Georgia Journal of Literacy
2025, Vol. *47*(2), pp. 22–38
https://doi.org/10.56887/galiteracy.200
ISSN: 2833-7611

Practitioner Article

Teaching Thinking for Reading: Merging Executive Function, Structured Literacy, and Asset-Based Practices

Sarah W. Sharpe
Columbus State University, Columbus, GA

ABSTRACT

Reading comprehension requires more than decoding; it requires strategic thinking. Yet many students, particularly those from historically marginalized backgrounds, are often labeled as struggling readers without attention to their cognitive assets or instructional gaps. This practitioner-based article explores how educators can intentionally teach thinking for successful reading by modeling executive function skills and comprehension strategies, fostering metacognition, and affirming students' cultural knowledge and assets. Grounded in the science of reading and learning, this work draws on research on executive function, purposeful think-alouds, and asset-based frameworks. This article offers practical, classroom-ready strategies for implementing structured literacy in ways that support comprehension, center student voice, and affirm diverse ways of knowing. Through teacher think-alouds, culturally responsive approaches, and student strategy reflection routines, this piece will show how educators can bridge the gap between decoding and comprehending while honoring the assets and brilliance students bring to the classroom.

KEYWORDS

reading comprehension; executive function; structured literacy; science of reading; asset-based teaching; teacher think-alouds; metacognitive reading strategies

A common issue educators observe is that some students demonstrate strong decoding skills but struggle to comprehend what they read (Oakhill et al., 2019). Research suggests that despite having adequate decoding skills, approximately 10% of students still struggle with reading comprehension (Landi & Ryherd, 2017; Taboada Barber et al., 2022). These students may read fluently (at a steady, conversational pace), yet be unable to explain the main idea or key details of the text. This pattern of performance is a characteristic of students with a specific reading comprehension deficit (S-RCD; Landi & Ryherd, 2017). S-RCD can result from several underlying factors, including limited background knowledge, poor vocabulary development, or underdeveloped executive function skills such as inferencing and monitoring for understanding. Regardless of the cause, it is critical for educators to focus on effectively modeling how to think while reading through explicit instruction and rich discussions.

Reading skills and strategies can be taught efficiently and successfully in early childhood and elementary settings when instruction is delivered in a clear, structured, and intentional manner (Rupley et al., 2009). However, while phonological awareness and phonics are often taught through explicit instruction, reading comprehension is not always approached with the same level of intentionality. Reading comprehension requires the integration of multiple linguistic and cognitive processes (Landi & Ryherd, 2017), necessitating explicit instruction for students. This article integrates the science of reading with the science of learning, emphasizing explicit, structured instruction paired with cognitive and metacognitive strategic teaching. Teachers can

CONTACT **Dr. Sarah W. Sharpe**, Assistant Professor, Department of Teacher Education, Leadership & Counseling, Columbus State University, Columbus, GA; email sharpe_sarah@columbusstate.edu (https://orcid.org/0000-0001-5529-5334).

model executive functions through think-alouds and affirm students' backgrounds as they teach students how to think while reading.

Thinking for reading refers to the cognitive and metacognitive processes that readers engage in to make meaning from text. It goes beyond decoding individual words and involves strategic actions such as making inferences, generating predictions, asking questions, clarifying misunderstandings, and summarizing key ideas. These are processes that skilled readers use flexibly and intentionally (Keene & Zimmermann, 1997; Pressley, 2006). These strategies are closely tied to executive function, which encompasses a set of self-regulatory skills including working memory, cognitive flexibility, and inhibitory control. These skills are essential for monitoring comprehension, adjusting strategies, and sustaining focus while reading (Baker, 2005; Cartwright, 2015).

Complementing executive function, *structured literacy* refers to a systematic and explicit approach to reading instruction, rooted in the science of reading (Moats, 2020). It emphasizes foundational skills such as phonological awareness, decoding, and word recognition, along with explicit instruction in syntax, morphology, and background knowledge to support language comprehension. To fully support all readers, particularly those who can decode fluently but struggle with meaning, structured literacy must be intentionally paired with instruction that cultivates executive function and thinking for reading. This integration is what enables students to become strategic, metacognitive, and self-regulated readers.

Why This Matters for Equity

Teaching students how to think while reading through an asset-based approach is a matter of educational fairness. Too often, students from historically marginalized backgrounds are overrepresented among those struggling with reading (U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics [NCES], 2022). Although direct studies on marginalized students with S-RCD (poor comprehension despite good decoding) remain limited, these broader reading disparities suggest a likely overrepresentation of marginalized students within the S-RCD category.

Students' reading disparities, as revealed in reports such as NCES (2022), are not necessarily due to innate deficits, but rather because instruction fails to honor their cultural knowledge or provide access to deeper meaning-making strategies. When teachers use think-alouds to model executive functioning and engage students in rich, meaningful discussions related to their reading that build on their lived experiences, they empower all learners to become strategic, reflective readers. This work ensures that comprehension instruction is not a privilege reserved for high-achieving or affluent students, but a right for every learner. Equitable reading instruction affirms students' identities and equips them with the cognitive tools to not only read text but to analyze, critique, and transform the world around them.

Addressing the comprehension crisis requires a shift in how we view reading success. Teaching phonics and decoding is necessary, but not sufficient. Students must also be taught how to think actively and strategically while reading. When comprehension is left to chance, or reserved for students with strong oral language or academic support at home, we risk widening opportunity gaps. Opportunity gaps reflect the systemic inequities in access to high-quality instruction, resources, and expectations that shape student achievement (Ladson-Billings, 2006). Ladson-Billings (2006) further argues that these disparities stem from a long-standing education debt—the accumulated historical, economic, and sociopolitical disadvantages that continue to undermine equitable outcomes for marginalized students. Addressing comprehension explicitly is one step

toward repaying that debt. All students deserve explicit instruction in the cognitive processes that underpin understanding: making inferences, asking questions, monitoring comprehension, and drawing connections. By combining structured literacy with rich, asset-based comprehension instruction, every child can become not just a reader, but a thinker.

