Language Science and Syntax: Guiding the Next Generation of Reading Instruction

by Julie A. Van Dyke

A quarter century ago, the National Reading Panel (2000) convened to review the existing research on reading instruction with a mandate to determine "what works." Its landmark report elevated phonemic awareness, phonics, fluency, vocabulary, and reading comprehension as core components of reading instruction, each with a significant evidence base attesting to its impact on reading outcomes. These "Big Five" have shaped commercial curricula and instructional practice ever since. Yet from the point of view of a language scientist such as myself, there's a glaring omission in this list of core components. If asked to list the foundational skills needed for successful reading or listening comprehension outcomes, first on my list would be syntax. Admittedly, this could be just because I'm a card-carrying "syntax nerd." By "card-carrying," I'm referring to my 28-year membership in the Society for Human Sentence Processing, which runs a yearly conference (currently in its 39th year) at which language scientists spend three entire days sharing data about how our brains process sentences. But beyond that, there is such a large body of behavioral and neurological evidence attesting to the exceedingly fast, automatic, and decisive role of syntax during language comprehension that it just can't be ignored.

Indeed, if I think back three decades to the period when the National Reading Panel was doing its work, those were the same years in which some of the most heated debates in language processing focused on *how* syntax works during comprehension. There was never a question of *if*—only *how*. These debates were fueled by data using then state-of-the-art research methods, including eye-tracking, electrophysiological responses (ERPs), and some of the earliest fMRI brain studies. The following are some of the questions we asked and experimental sentences we worded in specific ways to study how readers would respond to the syntax:

- How quickly is syntactic knowledge activated, and does background or contextual knowledge influence how it is computed? For example, is it easier to process the sentence "The coffee spilled on the rug was difficult for her to conceal" if it is preceded by a context that explains how the coffee got spilled?
- If a sentence is ambiguous, does the brain compute all possible meanings at once, or does it choose just one to start with? If it computes them all, what happens to those that turn out to be incorrect? And if it chooses only one, what happens if that choice turns out to be wrong? An example is "After Anna dressed the baby played in the crib."
- How does memory support sentence processing, and what types of sentences are beyond the limits of a typical reader's memory capacity? After all, sentences can be long, and sometimes related words occur very far away from each other, as in the example: "The attendant remembered that the older lady with the pink suitcase who sat in the smelly seat complained."

Fast forward to today, and we see this rich body of research captured in a variety of computationally explicit models of the comprehension process. My point in describing this is to reassure the reader that it is NOT the case that comprehension is so complex that we don't really know how it works. No teacher should feel helpless when it comes to comprehension! In fact, we language scientists know quite a lot about the word-by-word processes the brain follows when comprehending. We have modeled the interactivity of lexical, syntactic, semantic, pragmatic, and background knowledge, as well as the limits that our biology imposes on these processes. We can use these models to help us understand what the system needs to succeed and what makes it fail. These models are complex and therefore require

computationally and mathematically complex systems to describe them. The challenge for the next generation of reading instruction is that not all of this knowledge transfers easily to classroom practice, and most teachers will not have the technical background to understand the systems. And that's okay. But there definitely are some basic lessons from this research that are immediately transferable. The one that I choose to surface first is syntax, because of the undeniable research tradition that situates syntax as the foundation upon which comprehension is built.

What Is Syntax?

To understand why syntax is foundational, it's important to understand its function. It is common to think of syntax as being about word order, and that is true in English, but many languages across the world do not have a fixed word order. This means that knowing whether the noun is before or after the verb tells you nothing about the meaning of the sentence (in contrast to English, where the first noun is the subject and the noun after the verb is the direct object).

When word order does not provide reliable signals about grammatical function, languages typically have overt morphological markers that take over that function. For example, Table 1 shows the grammatical morphology that allows a Polish speaker to understand the basic meaning of a sentence regardless of the order in which the words occur. The sentences "Dziewczynka dała nauczycielce książkę" and "Książkę nauczycielce dała dziewczynka" both mean "The girl gave a book to the teacher," despite their differing word orders.

The upshot of this is that syntax is not about word order, but about what a particular word order signals regarding the relationships among entities or ideas in a sentence. Communicating those relationships is so foundational that every language on earth has a way of expressing them. Knowing that the syntax of a sentence *signals* meaning brings it into line with the idea of learning to decode words. Once learners have mastered grapheme-phoneme correspondence rules, they can read unfamiliar words and even nonsense words (e.g., "brane," "nust") because they have learned to interpret the individual letters and their patterns (e.g., VCe, CVCC) as signals (or "codes") for a particular phonological form. Similarly, knowing what to do when one sees a + symbol in a sentence, like 68 + 23, means that one knows the + sign is code signaling a certain mathematical operation. This mathematical syntax allows us to decode the answer from the equation.

