Indiana State LITERACY ASSOCIATION

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Dear Teaching Colleagues and Literacy Champions,

Our Fall and Spring editions of the Indiana Literacy Journal always correspond with breaks and part of that is deliberate. We hope to accomplish two things with the timing of our journal: One, we want to celebrate all the continual hard work you do on a daily basis and make sure to tell you to rest and relax and enjoy the time off with your family and friends. Second, we hope that in some of your free time you will read the articles and reflect on the literacy teaching and learning that takes place in your classroom. Hopefully you have some more processing time during the winter break this year, and we hope to be part of that conversation!

One of our favorite parts of the end of the year is when all the book lists are shared revealing people's and organization's favorite reads of the year. We are no different. Jeff Thomas, Kristin Rearden, Simone Nance, and Elizabeth Wilkins once again have compiled the 2024 Indiana Science Trade Book Annual Reading List (IN-STAR): Teaching Science Through Literature for your perusal. In addition to a brief summary of the book, the list is broken down by grade level and the specific science standard. Please add some of these books to your reading list over break!

Our other featured article from Amy Davis looks at an instructional strategy for multilingual learners. Amy will lead you through a read aloud example that includes higher order thinking questions, wait time, student participation and engagement, and an opportunity for multilingual learners to practice their newly acquired language. The article includes several tables that feature question stems and student response scaffolds for different levels of multilingual learners.

Finally, our two guest columns explore different areas of Science of Reading. Lacey Ladd dives deep into reading comprehension. Lacey explains that "comprehension is an outcome of instruction, not an isolated skill that can be directly taught." Her column explores different evidence-based strategies to set the stage for reading comprehension development in students. Kara Taylor examines Science of Reading through a culturally relevant lens. She shares some ways she has shifted her thinking to merge Science of Reading with culturally relevant pedagogy and offers some practical action tips for you to implement. These are columns not to miss!

As always, thank you for being a supporter of The Indiana State Literacy Association and The Indiana Literacy Journal. We can't wait to hear from you about this edition.

Your editors,

Benjamin Boche and Sharon Pratt

Creating Questions and Scaffolding Responses for Multilingual Learners: How Can Teachers Encourage Language Acquisition during Read Alouds?

Amy D. Davis
Eastern Illinois University

Abstract

Multilingual learners (MLs) are required to comprehend content-area knowledge while also acquiring a second language. Through purposeful planning, teachers can implement an instructional routine that fosters student wait-time, higher levels of thinking, and increases MLs' participation and engagement, and allows MLs to practice their newly acquired language. This paper outlines an instructional strategy that focuses on the creation of higher-level questions based on text and scaffolding MLs' responses based on their language acquisition level.

Multilingual learners (MLs) are expected to meet the same academic standards as their fluent English-speaking peers while simultaneously learning a second language. What scaffolds should teachers incorporate to ensure that MLs are processing literary content utilizing their newly acquired language? The purpose of this paper is to introduce and explain an instructional strategy that practitioners can incorporate into their read aloud routines. Given that oral language paves the way for reading and writing, this strategy incorporates a receptive and expressive practice for MLs. The scaffolds provided are based on students' level of language acquisition. While the strategy is appropriate for both narrative and expository text, I will provide an example of the strategy utilizing the narrative picture book, *Carmela Full of Wishes* by Matt de la Peña.

Second Language Acquisition

Acquiring a second language is a slow and gradual process. It requires explicit instruction and scaffolds to ensure this process is completed in a way that will promote students' academic success. Language acquisition theorist Dr. Jim Cummins (1979) introduced the distinction between Basic Interpersonal Communication Skills (BICS), conversational discourse, and Cognitive Academic Language Proficiency (CALP), the language specific to the context of school. Academic language proficiency is defined as "the extent to which an individual has access to and command of the oral and written academic registers of schooling" (Cummins, 2000, p. 67). BICS, which is sometimes referred to as "playground" language, typically takes up to two years to acquire. This is the language that MLs use to communicate their basic needs and socialize with their peers. Because of its complexity, CALP is specific to content areas (e.g., scientific terminology) and can take up to ten years to acquire (Thomas & Collier, 2002). Given the amount of time it takes, the adaptations and modifications teachers incorporate can aid MLs towards language acquisition.

There are five stages of second-language acquisition that relate to speech only and are not overgeneralized to other language skills: Preproduction, Early Production, Speech Emergence, Intermediate Fluency, and Advanced Fluency (Krashen & Terrell, 1983). The Preproduction stage is often referred to as "the silent period," where students are not producing language. While students may have minimal comprehension without additional scaffolds, they are capable of nodding *yes* or *no*, drawing, and pointing. During the Early Production stage, students begin to produce one or two words. After approximately six months to a year, ML students enter the

Speech Emergence stage where they begin speaking simple sentences. In the last two stages, Intermediate and Advanced Fluency, students increase the length and complexity of their sentences. To reach near-native level of speech, it can take ML students up to seven years (Krashen & Terrell, 1983; Hill & Miller, 2013).

Application to Instructional Strategy

There are several important reasons why teachers need to understand these five stages of language acquisition. As students are passing through these stages, teachers can provide scaffolds to aid in their expression and text comprehension. Krashen and Terrell (1983) describe this as "working within their 'zone of proximal development'" (p. 16). Vygotsky's (1978) idea of zone of proximal development applies to language development. The idea identifies what an ML student is currently capable of understanding and speaking. The connection between a suggested student response strategy and ZPD is how teachers are meeting students at their level of language acquisition and providing scaffolds to encourage usage.

For example, accepting students' ability to respond to questions either with writing, gesturing, or drawing based upon their second language acquisition level is essential for MLs. MLs in the Preproduction stage can think critically and express themselves nonverbally by using gestures such as pointing or completing an action like "circle" or "draw a picture." (Hill & Miller, 2013). In the Preproduction and Early Production stages, ask MLs to draw a picture, whereas, in the Speech Emergence stage, MLs can complete a sentence frame. As students begin to enter more advanced stages, teachers can use sentence starters to help them with grammatical structures (Hill & Miller, 2013). Typically, the prompt you provide for Intermediate and Advanced fluency stages can be used for both stages. Assure students that they can respond in a way that is comfortable for them either with a quick write or a quick sketch. Provide students with either a sticky note, whiteboard and marker, or a piece of paper and increase wait time up to two minutes. Again, allow an additional two minutes for students to work in pairs discussing their writing/sketch with a partner. Teachers can be very strategic in partnering lower language students with more fluent speakers. Consequently, it is through these social interactions that learners can express their own ideas and exchange them with more proficient peers to construct meaning (Zhou, 2021).

After discussion, then call on the previously selected students to share their responses. Questions falling into the three lower tiers: *knowledge, understand*, and *apply*, may not necessarily require this strategy and processing with a partner. Teachers can select a variety of leveled questions using their discernment on lower tiered questions which lay a foundation for higher tiered questions. Typically, teachers focus on asking questions before, during, and after reading. The questions before reading can focus on making predictions based on the title and cover art. I have seen teachers do this by asking students about their background knowledge and experiences so that they can make a personal connection to the story. During reading, the questions can be from the lower tiers of Bloom's taxonomy (Anderson & Krathwohl, 2001) to establish an understanding of the characters, setting, and identifying the problem or theme. After reading, teachers can ask more complex questions that require the student response strategy. You can incorporate the strategy at any point during the read aloud. The exact number of questions asked during a read aloud is dependent on how many questions will establish an understanding of the story's theme.

I teach undergraduate students how to implement this strategy during their read aloud routines. They have created an outline for students to utilize for before, during, and after reading.

After each question, students share their response with a partner. Figure 1 illustrates an outline created for "Molly on the Moon" by Mary Robinette Kowai. The teacher asked the first question before reading, then had students share with a partner. The second question was asked during reading with the same language routine. And finally, the last question was asked after reading and again, the students discussed their responses with a partner. Figure 2 is another example created for "Naming Ceremony" by Seina Wedlick and Jenin Mohammand and followed the same instructional routine.