The Science of Reading Meets the Science of Learning

In recent years, the science of reading has gained significant attention, with several states (including Georgia) mandating that K–5 educators utilize universal assessments and implement instructional strategies that align with structured literacy and the five fundamental pillars of reading. In fact, 40 states and the District of Columbia have enacted legislation or policies requiring evidence-based reading instruction that emphasizes phonemic awareness, phonics, fluency, vocabulary, and comprehension, including regular universal screening and the adoption of structured literacy curricula since 2013 (Schwartz, 2025). The science of reading refers to the body of research on best practices for teaching reading, specifically related to brain activities while reading (Moats, 2020). Technological advancements in brain imaging and statistical analysis have deepened our understanding of how students learn to read and respond to instruction.

Similarly, the science of learning is the body of research that studies learning from a multidisciplinary perspective, mainly drawing from neuroscience, psychology, and education. It investigates how people learn and how to design more effective learning environments, uncovering evidence-based principles that support long-term retention, conceptual understanding, knowledge transfer, and learner motivation (National Academies of Sciences, Engineering, and Medicine, 2018). The science of reading and the science of learning highlight the importance of explicit, evidence-based instruction. While the science of reading focuses on how the brain learns to read, the science of learning explains how knowledge is retained, transferred, and applied. Together, they emphasize intentional instruction that supports deep comprehension and long-term learning.

Researchers such as Cartwright and Palian (2024) have demonstrated through meta-analytic reviews that students with stronger reading-specific executive functions (including working memory, planning, organization, and cognitive flexibility) involved in shifting between ideas and integrating prior knowledge demonstrate significantly better outcomes in reading comprehension and fluency. Similarly, Berninger et al. (2017) found that abilities like inhibition (suppressing irrelevant information, impulses, or distractions when reading) and sustained switching attention (shifting attention between different aspects of reading and language in a literacy task) within language contexts uniquely support reading comprehension, indicating that students with stronger executive control are better able to manage competing cognitive demands during reading and writing.

Equally crucial as executive functions is self-regulation, which is the ability to set goals, monitor progress, and persist through challenging tasks. Baker (1979) defines self-regulation as readers' use of metacognitive strategies to monitor comprehension, detect confusion, and correct misunderstanding proactively, showing that such regulation supports effective reading behaviors. Guthrie and Wigfield (2004) demonstrate through their Concept-Oriented Reading Instruction framework that teaching students to set goals, self-initiate strategies, and sustain engagement significantly enhances strategy use, reading motivation, and comprehension outcomes.

Finally, metacognition, or thinking about one's own thinking, plays a foundational role in reading proficiency. Metacognition includes metacognitive knowledge (awareness of strategies) and metacognitive regulation (planning, monitoring, and evaluating one's cognitive activity) during learning tasks (Flavell, 1979). When teachers explicitly model these processes through

think-aloud demonstrations and scaffolded support, they enable students to internalize the cognitive habits of skilled readers (Pearson & Gallagher, 1983). Meta-analyses and classroom studies demonstrate that explicit instruction in planning, monitoring, and adjusting reading strategies leads to measurable gains in comprehension and vocabulary (Boulware-Gooden et al., 2007).

One essential instructional strategy for developing students' executive functions, self-regulation, and metacognition is explicit, teacher-led think-alouds. Think-alouds are an evidence-based approach in which teachers verbalize their cognitive processes during reading to model the strategic thinking skilled readers use (Ness, 2016). This modeling provides students with clear, concrete demonstrations of how and when to apply comprehension strategies such as predicting, clarifying, questioning, and summarizing. According to Ness (2016), think-alouds are especially powerful because they reduce students' cognitive load by externalizing the mental routines that proficient readers perform silently and automatically.

By making the invisible work of reading visible, teacher think-alouds reduce ambiguity and help learners internalize purposeful reading behaviors (Woods, 2020). For example, while reading a nonfiction passage, a teacher might pause and say, "Hmm, the heading says 'Causes of Hurricanes,' so I predict this section will explain how hurricanes form. I'll keep reading to confirm whether that's true." This simple statement models the strategy of predicting, drawing on text features and prior knowledge, while also inviting students to adopt that same habit in their independent reading. Over time, with consistent exposure and guided practice, students begin to mirror these metacognitive behaviors, gaining greater control over their comprehension processes.

In reading instruction, it is critical to distinguish between skills and strategies. Skills such as decoding and recognizing high-frequency words are foundational and typically become automatic with repeated practice. These automatic processes are essential for fluent reading, but they do not guarantee comprehension. In contrast, strategies are deliberate, goal-oriented actions that readers actively choose and apply when they encounter a challenge or want to deepen understanding. These include actions like questioning the text, visualizing content, rereading, making inferences, and summarizing meaning. Skilled and proficient readers don't rely on a single strategy—they draw from a flexible repertoire of strategies based on the demands of the text and their reading goals.

Understanding this distinction is vital because it clarifies the teacher's role in comprehension instruction. While students often acquire skills through modeling and practice, strategies must be explicitly taught, modeled, and practiced in varied contexts. Teachers play a central role in developing students' strategic reading behaviors by making their own thinking visible through think-alouds, providing guided practice, and gradually releasing responsibility to students. When teachers create environments that encourage students to monitor their thinking, select appropriate strategies, and reflect on their use, they empower students to become independent, metacognitive readers who can navigate complex texts with confidence and purpose.

