Figure 2

Sample of the decodable text for that lesson (r-controlled vowels review) - students highlighted the targeted skill, then used pencil to annotate all other secrets they saw. Next, they reread for fluency and comprehension, then illustrated the story to check their understanding.

**Phonemic Awareness - Heggerty**

To build students' phonemic awareness, our district uses a program called Heggerty. This program aligns with the Science of Reading by using explicit, systematic instruction that aligns with phonemic awareness and phonics. The program provides structured, step-by-step lessons that are not only quick, but effective in building these foundational skills within the classroom. The lessons are very detailed yet concise, designed to make phonemic awareness instruction easy to use for teachers with jam-packed educational schedules. During lessons, students work with the teacher to hear and manipulate sounds within words, as well as the relationship between letters and sounds. These skills help to enhance their reading fluency, leading to better reading comprehension. Phonemic awareness can also help improve their writing skills by not only matching sounds to letters, but by counting the number of words in a sentence. This helps the students to go back and check their sentence to ensure they didn't miss a part of the sentence. Click here for a [sample Heggerty lesson!](#)

Vocabulary - Flocabulary

At my school specifically, our students' vocabulary scores were low. To counter this and close that achievement gap, our PTO purchased an online program called Flocabulary. This engaging resource integrates age-appropriate vocabulary terms in fun videos and songs that the kids learn through. We start our mornings with these videos while they finish up their breakfast. The kids really enjoy the videos, which also have discussion points built into the videos to promote connecting to the new words. There are other activities that go along with each lesson, like vocabulary cards with pictures and definitions, vocabulary quiz games, a

break it down feature where students locate video evidence for their answer, and the lyric lab where they essentially create their own poem, or song lyrics, that rhyme using the vocabulary words, as well as an online quiz over the terms.

All these features can either be done whole group or assigned directly to the students where they can complete it on their devices. Each lesson lasts a full week, giving the students plenty of time to get familiar with the words and complete activities, supplying additional handout activities if needed. The printable activities not only review the vocabulary words, but have the students practice writing and using them in context, as well as connecting essential reading standards to aid in their overall comprehension.

Throughout the week, I am intentional about using the vocabulary words from the lesson in real-time and encouraging them to use them as well by using sentence stems or setting up situations where the word can be inserted. Overall, this resource has been beneficial for our students. Click here for a [sample lesson](#) or here for a [Youtube video](#) explaining the features.

Fluency / Comprehension - Decodable Texts w/ DOK-based questions

To continue practicing our reading skills as well as to assess comprehension and fluency, we use decodable texts over previously learned phonics skills. We scaffold by using decodable texts with just one specific phonics skill that we have been focusing on, then we make them with multiple phonics skills. When we read a decodable text, we will highlight the focused skill in the words, then will annotate and underline all other Secrets that we find. We teach the students about what reading fluency is, so we make sure they read the text a second time for fluency and comprehension. We add questions to the text with DOK-based questions. We have taught the students to go back in the text to find evidence of their answers, so they highlight or circle the evidence that backs up their answers. This is great because not only are they practicing their reading skills, but they are showing their comprehension by using previously taught strategies.

When looking for decodable texts for your students, I encourage teachers to find ones that are not too easy, but also not too challenging. If possible, I think making the decodable text yourself is the best way to do this, because you get to pick and choose what words would be best for you students, including vocabulary and context used. I like to mix up the decodables and choose something that I think will excite them sometimes (for example, one of our decodable tests was about the video game, Minecraft). This improves their engagement of the text, and you can pull on their schema, or prior knowledge, for the questions as well. When making decodables, you can either come up with the story on your own, or I like to use AI to give me a baseline to work with. I like to use [ChatGPT](#) because you can tweak the text as much as you want. Just put what you want (decodable text), the specific phonics skill, and the grade level of the students you want to share it with.

Another resource we use to track reading fluency is a monthly formative assessment for the whole grade level. We use the website [PearDeck](#) provided from our district to create decodable texts, just like the ones we make every Friday. The main difference with these ones is that it is all online on their Chromebooks, so we have an added feature where they record themselves reading the text. This lets the teachers hear them read the whole text, which is tricky to do every Friday when they're all reading the text at the same time. We can see what phonics skills they are struggling with, any irregular words they need help with, and track their reading accuracy and fluency. This has been a huge tool for us!