Syntactic structures similarly allow us to "decode" meaning. A passive sentence like "The cake was burnt by Alice" focuses our attention on "the cake," but a skilled English comprehender would never misunderstand "the cake" as actually doing the burning, despite the fact that the first noun in an English sentence is usually the doer of the action. Similarly, when reading the sentence "The lady sitting next to the girl hummed quietly to herself," a skilled reader decodes this syntax to mean that it is "the lady" who hummed and not "the girl," even though "the girl" is next to the verb "hummed." If a reader doesn't know what these structures signal, there is nothing to prevent them from associating each word with the one right next to it. Indeed, this is what we observe in individuals with developmental language disorder (DLD; Van Dyke et al., 2026).

To further emphasize how much syntactic decoding supports comprehension, consider cases where the meaning of the words themselves is unknown—this is the situation that many readers face daily. A famous example of this is Lewis Carroll's *Jabberwocky* (1871); the first stanza is shown in Figure 1. Notice that without knowing most of these words, we can infer quite a lot about the scene being described. For example, "slithy" must be an adjective, and

Table 1

Flexible Word Order in Polish

Word	Translation	Stem	Morphological Marker	Role
dziewczynka	girl (nominative)	dziewczynk-	-a	subject
książk-ę	book (accusative)	książk-	-ę	direct object
nauczycielc-e	to the teacher (dative)	nauczycielc-	-e	indirect object

Note. I chose Polish here because it uses the Roman alphabet. But all the Slavic languages work the same way—as do more than 200 other languages.

Figure 1

First Stanza of the Poem Jabberwocky by Lewis Carroll (1871)

Twas brillig, and the slithy toves
did gyre and gimble in the wabe:
All mimsy were the borogoves,
and the mome raths outgrabe.

Note. The Jabberwock illustration by John Tenniel, public domain accessed via Wikipedia

"toves" must be a plural noun—all this is signaled by the word "the." Similarly, the "toves" must be the things that are "gyring" and "gimbling" in a place referred to as a "wabe." And, what's most fascinating, is that the rhythm of the poem makes it pretty easy to understand the string of three non-words in the last line as telling us that the "mome raths" are the things that are "outgrabing," as opposed to thinking that the "mome" is "rathing" the "outgrabe." That's a lot of comprehension for having no vocabulary knowledge to work with! The syntactic signals in the text, including the phrasing prompted by the poetic meter, allowed me to decode the relationships between key words in the text, even without knowing the exact meaning of the words.

This decoding process, also referred to as "syntactic bootstrapping," has been demonstrated as a means by which 18- to 24-month-old babies learn their first words (Gleitman, 1990; Massari et al., 2026). From the perspective of reading instruction, I hope this example has demonstrated how important syntactic knowledge is for both beginning readers who are simultaneously flooded with new vocabulary and advanced readers who must make sense of complex syntactic constructions. Syntax is the knowledge that a reader needs in order to decode relationships between ideas and entities within texts. With it, readers have scaffolding that they can decorate with details from the exact meanings of the words. Without it, readers have just a collection of unconnected words, and they can only make guesses about who did what to whom.

Why Was Syntax Left Out of the NRP Report?

The National Reading Panel was true to its mission: to review the scientific research on *reading instruction* and determine which methods had reliable evidence of effectiveness. At the time that the NRP was doing its work, studies of syntax as part of reading instruction were rare. Instead, the NRP focused on research showing significant effects of cognitive strategies such as comprehension monitoring, cooperative learning, graphic/semantic organizers, answering and generating questions, and summarization. These strategies are all designed to help the reader actively engage with the text (e.g., Rosenshine et al., 1996). As described in the NRP report, "meaning resides in the intentional, problem-solving, thinking processes of the reader that occur during an interchange with a text" (pp. 4-39). Against this backdrop, the recommendations to focus on teaching comprehension strategies make a lot of sense. Teaching—or coaching—a child to actively engage with a text just feels like the right thing to do!

However, language scientists understand that these techniques are exactly what they claim to be: *cognitive* strategies for improving comprehension. Each of these strategies asks students to interact with the mental representation of the text that they created during reading, which itself is the outcome of *linguistic* processing—namely, integrating the meanings of individual words within the structured relationship expressed by the syntax of the sentence. If the student lacks the ability to decode the syntax or doesn't know the vocabulary, then the starting point for strategy use is a

faulty understanding. Strategies can guide students to realize they misunderstood a text, but a language-first perspective tells us we should ensure they have adequate language skills to create accurate representations of the text in the first place. Neuroimaging techniques confirm this point. We now know that the brain has distinct networks for processing language and for carrying out cognitive tasks, including problem solving, monitoring, questioning, and thinking about another's point of view (e.g., Fedorenko et al., 2024). By focusing on cognitive strategies as the primary teachable content to boost reading comprehension, the NRP inadvertently overlooked the foundational role of syntactic processing as the gateway to accurate reading comprehension. The clear recommendation from language science is to build syntactic processing skills.