As Keene and Zimmermann (1997) highlight, strategic reading involves intentional meaning-making rather than rote processing. Duke and Pearson (2002) also emphasized the teaching of "good reader" strategies through scaffolded, interactive instruction. Palincsar and Brown's (1984) work on Reciprocal Teaching further supports this approach by advocating for structured strategy instruction through a gradual release model: the teacher first models the strategy, then supports students as they take increasing responsibility. Baker's (1979, 2005) research also connects these strategies to self-regulation, showing that strategic readers are better able to monitor, adjust, and sustain engagement while reading.

Table 1 highlights key comprehension strategies every student should know. The table includes definitions, why the strategy matters, and classroom-based examples for each.

Table 1: Key Comprehension Strategies and Classroom Examples

Comprehension Strategy	Definition	Why it Matters	Classroom Examples
Predicting	Making informed guesses about what will happen next based on text clues, prior knowledge, or text structure.	Predicting sets a purpose for reading and keeps students actively engaged.	• Before reading a historical fiction text, a student says, "I think the main character will join the Civil Rights protest because she's angry about injustice." • While reading a science article, a student predicts the outcome of an experiment based on prior knowledge. • A teacher models predicting by saying, "The author just described storm clouds rolling in. I predict something dramatic is about to happen."
Questioning	Asking questions before, during, and after reading to clarify understanding and promote deeper thinking.	Questioning fuels curiosity and promotes metacognition.	• A student wonders, "Why did the character leave the house in the middle of the night?" • While reading an informational text, a student asks, "How does this relate to what we learned in science?" • During a think-aloud, the teacher models asking, "What is the author's purpose in using this example?"
Clarifying	Pausing to resolve confusion by rereading, using context clues, or consulting outside resources.	Clarifying empowers students to independently tackle challenging parts of a text.	• A student rereads a paragraph slowly to understand unfamiliar vocabulary. • A teacher models clarifying by saying, "I'm not sure what 'photosynthesis' means, but the next sentence gives an explanation." • A student uses a glossary or dictionary to clarify the meaning of a technical term.
Summarizing	Identifying and restating the most important ideas or events in a concise way.	Summarizing builds comprehension, memory, and the ability to distinguish main ideas from details.	• After reading a chapter, a student summarizes: "The main point was that pollution harms marine life." • A teacher models summarizing a paragraph using a "Somebody-Wanted-But-So-Then" framework. • Students work in pairs to summarize a nonfiction article using sentence starters.
Making Inferences	Using text evidence and prior knowledge to draw conclusions not directly stated in the text.	Inference-making is essential for understanding characters, themes, and author intent.	• A student infers that a character is jealous even though it's never directly stated. • While reading, the teacher thinks aloud: "The author didn't say she was scared, but the way she clutched her bag tells me she was nervous." • A student infers a cause-and-effect relationship between two events in a science article.
Visualizing	Creating mental images of the scenes, characters, or information described in the text.	Visualizing enhances engagement and memory, particularly for narrative and descriptive texts.	• A student says, "I can picture the forest in my mind—it's dark and full of strange sounds." • While reading poetry, students draw what they visualize based on sensory language. • A teacher models visualizing by saying, "I see a crowded market filled with bright colors and music."

Monitoring Comprehension	Being aware of one's understanding during reading and adjusting strategies when confusion occurs.	Skilled readers monitor their own comprehension and take action when meaning breaks down.	• A student realizes they don't understand a section and decides to reread it more slowly. • A teacher models, "Wait—I lost track of who's speaking. Let me go back and clarify." • A student switches strategies, like summarizing or visualizing, when comprehension falters.

Metacognitively developed readers are intentional and deliberate with the use of these strategies (Woods, 2020). By modeling these strategies through explicit think-alouds and gradually releasing responsibility, teachers support the development of students' executive function, self-regulation, and metacognitive awareness, all of which are critical for becoming independent, proficient readers. Think-alouds make the invisible cognitive processes of skilled readers visible, offering students concrete examples of how to plan, monitor, and adjust their thinking while reading. As Woods (2020) and Palincsar and Brown (1984) emphasize, these metacognitive strategies are more than tools for comprehension; they are essential for cultivating students' ability to regulate their own learning, make purposeful decisions about strategy use, and sustain deep engagement with text. Ultimately, instruction that emphasizes strategic thinking through modeled practice helps students build the cognitive flexibility, focus, and confidence necessary for lifelong reading success.

Asset-Based Teaching: Centering Students' Cultural Knowledge

Although teacher-led think-alouds are widely recognized as an effective instructional strategy for modeling metacognitive processes and supporting reading comprehension, there is a limited body of research on this instructional approach that centers on diverse student populations, particularly Black students, emergent bilinguals, and other historically marginalized learners. Woods (2020) notes in her examination of teacher think-aloud instruction that few studies have explored how these practices are implemented in classrooms serving culturally and linguistically diverse students. Similarly, Lindo (2006) found that Black students are significantly underrepresented in reading intervention research, highlighting a critical gap in the literature and underscoring the need for more inclusive, equity-centered inquiry. To maximize their effectiveness, think-alouds should not be delivered as decontextualized scripts, but instead should reflect and incorporate students' cultural knowledge and lived experiences. Embedding students' assets into teacher-led think-alouds not only makes instruction more meaningful but also affirms their identities and promotes equity in literacy learning.