Figure 1

Read Aloud Outline for Writing and Speaking Integration During Read Aloud

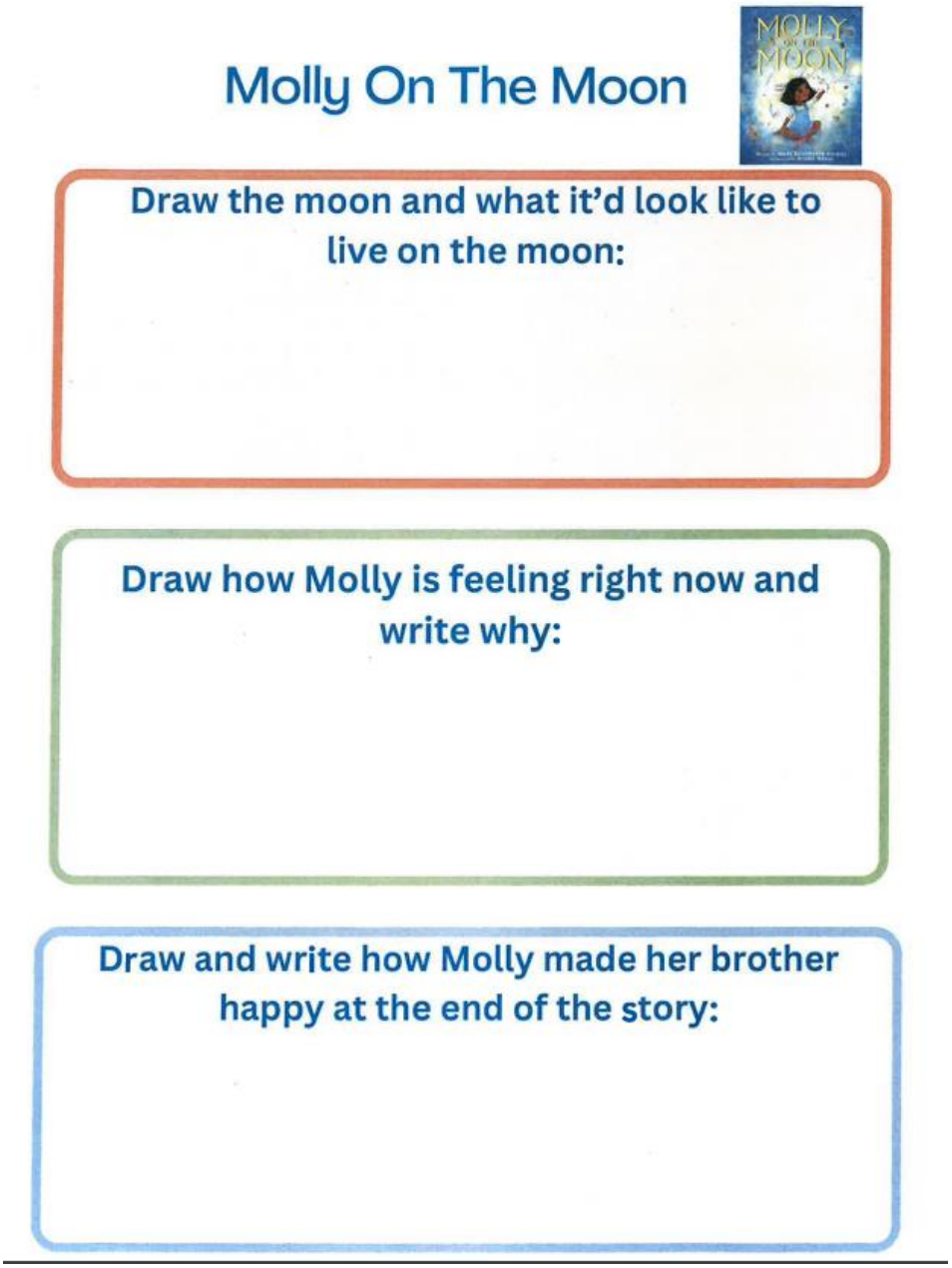
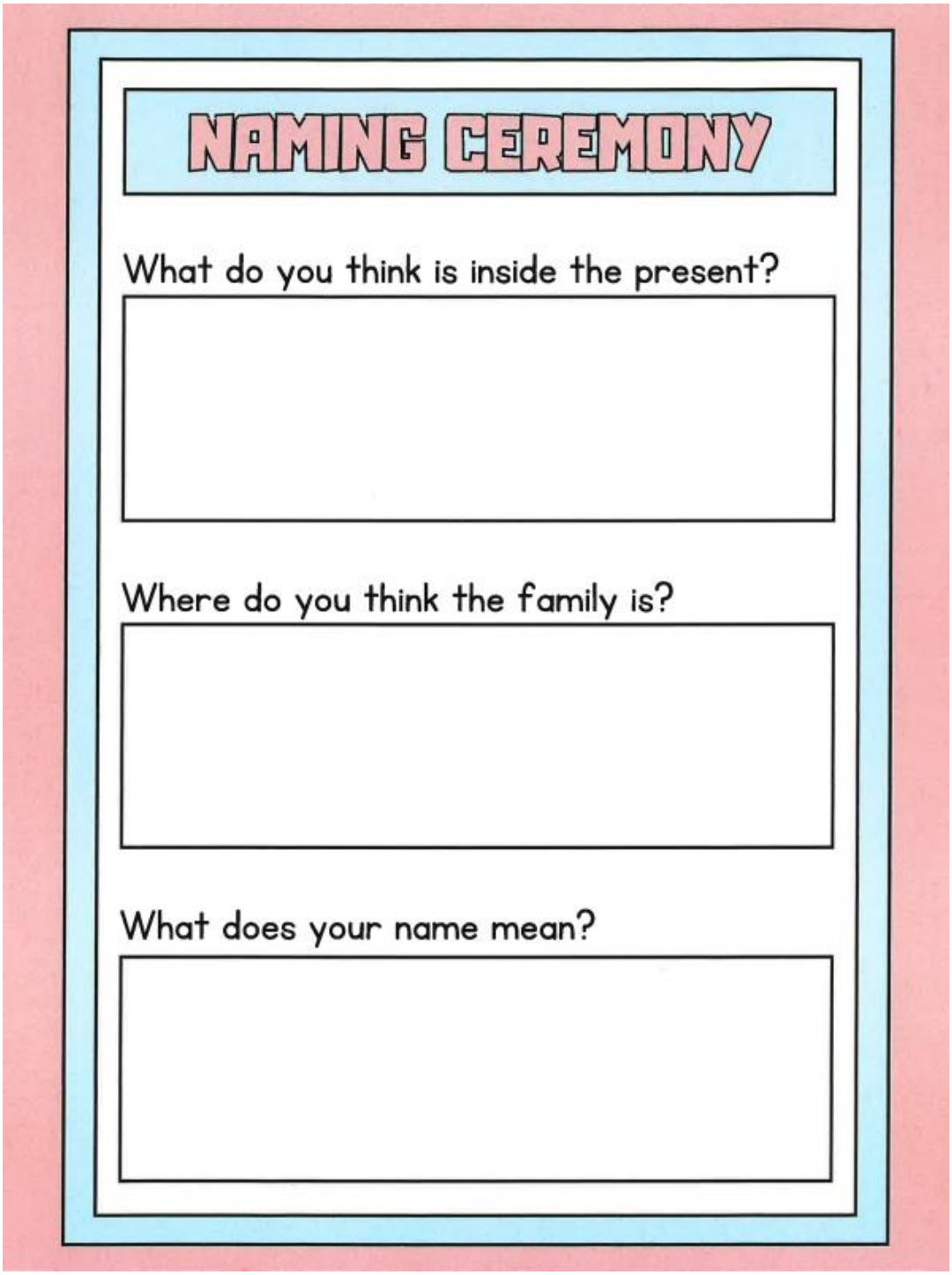


Figure 2
Read Aloud Outline for Writing and Speaking Integration During Read Aloud



Later in the paper, I will provide examples of how to generate question stems and scaffolded student responses using the picture book, *Carmela Full of Wishes* by Matt de la Peña.

Oral Language Development and Multilingual Learners

Best practices of reading and writing are not sufficient enough to help MLs develop English literacy skills. Researchers confirm that a rich and extensive oral language foundation is critical to the later development of reading and writing (Dickinson & Porche, 2011). However, MLs spend less than two percent of their school day in oral interactions. As a result, teachers must find a way to engage them in productive talk (August, 2011).

ML students often receive adequate instruction in word-level skills such as decoding, word recognition, and spelling; however, they struggle with text-level skills such as reading comprehension and writing (National Literacy Panel on Language-Minority Children and Youth, 2008). What should teachers implement into their practice that will address this area? According to Wright (2016), oral interactions for MLs need to be meaningful and authentic. Walqui and Heritage (2018) suggest integrating reading and writing into oral development activities which allows MLs to comprehend the text more deeply. The proposed strategy allows for the integration of writing and speaking during a read aloud.