Figure 3

Example of decodable test I made modeled off [these](#). The top portion is reviewed with the whole class, pointing out the targeted phonic skill, then students are to read the text on their own twice. Then, they read and answer the questions independently, circling the text evidence.

Name: _____ Date: 4-10-25 Long O
Vowel Team

Read each word. 5.1

Joe boat float blow slow

Read the high frequency words.

saw said began oh over

Read Twice

The Boat Ride

Joe saw a boat float in the sea. Ben sat in the boat and said, "Hop in, Joe!" The wind began to blow, and the boat hit a wave. "Oh no!" said Joe. "We may tip over!" The wind stopped and the boat slowed. "That was close!" said Joe.

Reading Comprehension Questions

- Where was the boat?
 - in the lake
 - in the sea
 - in the park
- Who was in the boat first?
 - Joe
 - Ben
 - Jen
- Why did a wave hit the boat?
 - it was windy
 - it was cold
 - it was hot
- Why did the boat slow down?
 - Ben slowed it down
 - the boat sank
 - the wind stopped
- What was the problem?
 - the boat almost tipped over
 - the wind stopped
 - the boat slowed?

Figure 4

Example of PearAssessment online formative assessment, where students record themselves reading the decodable text, then answer comprehension questions. This is the Minecraft one that I created to increase engagement for our grade level.

Question 1/11 NEXT BOOKMARK

Minecraft Fun


Steve is in Minecraft. He is a brave player. He likes to explore!

One day, Steve finds a large cave. "Wow! This is cool!" he says. He sees a lot of stone and grabs some.

Next, Steve finds a big tree. "I can chop this tree!" he thinks. He starts to chop. The tree falls down with a thud! "Now I can make wood!"

With the wood, Steve makes a house. "This is a nice place!" he says. He puts a bed inside. It feels like home.

At the end of the day, Steve looks out. He sees the moon shine. "Minecraft is fun!" he says.