Asset-based teaching (ABT) focuses on harnessing students' innate strengths and community resources, rather than centering on deficits or remediation (Kretzmann & McKnight, 1993). In educational settings, ABT has been linked with improvements in student confidence, agency, and motivation (Flint & Jaggers, 2021). Furthermore, core characteristics of effective ABT include inclusive, culturally informed, linguistically responsive, and reflective instructional practices (Mein, 2018). Across broader community development and educational paradigms, ABT aligns with principles of appreciative inquiry, social capital, and participatory development by emphasizing community assets as bases for growth (Mathie & Cunningham, 2003). When classrooms emphasize strengths and cultural wealth over deficits, they foster more engaged, empowered, and equitable learning environments for diverse learners (Flint & Jaggers, 2021; Mein, 2018). Within education, ABT is not a singular approach, but instead reflected in multiple pedagogical frameworks, such as culturally responsive teaching, culturally relevant pedagogy, and

culturally sustaining pedagogy, which each interpret and enact asset-based principles in distinct yet overlapping ways.

ABT aligns with frameworks such as Culturally Relevant Pedagogy (Ladson-Billings, 1995), Culturally Responsive Teaching (Gay, 2018), and Culturally Sustaining Pedagogy (Paris, 2012). While each one has unique components and emphases, they all share the goal of affirming students' identities and leveraging their cultural knowledge as academic resources in students' learning. Readers seeking deeper theoretical distinctions between each framework can refer to the original works.

Particularly, Culturally Responsive Teaching (CRT) highlights using students' cultural knowledge, prior experiences, and learning styles to make instruction more meaningful and effective. Gay (2018) identifies five essential elements of CRT: (1) developing a strong knowledge base about cultural diversity, (2) integrating diverse cultural perspectives and content into the curriculum, (3) demonstrating genuine care and cultivating inclusive learning communities, (4) communicating effectively with students from a variety of cultural backgrounds, and (5) adapting instructional practices to be responsive to students' cultural experiences. The instructional framework (Sharpe, 2022) introduced in this article draws on CRT principles to ensure that comprehension strategy instruction is both culturally affirming and cognitively rigorous.

While teacher-led think-alouds are widely recognized as a powerful approach to support reading comprehension and model metacognitive thinking (Ness, 2017; Pressley & Afflerbach, 1995), they are often implemented in ways that overlook the diverse cultural and linguistic experiences students bring to the classroom. Findings from a mixed-methods study examining teacher think-aloud practices (Woods, 2020), along with the development of a practitioner-informed framework for culturally responsive think-aloud instruction (Sharpe, 2022), indicate that while many educators value think-alouds, they often use them as scripted walkthroughs of strategies rather than as authentic opportunities to connect with students' identities and lived experiences. The framework proposes that teachers must be intentional, not only in how they model strategies such as predicting, inferring, and clarifying, but also in how they embed students' cultural knowledge, home language, and prior experiences into their verbal reasoning. When delivered in this way, think-alouds shift from procedural tools to relational and cognitively engaging practices that foster affirmation and deeper comprehension.

Research consistently demonstrates that students benefit from hearing how skilled readers think aloud in real time to make sense of texts (Pearson & Gallagher, 1983), as well as from adequate opportunities to practice reading and applying taught strategies (Duke & Pearson, 2002). However, as Gay (2018) argues, cognition and learning are inherently shaped by cultural context. Thus, reading strategies must be taught in ways that reflect students' discourse patterns, values, and meaning-making processes. Hammond (2015) extends this notion by advocating for "culturally responsive information processing," which invites teachers to support students' higher-order thinking by leveraging cultural schema and linguistic assets. When think-alouds are grounded in this asset-based stance, students are more likely to engage deeply and internalize strategic behaviors (Sharpe, 2022; Woods, 2020). In contrast, generic or decontextualized think-alouds, while technically accurate, often fail to resonate with learners, limiting their impact.

Sharpe's (2022) Culturally Responsive Think-Aloud Instructional Model (see Figure 1) addresses this gap by blending explicit strategy modeling with components of metacognition, cognition, self-regulation, and culturally responsive teaching. The model emphasizes metacognition by making students' thinking visible and reflective, guiding them to monitor their comprehension, adjust strategies, and plan ahead. Cognition is addressed through the intentional

modeling of strategy use, such as predicting, questioning, and summarizing, embedded within meaningful, grade-appropriate texts. Self-regulation is cultivated through opportunities for students to set goals, evaluate their understanding, and persist through complex texts. Just as important, the culturally responsive component ensures that texts, language, and modeled thinking reflect and affirm students' identities, experiences, and cultural knowledge. This integrated approach supports not only what students learn, but also how and why they engage with reading in purposeful, personally meaningful ways.

Figure 1: Culturally Responsive Think-Aloud Instructional Model (CRTAIM)

Note. From "Think-Aloud Reading Instruction Through a Culturally Responsive Teaching Lens" (Sharpe, 2022).

While the present author could not locate empirical studies involving direct observation or data collection on the impact of integrating asset-based approaches with structured literacy, there is emerging literature that supports this conceptual blending. For example, Sanchez et al. (2024) examine culturally sustaining pedagogy within the context of early literacy instruction and the Science of Reading. They provide theoretically grounded, practice-based strategies for integrating multilingual learners' linguistic and cultural assets into foundational literacy instruction. Their work illustrates how structured literacy principles can be aligned with culturally sustaining approaches to better serve diverse learners.

Similarly, Gunner (2023) outlines a classroom model that incorporates culturally responsive practices, such as student-authored sentences and texts tied to students' interests, within explicit phonics and phonemic awareness instruction. While not a formal study, Gunner shares anecdotal evidence pointing to increased student engagement, enjoyment, and ownership of learning.