Wait Time and Multilingual Learners

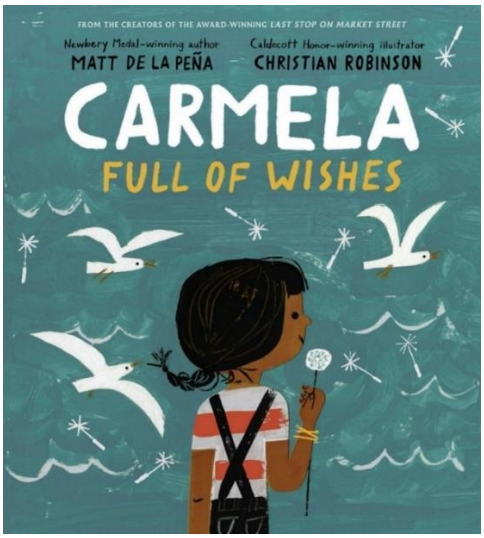
When teachers are reading aloud to MLs and pose questions based on the text, students may require additional time because these types of questions require more complex cognitive processing (Stahl, 1994). According to Rowe (1986), "to 'grow' a complex thought system requires a great deal of shared experience and conversation" (p. 43). Through analysis of tape recordings of high school and elementary school classes, Rowe (1986) examined the characteristics of discourse exchanges between the teacher and students. The researchers found just increasing the wait time to three seconds can improve the quality of discourse. The concept of providing wait-time, which is a brief pause after asking a question, can assist MLs with processing language and formulating a response in English. Furthermore, wait time can lower students' anxiety and increase confidence and engagement in the lesson. It allows time for MLs to translanguage, thinking in one language then speaking in another (Sűt, 2020; Wasik & Hindman, 2018; Holmes 2013). Teachers should consider asking questions from the top three tiers: *analyze*, *evaluate*, and *create*. Additionally, they may want to consider utilizing a structure where MLs can think deeply and process a response through writing and speaking. For instructional pacing and ensuring adequate wait time, teachers can set a timer for both the individual and paired responses.

Question Generation for Read Alouds

While creating questions, teachers should consider the top three tiers of Bloom's taxonomy: *analyze, evaluate,* and *create* (Anderson & Krathwohl, 2001). At these higher levels, the implementation of this strategy will give students an opportunity to engage and interact with the text in a more meaningful way. As a result, this interaction will lead to deeper connections and comprehension (Wright, 2016). In this next section, I will demonstrate how to create questions using the children's book, *Carmela Full of Wishes* by Matt de la Peña and suggested scaffolds for the five language acquisition levels. I chose this book for a third-grade read aloud because some of the story's themes require readers to generate inferences. Making inferences is "a fundamental skill that enables the construction of coherent representations during reading comprehension" (Kendeou et al., 2020, p. 257). A skilled reader can understand and connect to relationships that are not explicitly stated in the text. Generating questions to help MLs understand these unspoken relationships are crucial for their comprehension. The strategy

incorporates generating questions from the top three tiers, providing a scaffold based on students' language acquisition level, and promoting discussion as outlined in the narrative text example.

Narrative Text Example



Carmela Full of Wishes, by Matt de la Peña and illustrated by Christian Robinson (2018)

This is a story about a young girl, Carmela, who is celebrating her birthday with her older brother and mother. Her mother gives her gold bracelets, and she often jingles them at her older brother to ward off his evil glares. She accompanies him to town to run errands and he's not particularly happy with her presence. As they travel through town, she finds a dandelion and ponders the right wish before she blows the white fluff away. Unfortunately, she trips and her scooter destroys her precious dandelion. Carmela begins to cry, and her big brother takes her to the sea where she sees a sky full of dandelion spores flying through the air. Since he was so kind to her, she decides he isn't so bad and removes her gold bracelets. There are other themes in addition to the sibling rivalry woven into this story such as migrant issues, and hope that her deported father can rejoin the family.

The process of selecting questions to use the student response strategy were created for the top three tiers of Bloom's Taxonomy, *analyze, evaluate,* and *create* (Anderson & Krathwohl, 2001). In this next section, I will provide question stems for each level and examples of how teachers can scaffold for each of the five stages of language acquisition. To implement the strategy, determine students' level of language acquisition, pose the question, and explain how you want them to respond. After they have recorded their response, ask them to share with someone to the best of their ability. If students are unable to respond with the scaffold provided, move down to a lower level or rephrase the question so that the student understands.

Analyze

Taking the time to analyze text allows us to make connections between facts and visualize the big picture while thinking about how details in the text are interrelated. How do students use the text clues to infer and determine meaning from another point of view? Possible questions to ask for students to analyze could be:

- Describe an alternative solution to the problem.

- What is the significance of this event?
- How does this event contribute to the story as a whole?

(Adapted from Anderson & Krathwohl, 2001)

Table 1 provides a question stem and possible student response structures based on students' language acquisition level. So far in the story, we have only been introduced to her mother and brother and the text reads: "…past the huge home improvement store where dad used to stand around weekend mornings, waiting for work" (de la Peña, 2018, p. 4). Her dad's location is past tense so students will have to analyze the situation and determine her father's location.

Table 1
Analysis Question Stems by Language Acquisition Level

Question Stems	Student Response Scaffolds for ML Students
"Is Carmela's dad with the family? Where do you think he is?"	**Preproduction** "Can you shake your head *yes* or *no* - Do you see Carmela's dad in the picture? (No) Can you point to Carmela's dad in the picture? (No)" **Early Production** "If Carmela's dad is not in the picture, give me a word where you think he is? Can you draw a picture of where he might be?" **Speech Emergence** Provide the sentence frame, "I think her dad has gone to _____because_____." **Intermediate Fluency AND Advanced Fluency** You can combine intermediate and advanced fluency and provide the sentence starter: "Carmela's dad is not present because…I know this because..."

Evaluate

The next level is *evaluate* which means to make judgments about text supported with evidence. Suggested questions teachers could ask include:

- Which part of the text could be improved?
- In what ways would you improve this story?
- Did this story have an effective ending? Would you recommend the book, why or why not?

(Adapted from Anderson & Krathwohl, 2001)

In using the example from "Carmela Full of Wishes," the question posed asks students to evaluate the ending of the story on whether it was effective and if students would recommend this book (Table 2). When Carmela falls and crushes her dandelion and begins to cry, her brother

comforts her and takes her to the sea where she witnesses millions of dandelion spores floating in the air. Even though she sometimes feels annoyed at her brother, she realizes he does love her and she removes her birthday bracelets and places them in her pocket. She removes them at the sea because she no longer needs to "ward off" his negativity towards her since he tried to make a bad situation better for her.

Table 2
Evaluate Question Stems by Language Acquisition Level

Question Stems	Student Response Scaffolds for ML Students
"Did you like the way the story ended? Would you recommend this book?"	**Preproduction** "Can you shake your head *yes* or *no* – Did you like the way the story ended? Would you want to read this book again?" **Early Production** "Can you draw a picture of what you liked about the ending? **Speech Emergence** "Can you tell me with two to three words, did you like the way the story ended? Would you like to tell your friend about this book?" **Intermediate Fluency AND Advanced Fluency** "I think 'Carmela Full of Wishes' had an effective ending because….and I would or would not recommend it to…..because…."

Create

According to Feng (2014), the questions teachers create and ask influence and induce students' cognitive processing. Even though the majority of instructional time may be spent posing questions, they may not necessarily be at the higher levels. At the top of Bloom's taxonomy is *create* which learners identify patterns, ideas, and facts to create something new or formulate a hypothesis. Suggested questions teachers could ask include:

- If you were the main character, how would you have reacted to this?
- What would this character think?
- Using evidence from the text, why do you think her brother questioned her if she made a wish?

(Adapted from Anderson & Krathwohl, 2001)

Carmela finds a fluffy dandelion outside the Laundromat and bends down to pick it and blow the white spores away. Before she could, her brother questions whether she made a wish because everyone knows you are supposed to make a wish. She lies to her brother and tells him she did even though she did not.

Table 3
Create Question Stems by Language Acquisition Level

Question Stems	Student Response Scaffolds for ML Students
"If you were Carmela, how would you have reacted to her brother's response?"	**Preproduction** "Can you draw a picture of how you would have felt if your brother said that to you?" **Early Production** "In one or two words, can you tell me how you would have felt if your brother said to you?" **Speech Emergence** Provide the sentence frame: "Carmela felt angry towards her brother because he _____ to her." **Intermediate Fluency AND Advanced Fluency** Provide the sentence starter, "If I were Carmela, I would have reacted to her brother's response by…."