CLICK TO RECORD YOUR RESPONSE

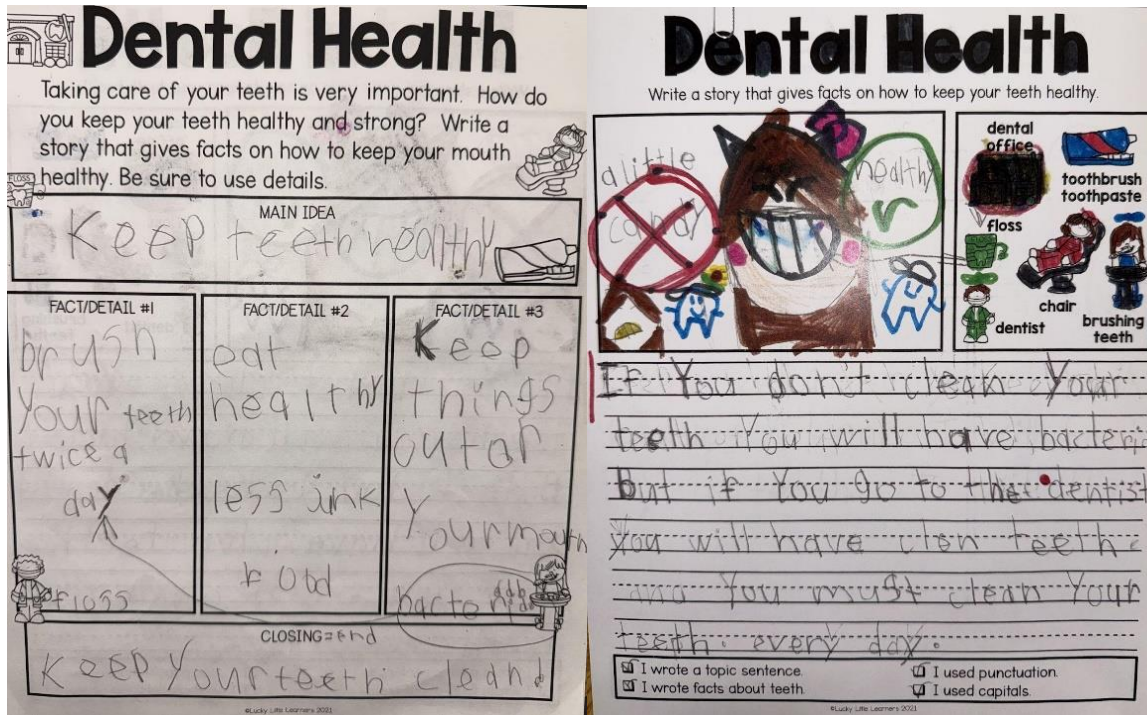
The screenshot shows a digital reading application interface. At the top, there is a green navigation bar with icons for a question (2/11), navigation (back, forward, NEXT), a bookmark icon, a search icon, a menu icon, a user profile icon, and an EXIT button. Below the navigation bar, the text reads "Decodable Text" and "Minecraft Fun by Wood First Grade". A small Minecraft character icon is next to the title "Minecraft Fun". The text of the passage is as follows: "Steve is in Minecraft. He is a brave player. He likes to explore! One day, Steve finds a large cave. 'Wow! This is cool!' he says. He sees a lot of stone and grabs some. Next, Steve finds a big tree. 'I can chop this tree!' he thinks. He starts to chop. The tree falls down with a thud! 'Now I can make wood!' With the wood, Steve makes a house. 'This is a nice place!' he says. He puts a bed inside. It feels like home. At the end of the day, Steve looks out. He sees the moon shine. 'Minecraft is fun!' he says." To the right of the text is a question: "2 What is the main idea of the text?" with four multiple-choice options: (A) Steve explores, (B) Steve is hungry, (C) Steve sees a friend, and (D) Steve makes cake. Navigation arrows are visible on the left and right sides of the text area.

Writing Connection

With the use of UFLI Foundations, Secret Stories, and Heggerty, my students' writing has improved tremendously. Students have more confidence in their writing, counting out the sounds in a word and writing the phonics skills/Secrets that they know with little to no frustration. The use of Flocabulary to increase their vocabulary skills has also been beneficial, helping them spice up their writing with new synonyms for basic words that they know. Also, the use of different graphic organizers has been beneficial for them planning their writing. This helps them get their ideas down on paper without them worrying about writing complete sentences.

Figure 5

(Left) Example of a student utilizing a graphic organizer (we brainstormed together based on what we learned about teeth and dental health in science—an example of a cross-curricular activity). (Right) The student's final writing on the topic, referencing the graphic organizer for help. A word bank is provided in this [resource](#) to help them. This student is one who usually struggles with reading and writing, but he worked through and wrote a great piece!



Sources

- [“Secret Stories” by Katie Garner](#)
- [UFLI Foundations](#)
- [“Secret Stories” and UFLI Alignment](#)
- [Heggerty](#)
- [Flocabulary](#)
- [PearDeck](#)
- [ChatGPT](#)
- [Decodable Texts Used](#)

Author Information

Paige Talian brings over seven years of experience in elementary education, with a dedicated focus on first-grade instruction. Known for fostering meaningful connections with her students, she creates a nurturing, engaging, and academically enriching environment that supports both personal and academic growth.

Paige holds degrees in General Elementary Education and Mild Intervention Special Education, complemented by extensive professional development in the Science of Reading. She is deeply committed to closing literacy gaps and champions the belief that all students thrive when held to high expectations. Through innovative and differentiated instructional strategies, Paige inspires a love of learning while meeting the diverse needs of her students.

Paige believes student success is rooted in strong relationships, high expectations, and social-emotional development. She integrates self-regulation strategies into daily routines to help students understand and manage their emotions, fostering a classroom culture of empathy, resilience, and respect. By using culturally and developmentally relevant themes—such as

popular games and media—she creates meaningful connections between academic content and students' personal interests, deepening engagement and enhancing learning.