Additionally, Pittman et al. (2024) present an empowered language approach, a culturally responsive framework designed to support African American students' oral and written expression through bidialectal awareness. The article offers pedagogical guidance grounded in sociolinguistic research and classroom application. By affirming students' linguistic identities and explicitly teaching Standard American English as a secondary dialect, the authors advocate for instruction

that is both academically rigorous and culturally affirming, principles that align with asset-based, strategic reading instruction.

Clausen-Grace and Kelley (2008) describe the Metacognitive Teaching Framework (MTF) as a four-stage, apprenticeship model for building strategic, reflective readers. Beginning with explicit teacher think-alouds and structured strategy instruction, the framework transitions through guided practice toward students' independent application of comprehension strategies, specifically, predicting, making connections, questioning, visualizing, and summarizing. Critically, the MTF embeds self-assessment, goal-setting, and metacognitive reflection, enabling students to monitor and control their own reading development.

The MTF components align with the Culturally Responsive Think-Aloud Instructional Model (CRTAIM) shown in Figure 1 (Sharpe, 2022), which focuses on metacognitive modeling through think-alouds. However, it is missing culturally responsive teaching that affirms students' identities and promotes agency. While the MTF is not explicitly framed within asset-based pedagogy, its intentional support for student reflection, discussion, and strategic independence reinforces the premise that structured literacy instruction can be enriched when paired with practices that center the learner's voice, culture, and thinking processes.

The successes and discoveries in the aforementioned literature relied on key instructional components: metacognition, where students reflect on their thinking processes; cognition, where students actively process and make sense of information; and self-regulation, where students plan, monitor, and adjust their reading behaviors. Culturally responsive teaching (CRT) principles, such as validating cultural schema, providing cognitive scaffolds, and creating opportunities for dialogic learning, enhance these processes by making learning relevant, relational, and rigorous (Gay, 2018; Hammond, 2015). When instruction weaves together structured literacy's systematic supports with CRT's emphasis on cultural affirmation and cognitive engagement, educators create conditions for all students, not just a select few, to become empowered, strategic readers.

By integrating explicit comprehension strategy instruction with culturally responsive pedagogy, CRTAIM positions think-alouds as tools for both academic development and identity affirmation. Rather than solely demonstrating how to monitor understanding, well-designed think-alouds reveal to students that their ways of speaking, thinking, and interpreting are meaningful in academic spaces. This approach reframes reading as a process that draws from and builds upon who students are, not just what they know. When enacted with intentionality and cultural relevance, think-aloud instruction becomes more than a literacy technique; it becomes a pathway toward equity, engagement, and empowered learning.

Strategies for Teaching Thinking While Reading

The following instructional strategies are essential components of a comprehensive framework for promoting metacognition and strategic reading among all learners. Each is grounded in evidence-based practice and contributes to the development of self-aware, engaged readers capable of monitoring and regulating their own comprehension. Ranging from explicit teacher modeling to peer collaboration and culturally affirming text selection, these strategies work together to support both the cognitive and affective dimensions of reading. By intentionally integrating these approaches into daily instruction, educators can scaffold student thinking, foster independence, and build stronger connections between learners and the texts they encounter.

Teacher Think-Alouds

Teacher think-alouds are an evidence-based instructional strategy in which educators verbalize their cognitive processes before, during, and after reading to model how skilled readers make meaning from text (Ness, 2016; Woods, 2020). This practice makes metacognitive strategies, like predicting, clarifying, and monitoring comprehension, visible and accessible, helping students internalize the habits of proficient, strategic readers (Palincsar & Brown, 1984).

Context example: While reading aloud, the teacher pauses and says, "When the author describes the character as standing tall and smiling, I'm thinking that she feels proud and confident. That helps me understand how she is changing in this part of the story."

Cognitive Scaffolds

Cognitive scaffolds are tools that support students' strategic thinking by providing visual or verbal cues to guide comprehension (Moats, 2020; Pressley, 2006). Examples include question stems, anchor charts, and graphic organizers, which help students organize their thoughts, monitor their understanding, and engage more independently with complex texts.

Context examples: The teacher provides a bookmark with a list of question stems such as "I wonder…" and "This reminds me of…". During independent reading, a student uses the prompt "I wonder…" to write, "I wonder why the main character didn't tell anyone about the problem."

Student Self-Talk & Reflection

Promoting student self-talk and reflection helps cultivate metacognition and self-regulation—key components of executive function (Baker, 2005; Woods, 2020). Through practices such as reflective journaling and "What was I thinking?" protocols, students learn to monitor their comprehension, articulate their thinking processes, and adjust strategies when meaning breaks down.

Context example: After reading, students write in their journals: "When the character ran away, I thought about what I would do in that situation. That helped me realize why he was so nervous."

Culturally Responsive Texts

Culturally responsive texts affirm students' cultural identities and experiences, making comprehension more meaningful and accessible (Gay, 2018; Ladson-Billings, 1995). When students see themselves and their communities reflected in what they read, they are more likely to engage with the text, activate background knowledge, and connect strategically to content.

Context example: A teacher selects a text that reflects her students' family and community experiences. During discussions, students share how their own traditions or challenges connect to the characters, deepening their understanding of the text and the author's purpose.

Collaborative Reading Tasks

Collaborative reading tasks promote comprehension through peer dialogue and shared strategy use (Palincsar & Brown, 1984; Paris, 2012). When students engage in activities like partner reading

or explaining strategies to a peer, they deepen understanding through social interaction, clarify misunderstandings, and practice metacognitive talk in an authentic context.

Context example: Students work in pairs to reread a paragraph and ask each other, "What do you think the author meant here?" One student says, "I think the character felt left out because nobody listened to her," while the other adds, "Yeah, and that's why she decided to speak up."