Conclusion

MLs have the formidable task of thinking and expressing themselves in a newly acquired language. The purpose of this paper was to share a strategy for creating scaffolds based on MLs' level of language acquisition. The strategy can be implemented during a read aloud routine so they can comprehend the story utilizing expressive language. It allows for differentiation based on MLs' language acquisition levels and focuses on the importance of wait time.

When teachers are mindful to differentiate their instruction to meet the needs of ML students, it can lower students' anxiety and increase confidence, engagement, and participation. The end goals should not only be for MLs to successfully express their understanding, but also be given opportunities to practice their newly-acquired language. Oral language does pave the way for reading and writing and these students need every opportunity to practice language.

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Author Information

Amy Davis is an assistant professor at Eastern Illinois University in the department of Teaching, Learning, and Foundations. She will be going up for tenure in 2025 and her research interests include the blend of literacy practices and ELLs' language acquisition. In addition, Dr. Davis enjoys writing about children's literature and suggesting ways for practitioners to use it during read alouds with their students.

2024 Indiana Science Trade Book Annual Reading List (IN-STAR): Teaching Science Through Literature

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University of Southern Indiana

Kristin Rearden
University of Tennessee

Simone Nance
University of Southern Indiana

Elizabeth Wilkins
University of Southern Indiana

Abstract

The 2024 IN-STAR List is a curated list of books elementary teachers can use to integrate children's literature and science. The titles align to the domains of the Disciplinary Core Ideas of the K-12 Science Indiana Academic Standards. Several nationally recognized lists are produced to help teachers identify books that can be used in elementary classrooms, but these lists don't align their selections to grade levels and Indiana's K-5 science standards. The IN-STAR list bridges that gap. The IN-STAR List ensures that the recommended books meet the specific science standards for each grade level in Indiana. This alignment helps teachers deliver targeted instruction and assess student learning effectively. All books were published in 2023 and there are two high-quality titles per grade level and three honorable mention selections for the primary and intermediate grade bands. A brief description and ISBN number are offered so that the reader may consider classroom connections and work with local libraries to acquire books.

The 2024 **I**ndiana **S**cience **T**rade Book **A**nnual **R**eading List (IN-STAR) features unique selections which provide thought-provoking connections between rich literature and science content. The criteria and process to identify books has been previously described (Author, 2012). Selections meet the following criteria:

1. The book has substantial science content.
2. The information is clear, accurate, and up to date.
3. Theories and facts are clearly distinguished.
4. Facts are not oversimplified to the point where the information is misleading.
5. Generalizations are supported by facts and significant facts are not omitted.
6. Books are free of gender, ethnic, and socioeconomic bias.
7. Information can be connected to the Indiana Science Standards for grades K-5.
8. Books are readily available in public libraries or bookstores.
9. Books have received at least one positive review in one of the identified professional journals: *Booklist*, *Bulletin of the Center for Children's Books*, *Horn Book*, *Kirkus Reviews*, *Publishers Weekly*, *School Library Journal*, *and Science and Children*.

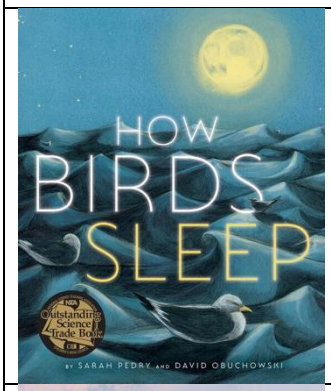
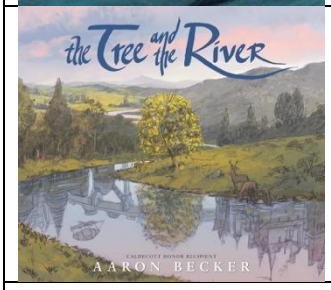
Items one through five are critical because they help teachers select quality science-focused books for classroom use. Item six ensures a teacher's universal responsibility to promote classrooms and resources which promote a variety of populations and cultures. Items seven through nine ensure the selections are high quality and easily attainable by classroom teachers.

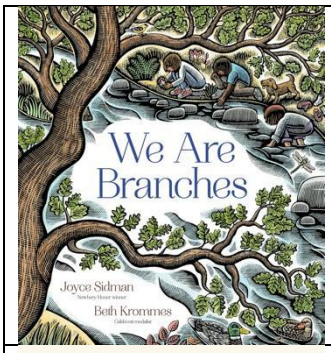
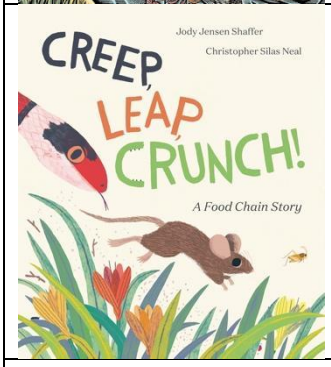
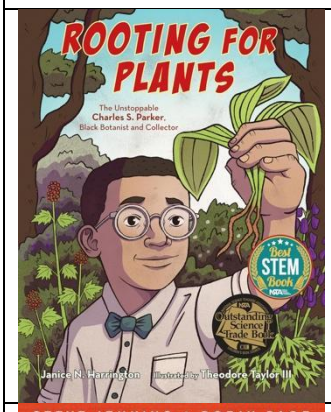
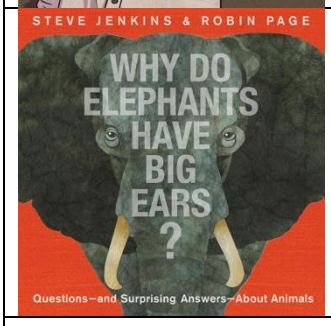
Chosen titles were published in the preceding year. Books are selected through a continuous review of resources highlighting new publications in children's literature. As interesting and appropriate books are discovered, they are purchased or acquired through local libraries for review. Their content is assessed for the nine criteria and if they address the science content listed in the K-12 Science Indiana Academic Standards for each grade level. The reading level of books is considered when aligning them with grade levels.

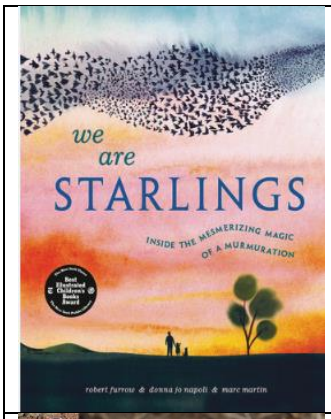
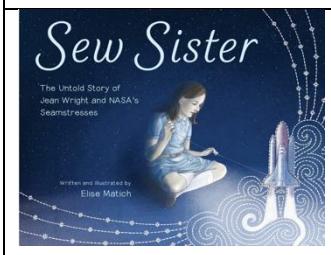
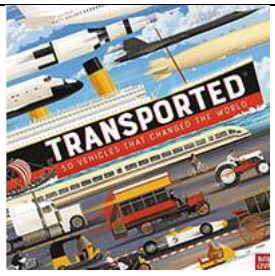
The titles can certainly be used in other grade levels to help with readers at different levels that teachers have in their classroom. Additionally, read alouds make using some of the upper grades appropriate for the lower grades if the content aligns. And, of course, upper-level students can explore the deeper meaning in a simple image or part of the book. The authors anticipate that teachers will implement a variety of reading strategies while using these science-based books. Examples include highlighting character descriptions in biographies, demonstrating how to use text features to gain meaning from a text, and incorporating opportunities for retelling main ideas and key details of a text. Presented below are of this year's selections.