Classroom Vignettes and Examples

Below are three classroom vignettes that illustrate practical ways teachers can implement the Culturally Responsive Think-Aloud Instructional Model (CRTAIM; Sharpe, 2022), using selected strategies to teach students how to think while reading. As you read each scenario, consider how the teacher makes cognitive processes visible, affirms students' identities, and models strategic reading behaviors. Each vignette offers a glimpse into how intentional, asset-based instruction can foster deeper comprehension and more engaged, reflective readers.

Vignette 1: Ms. Torres and the Power of Prediction

Ms. Torres, a White, monolingual fifth-grade teacher, teaches in a culturally and linguistically diverse classroom with many Latinx and multilingual students. She's intentionally selected *The First Rule of Punk* by Celia C. Pérez for today's read-aloud, having spent time learning about her students' interests and identities through classroom surveys and family connection letters.

"Before we start," she says, holding the book and pointing to the cover, "I want to share why I chose this story. I know some of you have shared during morning meetings that your families value both tradition and self-expression, and that sometimes those can feel at odds. This book reminded me of your stories."

She directs students' attention to the anchor chart labeled "What Good Readers Do Before Reading", which includes sentence stems like "I wonder if…" and "I predict…" Then, she models her thinking: "Looking at this cover, I see a girl wearing a punk outfit, skulls in the background, and the words, *Always remember to be yourself.* I predict she's going to find her own voice, even if others don't always understand it."

As Ms. Torres reads aloud, she pauses to verbalize her reasoning: "When Malú says her mom wants her to be a 'proper senorita,' I think about how hard it must feel to balance family expectations with wanting to be yourself. I don't share Malú's cultural background, but this part helps me imagine what it's like."

Students then engage in a collaborative reading strategy, using their own experiences to connect to the text. Later, they respond in journals using the prompt: "What was I thinking when...?" One student writes, "When Malú's mom said she should be more proper, I thought about when my mom tells me to speak Spanish with my cousins. It's hard sometimes, but I get it."

By listening carefully and choosing texts and language that resonate with her students, Ms. Torres models both strategic thinking and cultural humility, allowing her students to see their identities reflected and honored in the literacy space. Her teaching approach illustrates how teaching thinking while reading can go beyond comprehension strategy instruction to include cultural empathy. Additionally, she bridges metacognitive awareness with asset-based teaching, demonstrating that thinking about reading can also involve thinking about whose stories, experiences, and backgrounds are valued and made visible.

Vignette 2: Mr. Johnson and the Anchor Chart for Questioning

Mr. Johnson is a Black fourth-grade teacher, serving a predominantly Black American student population in the community in which he grew up. During a lesson, he stood beside a large anchor chart labeled "Thinking While We Read: DURING Reading Questions." It featured question stems like, "Why might the character feel this way?" and "What is the author really trying to show?"

Today's text was *Crown*: *An Ode to the Fresh Cut* by Derrick Barnes. Before reading, Mr. Johnson said, "Y'all remember how we talked about barbershop culture and how important that is in many of our communities? Well, this book celebrates that, and I'm going to model how I ask questions that help me really understand what the author is trying to say beneath the surface."

As he read the first page, he paused: "It says, 'You came in as a lump of clay, a blank canvas, a slab of marble.' That's some powerful language. I'm thinking, why does the author use art metaphors to describe the boy?" He pointed to the chart. "That's me asking a question to dig deeper."

After reading, Mr. Johnson asked students to work in pairs for a dialogic conversation, using the sentence stem, "This part made me think…" and to practice asking questions as they read the text. As students shared, he circulated the classroom and encouraged them to connect the text to their lived experiences. While reading, one student asked herself, "Why does the author describe the haircut as 'fresh'?" In a separate student pair, another student reflected on his similar lived experiences, saying aloud, "When the boy felt fresh after his haircut, it made me think of when my uncle says, 'Look good, feel good.'"

To close the lesson, Mr. Johnson asked students to share one to two thoughts or questions that occurred to them as they read the text. A student shared, "While reading, I was thinking that this book made me feel proud. I didn't know books talked about stuff like this."

By modeling how to ask questions during reading tasks, prompting students to pause and reflect on their thinking while reading, and encouraging students to make connections with the text, Mr. Johnson demonstrates to students that reading should be a mentally engaging task. He also reaffirms his students' culture and experiences by using a text that reflects their identities. Through the questioning strategy, not only does this strengthen students' comprehension, but it also further develops their critical thinking skills by learning to make meaning beyond the surface level of texts. The collaborative inquiry enables students to connect their lived experiences with their peers and the book characters, transforming reading into an act of reflection, connection, and cultural pride.

Vignette 3: Mr. Halbrook and Reading with a Plan

Mr. Halbrook, a White, mid-career third-grade teacher, teaches in a school where the majority of students are multilingual and learning English as a second language. He has been working on strengthening his culturally responsive practice by attending professional development sessions, engaging in community events, and reading student-authored reflections about identity. Today, he's reading *The Name Jar* by Yangsook Choi and plans to model both comprehension strategies and executive functioning.

He begins by pointing to the board, where the day's goal is written:

"Today, I will monitor my thinking while reading to understand the character's decisions and identity."

"I want to show you how I make a plan for reading and what I do when I feel distracted or stuck," he tells the class.

Before opening the book, he reflects aloud: "I've never moved to a new country or had people mispronounce my name, but I've read your family stories and learned how important names and identity are to many of you. I'm going to read this book with the goal of understanding how Unhei feels, and I'll stop to check my understanding along the way."

He gestures toward a class anchor chart titled "Plan → Monitor → Adjust" and begins reading. "Okay, Unhei's classmates are teasing her name. That would make anyone feel upset. I'm going to pause and ask myself, 'What is she thinking right now, and why might she consider changing her name?" He writes his thoughts on a sticky note: She wants to fit in, but what will she lose if she hides her name?

Later, students complete a graphic organizer that tracks the character's feelings and decisions. Mr. Halbrook encourages them to use the "What was I thinking?" protocol in their reflections. One student writes, "I was thinking how I feel when people mess up my name, too. I liked how the teacher understood how names can be hard but still important."

Even though Mr. Halbrook does not share his students' cultural or linguistic backgrounds, he models curiosity, intentionality, and respect towards the diversity in his classroom. By using cognitive scaffolds, goal setting, and identity-centered reading, he demonstrates how any teacher can make strategic, culturally responsive instruction meaningful for every learner. Using students' lived experiences as both cognitive and cultural tools for meaning-making, he transforms his comprehension instruction into both an intellectual and identity-affirming activity.

Conclusion

Teaching students how to think while reading is ultimately an act of empowerment. When we shift our literacy practices from a focus on compliance, answering surface-level questions, or completing reading tasks, to a focus on cognition, we invite students to engage deeply, question critically, and make meaning on their own terms. As Geneva Gay (2018) reminds us, culturally responsive teaching is not just about content, but about cultivating intellectual capacity and agency. Zaretta Hammond (2015) builds on this by asserting that instruction must develop independent learners who can process, analyze, and act on information. By teaching thinking as a core part of reading instruction, we move beyond rote performance and toward liberatory, equity-centered pedagogy, one where all students are equipped not just to read the word, but to read and reshape the world.

Implications for Future Research

The integration of structured literacy, executive function, and asset-based practices into a unified instructional framework offers a promising direction for equitable reading comprehension instruction. However, the effectiveness of this integrated approach, particularly the Culturally Responsive Think-Aloud Instructional Model (CRTAIM; Sharpe, 2022), has not yet been examined through rigorous, empirical research. While current literature supports each component independently, few studies investigate their combined impact on student outcomes, especially in culturally and linguistically diverse classrooms.

To address this gap, the author plans to implement the framework in teacher preparation and K–5 classroom settings to examine how it supports student engagement, strategy use, and comprehension development. Mixed-methods studies will be designed to gather insight into both student outcomes and the instructional experiences of teachers. For example, quantitative data may track changes in students' reading strategy use, comprehension performance, and executive functioning, while qualitative data may help explain how teachers adapt and enact the model.

Action research conducted in collaboration with classroom teachers will also provide valuable, practice-centered feedback for ongoing refinement.

Longitudinal research could further explore the lasting effects of culturally responsive comprehension instruction, particularly in supporting students' self-regulation, cognitive flexibility, and higher-order thinking over time. Given the underrepresentation of historically marginalized students in reading comprehension intervention studies, future research must intentionally center the voices and experiences of Black students, emergent bilinguals, and other groups who have often been excluded from such work.

Ultimately, sustained inquiry and practitioner collaboration will be critical to determining how models like this can be scaled, sustained, and adapted across contexts. This work represents not only an instructional shift but a broader call for equity-driven literacy research that affirms student identities and advances reading as a cognitive, cultural, and justice-oriented practice.

Acknowledgments

The author used ChatGPT to help generate ideas for the vignettes. The vignettes were subsequently adapted, edited, and reviewed by the author to ensure accuracy and alignment with the article's purpose.

References

Baker, L. (1979). Comprehension monitoring: Identifying and coping with text confusions. *Reading Research Quarterly*, *15*(4), 203–214. https://doi.org/10.1080/10862967909547342

Baker, L. (2005). Developmental differences in metacognition: Monitoring and control of comprehension. In S. E. Israel, C. C. Block, K. L. Bauserman, & K. Kinnucan-Welsch (Eds.), *Metacognition in literacy learning: Theory, assessment, instruction, and professional development* (pp. 61–79). Lawrence Erlbaum Associates. https://psycnet.apa.org/record/2005-07525-004

Barnes, D. (2017). *Crown: An ode to the fresh cut.* Agate Publishing.

Berninger, V. W., Abbott, R. D., Cook, C. R., & Nagy, W. (2017). Relationships of attention and executive functions to oral language, reading, and writing skills and systems in middle childhood and early adolescence. *Journal of Learning Disabilities*, *50*(4), 434–449. https://doi.org/10.1177/0022219415617167

Boulware-Gooden, R., Carreker, S., Thornhill, A., & Joshi, R. M. (2007). Instruction of metacognitive strategies enhances reading comprehension and vocabulary achievement of third-grade students. *The Reading Teacher*, *61*(1), 70–77. https://doi.org/10.1598/RT.61.1.7

Cartwright, K. B. (2015). *Executive skills and reading comprehension: A guide for educators*. Guilford Press.

Cartwright, K. B., & Palian, S. R. (2024). Considering roles of executive functions in the science of reading: A meta-analysis highlighting promises and challenges of reading-specific executive functions. *Educational Psychologist*, *59*(4), 263–290. https://doi.org/10.1080/00461520.2024.2418392

Choi, Y. (2003). *The name jar.* Dragonfly Books.

Duke, N. K., & Pearson, P. D. (2009). *Effective practices for developing reading comprehension*. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction* (3rd ed., pp. 205–242). International Reading Association. https://faculty.washington.edu/smithant/DukeandPearson.pdf

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist*, *34*(10), 906–911. https://doi.org/10.1037/0003-066X.34.10.906

Flint, A. S., & Jaggers, W. (2021). You matter here: The impact of asset-based pedagogies on learning. *Theory Into Practice*, *60*(5), 397–410. https://doi.org/10.1080/00405841.2021.1911483

Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press.