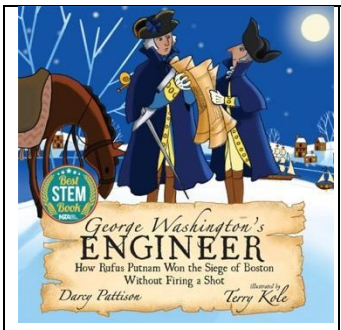
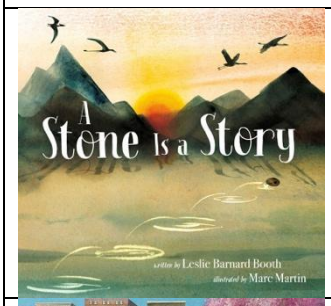
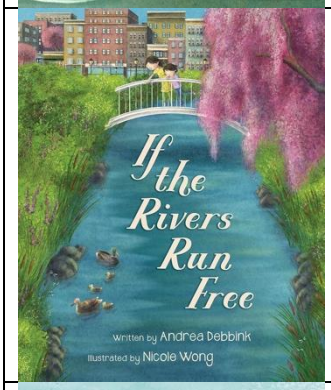
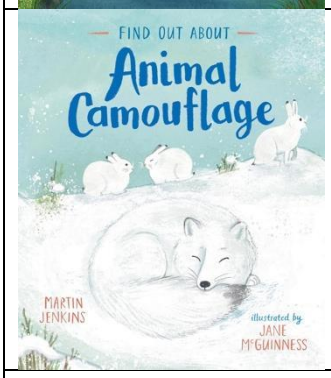
The 2024 Indiana Science Trade Book Annual Reading List (IN-STAR)

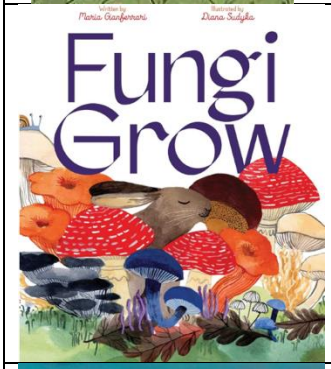
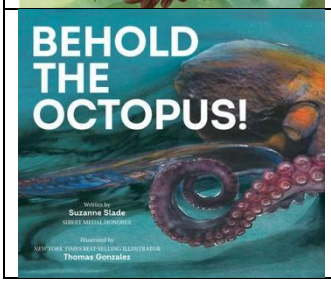
Reprinted with permission from: https://www.usi.edu/science/southwest-indiana-stem/instar-book-list

	Kindergarten
	HOW BIRDS SLEEP. 2023. David Obuchowski. Illus. Sarah Pedry. Minedition. 40 pp. ISBN-13: 978-1662650970. David Obuchowski's "How Birds Sleep" shares the way different birds catch their Zzzs. From parrots tucked in trees to ostriches napping on the ground, the book reveals birds sleep in all sorts of surprising places. This beautifully illustrated book is a great resource to spark curiosity about the hidden world of bird sleep. STANDARD: LIFE SCIENCE
	THE TREE AND THE RIVER. 2023. Aaron Becker. Candlewick. 32pp. ISBN-13: 978-1536223293. Told from the point of a tree and river, this wordless story shows humans impact on the ecosystem from homes to eventual cities. Despite the changes, the tree and the river endure, offering a message of nature's resilience. STANDARD: EARTH AND SPACE SCIENCE and LIFE SCIENCE
	First Grade

	WE ARE BRANCHES. 2023. Joyce Sidman. Illus. Beth Krommes. Clarion Books. 40. ISBN-13: 978-0358538189. The book's beautiful illustrations and poetry engage young readers to show how the branching shape is everywhere in nature, not just on trees. From the veins in our bodies to the way lightning streaks across the sky, branches help things grow, spread out, and connect. STANDARD: EARTH AND SPACE SCIENCE and LIFE SCIENCE.
	CREEP LEAP CRUNCH. 2023. Jody Jensen Shaffer. Illus. Knopf Books for Young Readers. 48pp. ISBN-13: 978-0593565537. "Creep, Leap, Crunch!" is a vibrantly illustrated story that introduces young children to the concept of a food chain. It follows the journey of a tiny worm through the forest, who becomes food for a hungry cricket, then a darting mouse, and so on. Rhyming text and playful sounds ("creep," "leap," "crunch") keep students engaged. STANDARD: LIFE SCIENCE
	Second Grade
	ROOTING FOR PLANTS. 2023. Janice Harrington. Illus. Theodore Taylor III. Calkins Creek. 48pp. ISBN-13: 978-1662680199. A fascinating retell of Charles S. Parker, a Black scientist who loved exploring nature and learning about plants. Despite facing challenges, Charles became a botanist and collector, traveling the United States to discover new plant and fungi species. STANDARD: LIFE SCIENCE
	WHY DO ELEPHANTS HAVE BIG EARS? 2023. Steve Jenkins and Robin Page. Little, Brown Books for Young Readers. 40pp. ISBN-13: 978-0316456791. Elephants' giant ears aren't just for hearing! Young readers will enjoy another the collaged-based narrative to the form and function of how these big ears help them stay cool in hot environments. STANDARD: LIFE SCIENCE
	Third Grade

	WE ARE STARLINGS: INSIDE THE MESMERIZING MAGIC OF A MURMURATION. 2023. Robert Furrow and Donna Jo Napoli. Illus. Marc Martin. Random House Studio. 40 pp. ISBN-13: 978-0593381632. This beautifully illustrated book succinctly presents how starlings benefit from being part of a group, such as protection from predators. Fold-out pages add to the reading engagement. STANDARD: LIFE SCIENCE
	AT HOME WITH THE PRAIRIE DOG: THE STORY OF A KEYSTONE SPECIES. 2023. Dorothy Hinshaw Patent. Illus. William Munoz. Web of Life Children's Books. 34 pp. ISBN-13: 978-1970039061. The interactions of prairie dogs with other species and their habitat convey the interdependence of organisms and the importance of keystone species. Captioned up-close photos support the text and introduce readers to the variety of grassland species. STANDARD: LIFE SCIENCE
	Fourth Grade
	SEW SISTER: THE UNTOLD STORY OF JEAN WRIGHT AND NASA'S SEAMSTRESSES. 2023. Elise Matich. Tilbury House Publishers. 36 pp. ISBN-13: 978-0884489825. This biography of "Sew Sister" Jean Wright conveys the contributions she and other seamstresses made to the NASA space shuttle program. The text is presented in prose and supported by realistic painted illustrations and pops of stitch patterns. STANDARD: ENGINEERING, TECHNOLOGY, AND APPLICATIONS OF SCIENCE
	TRANSPORTED: 50 VEHICLES THAT CHANGED THE WORLD. 2023. Matt Ralphs. Illus. Rui Ricardo. Nosy Crow. 112 pp. ISBN-13: 979-8887770208. Presented in chronological fashion, each page spread of this oversized non-narrative informational book focuses on one type of vehicle, including a text box of facts and figures as well as a summary of what make the vehicle important. The variety of vehicles demonstrates the many ways that energy can be converted. STANDARD: PHYSICAL SCIENCE
	Fifth Grade
	HOW TO SPACEWALK: STEP-BY-STEP WITH SHUTTLE ASTRONAUTS. 2023. Kathryn D. Sullivan and Michael J. Rosen. Illus. Michael J. Rosen. MIT Kids Press. 48 pp. ISBN-13: 978-1536226218. Former shuttle astronaut Kathryn D. Sullivan shares her career pathway and compares experiences in Earth's gravity with the weightlessness of space. Photos, cartoon-style illustrations, and labeled drawings support the text. STANDARD: PHYSICAL SCIENCE

	GEORGE WASHINGTON'S ENGINEER: HOW RUFUS PUTNAM WON THE SIEGE OF BOSTON WITHOUT FIRING A SHOT. 2023. Darcy Pattison. Illus. Terry Kole. Mims House. 33 pp. ISBN-13: 978-1629442211. This narrative of the how the British occupation of Boston ended blends engineering and history seamlessly, making this book ideal for supporting not only science standards but also history-based social studies standards. Maps and parchment-looking text boxes add to the visual features. STANDARD: ENGINEERING, TECHNOLOGY, AND APPLICATIONS OF SCIENCE
	Primary Honorable Mention
	A STONE IS A STORY. 2023. Leslie Booth. Illus. Marc Martin. Margaret K. McElderry Books. 40pp. ISBN-13: 978-153449694. The book describes the remarkable journey of a “simple” stone on a grand adventure through time. During the journey which starts as hot, molten rock deep underground, the stone is shaped by glaciers, rivers, and travels through mountains and oceans. STANDARD: EARTH AND SPACE SCIENCE
	IF THE RIVERS RUN FREE. 2023. Andrea Debbink. Illus. Nicole Wong. Sleeping Bear Press. 40pp. ISBN-13: 978-1534112780. "If the Rivers Run Free" tells the story of how cities grew up alongside helpful rivers, providing water, transportation, and even power. But as cities got bigger, they sometimes hid the rivers underground, causing problems like pollution and flooding. Thankfully, clever people realized they could uncover these "buried rivers" and bring them back to life, making cities healthier and more beautiful places. STANDARD: EARTH AND SPACE SCIENCE
	FIND ABOUT ANIMAL CAMOUFLAGE. 2023. Martin Jenkins. Illus. Jane McGuinness. Candlewick. 32pp. ISBN-13: 978-1536228366. This vibrant picture book takes young explorers on an adventure to read about how animals use incredible disguises to outsmart predators or sneak up on prey. From desert lizards turning into living pebbles to butterflies that look just like leaves, the book bursts with amazing examples of how camouflage helps animals thrive and hide in plain sight. STANDARD: LIFE SCIENCE
	Intermediate Honorable Mention