Gunner, C. (2023, July 31). Student-structured literacy. *Goyen Literacy Fellowship Blog*. https://www.goyen.io/blog/student-structured-literacy

Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 403–422). Lawrence Erlbaum Associates.

Guthrie, J. T., Wigfield, A., Barbosa, P., Perencevich, K. C., Taboada, A., Davis, M. H., Scafiddi, N. T., & Tonks, S. (2004). Increasing reading comprehension and engagement through concept-oriented reading Instruction. *Journal of Educational Psychology*, *96*(3), 403–423. https://doi.org/10.1037/0022-0663.96.3.403

Hammond, Z. L. (2015). *Culturally responsive teaching and the brain.* Corwin Press.

Hudson, A., Moore, K. A., Han, B., Koh, P. W., Binks-Cantrell, E. S., & Joshi, R. M. (2021). Elementary teachers' knowledge of foundational literacy skills: A critical piece of the puzzle in the science of reading. *Reading Research Quarterly*, *56*(S1), S287–S315. https://doi.org/10.1002/rrq.408

Keene, E. O., & Zimmermann, S. (1997). *Mosaic of thought: Teaching comprehension in a reader's workshop*. Heinemann.

Kretzmann, J. P., & McKnight, J. L. (1993). *Building communities from the inside out: A path toward finding and mobilizing a community's assets.* ACTA Publications.

Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in U. S. schools. *Educational Researcher*, *35*(7), 3–12. https://doi.org/10.3102/0013189X035007003

Landi, N., & Ryherd, K. (2017). Understanding specific reading comprehension deficit: A review. *Language and Linguistic Compass*, *11*(2), e12234. https://doi.org/10.1111/lnc3.12234

Lindo, E. J. (2006). The African American presence in reading intervention experiments. *Remedial and Special Education*, *27*(3), 148–153. https://doi.org/10.1177/07419325060270030301

Lipnevich, A. A., Preckel, F., & Roberts, R. D. (2014). Psychosocial skills and school systems in the 21st century: Theory, research, and practice. In A. A. Lipnevich, & J. S. Kaufman (Eds.), *Non-cognitive skills in education* (pp. 1–13). Springer.

Mathie, A., & Cunningham, G. (2003). From clients to citizens: Asset-based community development as a strategy for community-driven development. *Development in Practice, 13*(5), 474–486. https://doi.org/10.1080/0961452032000125857

Mein, E. (2018). An asset-based approach to literacy teaching in diverse classrooms. *Literacy Today*, *36*(2), 24–25.

Moats, L. C. (2020). *Teaching reading is rocket science: What expert teachers of reading should know and be able to do* (2nd ed.). American Federation of Teachers. https://www.aft.org/sites/default/files/moats.pdf

National Academies of Sciences, Engineering, and Medicine. (2018). *How people learn II: Learners, contexts, and cultures.* The National Academies Press. https://doi.org/10.17226/24783

Oakhill, J., Cain, K., & Elbro, C. (2019). Reading comprehension and reading comprehension difficulties. In D. Kilpatrick, R. Joshi, & R. Wagner (Eds.), *Reading development and difficulties* (pp. 83–115). Springer. https://doi.org/10.1007/978-3-030-26550-2_5

OpenAI. (2025, July 19) *ChatGPT* (Feb 11 version) [Large language model]. https://chat.openai.com/

Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction*, *1*(2), 117–175. https://doi.org/10.1207/s1532690xci0102_1

Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, *41*(3), 93–97. https://doi.org/10.3102/0013189X12441244

Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, *8*(3), 317–344. https://doi.org/10.1016/0361-476X(83)90019-X

Pérez, C. C. (2017). *The first rule of punk.* Viking.

Pittman, R. T., O'Neal, L., Wright, K., & White, B. R. (2024). Elevating students' oral and written language: Empowering African American students through language. *Education Sciences*, *14*(11), 1191. https://doi.org/10.3390/educsci14111191

Rupley, W. H., Blair, T. R., & Nichols, W. D. (2009). Effective reading instruction for struggling readers: The role of direct/explicit teaching. *Reading & Writing Quarterly*, *25*(2–3), 125–138. https://doi.org/10.1080/10573560802683523

Sanchez, L., Terrazas, C., & Marek, M. (2024). The science of reading and culturally sustaining early literacy for multilingual learners. *Texas Association for Literacy Education Yearbook*, *11*, 1–12. Texas Association for Literacy Education. https://eric.ed.gov/?id=EJ1452337

Schwartz, S. (2025, July 22). Which states have passed 'science of reading' laws? What's in them? *Education Week*. https://www.edweek.org/teaching-learning/which-states-have-passed-science-of-reading-laws-whats-in-them/2022/07

Sharpe, S. W. (2022). Think-aloud reading instruction through a culturally responsive teaching lens. *Literacy Matters: The Journal of the Palmetto State Literacy Association*, *22*(Winter), 32–37. https://user-23310503727.cld.bz/Literacy-Matters-Winter-2022/32/

Taboada Barber, A., Klauda, S. L., Wang, W., Cartwright, K. B., & Cutting, L. E. (2022). Emergent bilinguals with specific reading comprehension deficits: A comparative and longitudinal analysis. *Journal of Learning Disabilities*, *55*(1), 43–57. https://doi.org/10.1177/0022219420983247

U. S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. (2022). *NAEP Report Card: 2022 NAEP reading assessment—Highlights from the 2022 assessment*. The Nation's Report Card. https://www.nationsreportcard.gov/highlights/reading/2022

Received: August 12, 2025 | Accepted: October 9, 2025 | Published: December 12, 2025