	Josephine and Her Dishwashing Machine: Josephine Cochrane's Bright Invention Makes a Splash. 2023. Kate Hannigan. Illus. Sarah Green. Calkins Creek. 40 pp. ISBN-13: 978-1635926217. Any student who has the house chore of loading or unloading the dishwasher will appreciate this lively biography of inventor Josephine Cochrane. Pastel-hued illustrations and brief overviews of other inventions developed in the late 1800s augment the story. STANDARD: ENGINEERING, TECHNOLOGY, AND APPLICATIONS OF SCIENCE
	FUNGI GROW. 2023. Maria Gianferrari. Ilus. Diana Sudyka. Beach Lane Books. 48 pp. ISBN-13: 978-1665903653. Fungi structures and functions are described through the running text and additional layered text, both of which are supported through informative visual features. End pages include a glossary, fun facts, and an illustrated depiction of the mushroom's life cycle. STANDARD: LIFE SCIENCE
	BEHOLD THE OCTOPUS. 2023. Suzanne Slade. Illus. Thomas Gonzalez. Characteristics of octopuses and interactions with their environment are presented through limited text, additional sidebars, and end pages. Full-page realistic illustrations of a variety of octopus species enrich the science content. STANDARD: LIFE SCIENCE.

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Resources

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Invited Column
Setting the Stage for Reading Comprehension

Lacey Ladd
Marian University

Have you ever had a student read a passage fluently and then miss all the comprehension questions? As a classroom teacher, I always wanted to say, "But you literally just said the answer!" However, contrary to popular belief, comprehension is not something that just *happens* as we read. It is an active process that involves processing language on many levels simultaneously (National Reading Panel, 2000; Oakhill & Cain, 2012). In hindsight, I know the reason my students demonstrated inconsistent comprehension – I had not properly prepared them. I had not set the stage.

Developed by Gough and Tunmer in 1986, the Simple View of Reading is a theoretical model to explain reading comprehension as the product of word reading times language comprehension. The central components of the Simple View of Reading, word recognition and language comprehension, have been acknowledged for over a century (Hoover & Tunmer, 2018). The multiplicative nature of the equation illustrates that both word reading and language comprehension are necessary for reading comprehension to occur, and that a strength on one side of the equation does not compensate for a weakness on the other side. For a student with limited decoding skills, reading comprehension is unlikely to be improved by focusing exclusively on comprehension-specific processes, such as vocabulary and inference. As a child gains proficiency in decoding, placing greater emphasis on comprehension-specific processes, like vocabulary, becomes more effective in enhancing their reading comprehension (Lonigan et al., 2018). Reading comprehension requires strength in both word reading and language comprehension.

Further, comprehension is not a skill that we can directly teach. Yes, you read that right. While there is evidence in research to support teaching comprehension strategies, they are only one piece of the complex puzzle of reading comprehension (Shanahan et al., 2010). The purpose of strategy instruction is to show students that ideas within the text *should* be connected, but not necessarily *how* to make those connections for themselves (Willingham, 2017).

A budding cyclist learning to ride may look to a more experienced rider with the assumption that it is a natural talent. Then, picking up a bicycle, discover over the course of a few skinned knees the complexity required to ride well. A cautious parent may opt for training wheels, providing a scaffold until the child is ready to ride without them. Just like training wheels help a beginning cyclist learn to balance, comprehension strategies can help readers learn to connect ideas in the text. Over time, a cyclist learns to balance without training wheels, and readers learn to connect ideas without explicit comprehension strategies (Willingham, 2023). We would not wish to keep training wheels on a child's bicycle as a long-term cycling strategy, nor should we rely on strategies alone as a means to develop comprehension.

There are three processes involved in reading comprehension: A reader must (1) extract ideas from individual sentences, (2) connect those ideas across sentences, and (3) build a general idea,

or mental model, of the text (Willingham, 2017). A skilled reader has years of practice weaving these three processes together while reading. And yet, even the most skilled readers cannot read every text with flawless fluency and comprehension. Why is that?

In addition to engaging in the three processes of reading comprehension, we must also consider a reader's interaction with the text, which provides several variables that can make comprehension more or less challenging (Hennessy, 2024). For example, the reader has strengths and weaknesses in word recognition and language skills, as well as in working memory and other cognitive skills needed for reading. The text can vary in complexity based on the content, organization, academic language, and syntax. Finally, the purpose for reading should also be considered. A reader is likely to engage differently with a text read for pleasure compared to a text read to learn complex information.

How can we, as educators, maneuver among these complex layers of comprehension to teach students how to meaningfully engage in the processes of extracting and connecting ideas across sentences to build a general understanding of the text? Comprehension is an outcome of instruction, not an isolated skill that can be directly taught. However, there are evidence-based practices that can set the stage for reading comprehension development for all students.

Consider the ways comprehension can break down:
"Comprehension will suffer if a word has been incorrectly recognized, if the text includes words that are not in the reader's oral vocabulary, if the linguistic structure of the sentence is overly complex, or if the topic of the reading material is so unfamiliar that the reader cannot make inferences ("read between the lines") that are necessary to understanding the text" (Snow et al., 1999, p. 51).

This comprehensive explanation by Snow, Scarborough, and Burns (1999) details how to set the stage for reading comprehension.

1. **To prevent a word from being incorrectly recognized, we must prioritize foundational reading skills, intensifying phonics instruction when necessary.** As Dr. Anita Archer is known to quip, "There is no comprehension strategy powerful enough to compensate if a student cannot read the words" (Archer, 2008). This idea underscores the Simple View of Reading – no matter the language comprehension skills a reader possesses, their reading comprehension will continue to depend on skill in word recognition.

   When we discover a student lacking foundational reading skills, how should we intervene? Burns et al. (2014) studied 22 meta-analyses of reading interventions to determine the essential attributes of the most-effective interventions. The following five essential attributes were identified in the reading interventions with the largest effects: explicit instruction in the skill, targeted instruction tailored to students' needs, frequent opportunities for students to respond, an appropriate level of challenge, and immediate corrective feedback.

   Systematic and explicit instruction does not mean blindly marching along the scope and sequence of a curriculum, regardless of learning needs. Systematic instruction incorporates a comprehensive system of assessments to determine the instructional needs of each student,

implement targeted and intensive phonics intervention, monitor progress and regroup as necessary. Once needs are identified, effective instruction must include frequent opportunities to respond, which can increase engagement, on-task behavior, and accountability, promote desired behaviors while reducing inappropriate behaviors, and keep instruction moving at a perky pace (Archer, 2024).

"Every day, in every class, every student is participating by speaking, writing, or doing. Everyone does everything" (Archer, 2024, p. 35). Archer recommends 3-5 simple responses per minute through choral responses, gestures, or response cards. One response that is more complex per minute, through partner sharing or a written answer; and one very complex response every 10-30 minutes, such as writing to a prompt. Eliciting frequent responses from students is a way to embed formative assessment into instruction, allowing the teacher to monitor understanding, provide feedback, and adjust instruction to best target student needs.

2. **We must foster language-rich environments, strengthen oral language, and explicitly teach sophisticated vocabulary to expand a reader's oral vocabulary.** Oral language lays the groundwork for reading development and language comprehension (Cardenas-Hagan, 2020). In fact, once a student has heard a word, that word becomes easier to decode when encountered in print (Duke & Cartwright, 2021). This is not a one-to-one correlation such that if a student has heard the word *pneumonia*, they will automatically be able to decode it when they see it in print. However, between two students who encounter the word *pneumonia* in print, the student who has heard the word is more likely to be able to decode it than the student who has never heard it. Through a combination of daily conversations and explicit instruction, we can develop our students' oral language, adding sophisticated language to their repertoire, with the end goal of strengthening reading comprehension.

   The term "strive for five" was originally coined by David Dickinson in 2003, and provides a concrete way to support oral language development through a series of five brief interactions between teacher and student (Hennessy, 2021; Zucker & Cabell, 2024). A typical conversation lasts three turns – teacher questions, student responds, teacher evaluates. The "strive for five" framework encourages educators to take the conversation further – teacher questions, student responds, teacher challenges, student responds, teacher extends. Here is an example of a five-turn conversation during a read aloud:
   Teacher: How is the bunny feeling about not being invited to the party?
   Student: Mad.
   Teacher: That's right! The bunny was mad, maybe even furious. How can you tell?
   Student: His forehead is scrunched up and his arms are crossed.
   Teacher: I see that, too. The bunny is communicating his feelings without words, which is called nonverbal communication.

   Students who have strong oral language often seek out interaction, while students who need more practice may avoid interaction or be overlooked (Hadley et al., 2020). By using a conversational tracker and integrating conversational turns into classroom routines, we can ensure that all our students have opportunities to engage with rich language models (Zucker & Cabell, 2024). Another opportunity provided by the five-turn framework is the chance to expose students to sophisticated language that they may not otherwise hear. Vocabulary

knowledge is critical, as it opens the gate to reading comprehension (Wright, 2021). Incidental exposure to vocabulary through conversations can be strengthened with explicit vocabulary instruction, which includes focusing on spelling, sounds, word parts, providing student-friendly definitions, placing words in context, and checking for understanding (Archer & Hughes, 2011).

3. **To prevent complex linguistic structure from impeding comprehension, we must teach syntax as a means to build sentence-level comprehension.** Consider the difference between these two sentences: *I saw the man with the telescope*. *With the telescope, I saw the man*. By changing the order of words, the meaning was altered. Reading comprehension is complex, relying on our ability to process many layers of language simultaneously (Oakhill & Cain, 2012). One of these layers is syntax, which refers to the organization of words to create meaningful sentences. Understanding how syntax shapes meaning is essential in explaining how a sentence either aids or hinders comprehension (Hennessy, 2024).

   Within the processes of reading comprehension, one must extract ideas from sentences and connect these ideas across sentences before developing a general idea of the text (Willingham, 2017). A reader's ability to make sense of individual sentences is an essential ingredient in building a successful mental representation of meaning (Shanahan, 2022; Hennessy, 2024). Consider the following examples of complex linguistic structures.

Passive voice	*The cake was eaten by the children.*
Double negatives	*I never told him not to eat the entire bowl of candy.*
Conditional verb forms	*If she had studied harder, she might have passed the test.*
Articles	*This is **a** problem. This is **the** problem.*
Embedded clauses	*The woman talking to the man in the red hat is my aunt.*
Pronouns	*Tyra handed Kira the book, but **she** wasn't sure if **she** wanted to read it.*

These complex linguistic structures can be challenging for students. Rather than explicitly teaching each complex linguistic structure, try focusing on the function of words. "A word's part of speech is a clue to meaning" (Hennessy, 2024, p. 94). By focusing on the simplest expression of meaning – a noun names, while a verb shows action – even emergent readers can begin this complex work by sorting pictures and words into categories of "namers" and

"doers" (Gillis & Eberhardt, 2018). Once students have a solid understanding of sentence construction, this activity can be expanded to incorporate more parts of speech. This instruction focuses on pairing deconstructing sentences with questioning to build comprehension of complex sentences (Hennessy, 2024).

Article	Adjective: What kind?	Noun: Who or what?	Action Verb+ed: Did what?	Adverb: How?	Adverbial phrase: Where?
The	boisterous	kindergartener	laughed	maniacally	on the playground.

4. **We must systematically build students' background knowledge so the topic of the reading material will not hinder inference and comprehension.** Research by Recht and Leslie in 1988 studied the impact of background knowledge on reading comprehension. In the study, students were given a passage describing half an inning of a pretend baseball game and were asked to use wooden figurines to act out what they had read. The researchers found that reading ability did not align with who understood the story. Students who were weak readers with a strong grasp of baseball performed better than strong readers who knew little about baseball.

   Experts suggest that the background knowledge we possess on a topic creates a scaffolding for new information in our memories – a kind of mental velcro (Wexler, 2019). This velcro creates a snowballing effect in which new knowledge builds upon background knowledge. However, the reverse is also true - those who start out with less acquire less, resulting in an effect referred to as "the Matthew effect," in which the rich get richer and the poor get poorer (Wexler, 2019; Stanovich, 1986). This phenomenon has such alarming consequences that cognitive psychologist Daniel Willingham proposed that "reading comprehension tests are really knowledge tests in disguise" (2017, p. 127). Connecting new information to what learners already know can foster higher cognitive learning (Cardenas-Hagan, 2020). For students who lack the necessary background knowledge to bridge the meaning of what they read, we must invest the time to systematically teach a knowledge-rich curriculum (Willingham 2017; Wexler, 2019).

As we reach the final act, the onus is upon all of us to consider the instructional changes necessary to set the stage for reading comprehension. We must prioritize foundational skills, intensifying through increased opportunities to respond and providing targeted, corrective feedback. Second, we must remember that word meaning matters. Without knowledge of words and how words connect to convey meaning, readers can get stuck in the weeds of complex language, unable to access the garden of comprehension. By strengthening oral language through daily conversation and providing explicit instruction in both vocabulary and syntax, we grant our students the vehicle through which to extract meaning from sentences. Finally, we must build background knowledge for our students, trusting that each brick laid is a step closer to a scaffolding in which knowledge begets knowledge.

The stage is now set. Your next moves determine what transpires upon the stage of reading comprehension. The curtain opens.

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Invited Column
Reading Between the Lines: Embracing the Science of Reading Through a Culturally Relevant Lens

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The passage of HB 1558 in Indiana marked a pivotal moment in my career as a literacy educator. For years, I advocated for teaching methods that embraced my students' cultural, linguistic, and personal identities. Literacy, to me, holds the power to heal and liberate—it should be a holistic process that nurtures the whole child and acknowledges their unique background. Therefore, when the state passed a law focusing on the "science of reading" as primarily phonics instruction, I felt an immediate conflict. The law's emphasis on a technical, evidence-based approach contradicted the inclusive, student-centered pedagogy I valued so deeply.

At first, I viewed HB 1558 as a challenge to my teaching philosophy—a move that would narrow my methods and stifle creativity. Would my courses become sterile learning spaces focused only on rote skills? I feared this policy would reduce literacy instruction's rich, dynamic process to mere technicalities devoid of cultural relevance, which I believed was essential for student success. I immediately reflected on my experiences as a student, sitting quietly in the back of my classroom without any advocate or representation of myself in the literacy curriculum. Yet, as I reflected on the potential impact of this law, I began to see it not as a barrier but as an opportunity for growth.

As a Clinical Professor of Literacy Education at Indiana University Indianapolis, I teach future teachers and facilitate spaces to explore literacy lineages, the development of a love for literacy, and its intersection with equity. Most of my students are white and middle-class, and will soon teach in urban classrooms with diverse, culturally and linguistically rich populations. I've always felt a profound responsibility to prepare my students for the complex realities they will face in these classrooms, as the toggle between academic success and cultural competence. However, I also recognized a gap in their preparation—many were eager to serve urban communities but lacked direct exposure to this setting. This mismatch made me question how best to equip them with the cultural awareness, empathy, and pedagogical tools they would need to succeed. I realized that culturally relevant pedagogy and the science of reading need not be in opposition; when combined thoughtfully, they can enhance literacy instruction for all students.

Shifting My Focus: Merging Science of Reading with Culturally Relevant Pedagogy

As I began to embrace this new perspective, I realized that the science of reading—particularly its emphasis on phonemic awareness, phonics, fluency, vocabulary, and comprehension—was not inherently incompatible with the culturally relevant, student-centered teaching I had always valued. I understood that these approaches could complement one another when integrated thoughtfully. The science of reading offers evidence-based practices that have proven effective in improving literacy outcomes for all students, including those who struggle with reading. However, I now believe that for literacy instruction to be truly effective, it must go beyond teaching isolated technical skills. It must also address students' cultural, linguistic, and socio-emotional needs.

A classroom that recognizes and values students' diverse backgrounds is essential for academic success and the collective liberation of marginalized communities (Gay, 2010). When we combine the science of reading with culturally relevant teaching, we can help students decode words and engage with reading on a deeper level, seeing it as a tool for personal expression and cultural connection. By embracing both approaches, we create an environment that respects and celebrates the whole student.

This shift in perspective was critical for my students—future teachers preparing to enter classrooms where policies like HB 1558 are in place. Many of them are eager to serve, but they are also stepping into settings where the diversity of their students may be very different from their backgrounds. While they bring passion and good intentions, they may lack the cultural knowledge or lived experiences needed to understand the intersectional inequalities their students may face fully. By focusing on the intersection of the science of reading and culturally relevant pedagogy, I can help them bridge that gap. Literacy is not just about mastering technical skills; it's about understanding the cultural and social contexts in which those skills are used. When my students understand this, they will be better equipped to teach reading practically and meaningfully to their diverse learners.

Creating a Culturally Responsive Literacy Environment

Before engaging in methodological instruction, my class of future educators first engaged in critical reflection to explore how they received literacy instruction throughout their educational experiences. This reflective process allowed them to identify positive teaching practices that inspired them and oppressive methods they wished to disrupt. By examining their histories as learners, they could better understand how power and privilege shaped their education and, in turn, lay the foundation for a more inclusive and equitable pedagogical practice. As Tyrone Howard (2003) suggests, such self-reflection is essential for educators to disrupt harmful educational systems and create spaces where all students can thrive. Beyond critical reflection, I introduce my students to how integrating the science of reading with culturally relevant pedagogy might look. I emphasize a few key principles that I believe are essential for effective literacy instruction:

1. **Honor students' lived experiences:** Effective literacy instruction must integrate foundational skills like phonemic awareness and phonics into lessons that reflect students' backgrounds and communities. Phonics should not be taught in isolation but within a broader context that connects reading to real-life experiences, making it meaningful and relevant (Guthrie, 2004). Cultural responsiveness goes beyond offering diverse texts; it involves creating an environment where students feel seen and valued. This can be seen in how we question, assess, and physically organize the classroom space.
2. **Gradual release model for explicit, systematic instruction:** The gradual release of responsibility model involves students first receiving direct teaching and then gradually taking on more responsibility for their learning. This ensures that foundational skills are taught explicitly while also allowing for application in meaningful contexts. Incorporating culturally relevant texts, questions, and assessments encourages students to make personal connections, boosting motivation and engagement (Ladson-Billings, 1995).

3. **Recognize the value of bilingualism and linguistic diversity:** In classrooms with English Learners (ELs), I stress the importance of using students' native languages as bridges to literacy. Teaching Spanish-English cognates can help students build vocabulary and phonemic awareness. Research shows that leveraging students' home languages in literacy instruction improves academic performance and phonological awareness (August & Shanahan, 2006).
4. **Literacy instruction should be multisensory, especially when teaching phonics and word decoding:** One effective strategy is using tactile materials like letter tiles or sandpaper letters to reinforce letter-sound connections. Research has shown that engaging multiple senses during instruction can significantly improve literacy outcomes (Moats, 2020). This approach is particularly important for students who struggle with decoding or fluency, as it offers multiple pathways for engaging with the material.

Things Done in Action

Two practical examples of how I've integrated the science of reading with culturally relevant pedagogy in my teaching include the interactive digital alphabet book project and the use of Spanish-English cognates in literacy instruction. In the digital alphabet book project, students engaged in phonemic awareness and letter-sound correlation by typing letters, recording their sounds, and incorporating personal, culturally relevant images. This process reinforced phonics skills and allowed reading and writing to become dynamic and meaningful forms of self-expression. Similarly, in classrooms with a high population of English language learners, I use Spanish-English cognates to help bridge students' home languages with academic English. This approach strengthens vocabulary acquisition and phonological awareness while honoring students' linguistic backgrounds and fostering a deeper connection to both languages (Lesaux & Kieffer, 2010).

These initial steps demonstrate the potential of merging evidence-based methods focusing on students' unique backgrounds. However, there is still work to integrate reading science with culturally responsive pedagogy fully. For this integration to be truly impactful, ongoing refinement is needed in how we connect literacy instruction to our students' diverse lived experiences. This effort is crucial to ensuring that every student feels valued, seen, and empowered to succeed in their literacy development.

The Impact of Culturally Relevant Literacy on Students, Families, and Communities

Integrating culturally relevant literacy practices into the science of reading has far-reaching implications for students, families, and communities. For students, it means feeling seen and valued in their literacy learning, which leads to increased engagement and motivation. When students see their cultures reflected in the classroom, they feel more connected to the learning process, which results in greater academic success.

This approach builds bridges between home and school for families. It creates a space where families' cultural practices and languages are respected, empowering parents and caregivers to participate in their children's education actively. This connection between home and school helps strengthen the relationship between teachers and families, which research shows improves student outcomes (Epstein, 2001).

Culturally relevant literacy practices contribute to a more inclusive and equitable educational environment at the community level. When schools embrace their students' linguistic and cultural diversity, they create spaces where all students can succeed. Students who develop strong literacy skills are better equipped to engage with and contribute to their communities. This, in turn, helps break down systemic barriers and promotes greater social justice.

A Vision for the Future

Reflecting on my journey, I now realize that integrating the science of reading with culturally relevant pedagogy was more achievable than I initially believed. By integrating these approaches, I have found a way to honor both the science of reading's evidence-based practices and the cultural relevance that I feel is crucial for student success. This process has not only strengthened my teaching but also deepened my commitment to preparing future educators who can teach in ways that are both scientifically grounded and culturally responsive.

Looking ahead, I am filled with optimism. The challenges posed by HB 1558 are real, but they present an opportunity to reimagine literacy instruction in ways that honor both the technical and the human aspects of teaching. By empowering my students to integrate the science of reading with culturally sustaining pedagogy, I believe we can create classrooms where every student has the tools they need to succeed—not just academically but personally and culturally.

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Indiana Literacy Journal

The *Indiana Literacy Journal* is the peer-reviewed journal of the Indiana State Literacy Association, which is composed of and serves classroom teachers, literacy specialists, educational leaders, teacher educators, and university faculty. The journal publishes on diverse topics related to literacy, including reading, writing, speaking, listening, viewing, visually representing, technology, and literature for children and young adults. Submissions are invited in any of the categories below, though we are particularly interested in manuscripts that connect literacy and social justice, address new literacies (e.g., technology, graphic novels, podcasts, etc.), current literacy legislation, and other literacy topics relevant to the state of Indiana.

Our Spring 2025 issue is an open-themed call, so we welcome submissions on a variety of topics and methods.

Deadline for submission: February 1st, 2024

Bridging Research and Practice Articles
Articles submitted in this category present original descriptions of research-based instruction that improves the literacy learning of students ranging from birth to college age. Articles describing research-based practices in literacy teacher education will also be considered. Manuscripts in this category must include practical steps to guide readers in applying the research to their practice. Manuscript submissions should include APA formatted references to the relevant research literature and must not exceed 5,000 words (including tables, figures and appendices; excluding reference list) in 12-point font and left-aligned. Any charts or graphics must be of high-quality and in black and white. These manuscripts undergo blind review by members of the journal's editorial review board.

Voices from the Region
Articles submitted in this category will showcase evidence-based literacy practices being implemented throughout the state and region in such varied spaces as classrooms, districts, libraries, after school programs, online schools, homes, daycares, preschools, etc.. We are specifically interested in submissions from practitioners who can share tips and ideas about what is working in their context, why they are engaging in these ideas, and how others could do this, too. Our goal is to hear from a range of practitioners in and around the state who are interested in literacy. Manuscripts in this category should begin with an introduction to the authors and the context of their work. Please also include APA formatted references to the relevant research literature, if appropriate to the piece. Manuscript submissions should be between 750 and 1500 words (including tables, figures and appendices; excluding reference list), double-spaced, and in 12-point font and left-aligned. Any charts or graphics must be of high-quality and in black and white. These manuscripts undergo blind review by members of the journal's editorial review board.

Visual Artifacts and Graphics
Submissions in this category share visual artifacts of literacy teaching practices through photos of teachers and students engaging in literacy, literacy projects, literacy centers, and artifacts of student learning. Each image should be clear, in focus, of a high resolution/quality, and sent as a

full-size jpeg or tiff file attachment, accompanied by a brief, 50-100 word description. Documents must be scanned, not photographed; the latter will not be of high enough quality for publication. By submitting an item in this category, the individual indicates that he/she has obtained consent from the district, school, teacher, parent, and child to use the image for publication. The journal's editorial team reviews submissions in this category

Submissions should be sent electronically to Sharon Pratt at prattsh@iu.edu. The author(s) must agree that the submitted manuscript is original work and not currently under consideration for publication elsewhere. Manuscripts should include a complete title on the first page, but no identification of the author or affiliation should appear in the title or elsewhere in the submitted manuscript. Use "author" to ensure the submitted version is a blind copy. Be sure to adhere to APA 7th edition guidelines. Provide an abstract for the manuscript that is between 100-200 words underneath the title on the first page. Include within your email submission your name, affiliation, and a brief author bio of 50-100 words. Manuscripts are peer reviewed and editors reserve the right to edit all copies. Each article is sent to at least two members of the editorial advisory board for review and recommendations to the editors. Manuscripts are evaluated in terms of interest, quality of writing, appropriate documentation of ideas, uniqueness, and needs of the journal. Please contact Ben Boche at benjamin.boche@valpo.edu or Sharon Pratt at prattsh@iu.edu with any questions.