There is now a sizeable body of research demonstrating that syntactic ability is highly correlated with reading comprehension (e.g., Deacon & Kieffer, 2018; LARRC & Logan, 2017; Muter et al., 2004; Nielsen et al., 2025; Poulsen & Gravgaard, 2016; Silva & Cain, 2015; Sorenson, et al., 2021). From this representative sample, the two are correlated at $r = .55$ on average ($SD = .08$), with individual studies ranging from $r = .36$ to $r = .77$. To put that in plain terms, a correlation of zero means two things are completely unrelated, and a correlation of 1.0 means they move together perfectly. Most researchers consider anything above .50 a large effect—meaning syntax and reading comprehension are not just related, they are closely linked. This is consistent with a meta-analysis by Tong et al. (2025), which reported a mean correlation of $r = .54$ between syntactic ability and reading comprehension across 59 articles reporting on 74 independent samples with a total of 15,017 participants of varying ages. Their analysis specifically included research conducted with English and Chinese L1 learners to examine potential language-specific differences in the relationship between syntax and reading. Yet separate analyses yielded the same correlation ($r = .54$) for both languages. This is consistent with the idea that syntactic processing is at the core of the human language processing ability, regardless of how a particular language specifies its grammar.

Beyond simple correlations, statistical models consistently show that syntactic processing is one of the strongest—if not the strongest—predictor of reading comprehension. In these models, each student skill is assigned a beta weight (β), a number that reflects how much that skill independently contributes to comprehension when all other skills are accounted for. The higher the beta weight, the stronger the predictor. For example, Nielson et al. (2025) found that $\beta = 0.63$ for syntax, compared to $\beta = 0.24$ for vocabulary and 0.23 for decoding, meaning syntax was more than twice as powerful a predictor as either of the other two skills. Across studies published in the past 20 years, when syntax was included, it was shown to be either the strongest or second strongest predictor among language factors.

Tong et al. (2025) also found that the relationship between syntax and reading comprehension grows stronger as students get older—from a moderate association in kindergarten ($r = .38$) to a stronger one by secondary school ($r = .62$), though syntax was a significant predictor at every grade level. The most meaningful jump occurs between kindergarten and all later grades, after which the relationship remains relatively stable. This developmental pattern is consistent with several studies that have argued for a general "oral language" factor encompassing vocabulary, morphology, and grammar in the primary school years, which differentiates into separate factors for vocabulary and grammar throughout adolescence until 8th grade (LARRC et al., 2018; Tomblin & Zhang, 2006). Further, the sentences students encounter in academic texts become grammatically more complex from around 3rd or 4th grade onward, which means a student's syntactic ability increasingly determines whether they can accurately comprehend what they read.

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How Comprehension Actually Works: Evidence From Language Science Research

The research summarized above provides strong support for the role of syntax in reading comprehension. Yet it can only tell us that syntax is important. It cannot tell us how syntax is actually used during reading, or how it interacts with other components, such as vocabulary or background knowledge. This is the domain of language science, which uses experimental techniques to determine causal relationships

between the various components. Because the goal is to isolate linguistic features in order to understand their roles in the moment-by-moment comprehension process, the actual experiments don't seem to transfer directly into actionable recommendations for instruction. They do, however, provide invaluable information about how the brain processes language and can be used as a basis for evaluating whether particular teaching practices align with how the brain comprehends.

I have published several studies that seek to understand how brains use syntax and lexical information to create meaning (e.g., Tan et al., 2017; Van Dyke, 2007; Van Dyke et al., 2014). These studies used methods that measured word-by-word processing and experimental manipulations to isolate the contributions of syntactic and lexical knowledge during comprehension. The underlying principle of the research is the well-established fact that humans are susceptible to distracting information. Thus, if I created sentences that had syntactic and lexical distractors, then it would be possible to see when the distractors had their effect. Moreover, if I also asked participants to answer questions about the sentence, I could evaluate the extent to which the brain can overcome distraction to arrive at the correct understanding. Table 2 shows an example of the type of sentences we asked people to read.

Sentences (1) and (2) have nearly identical meanings, but differing syntactic structures. By comparing how they are processed, we can determine whether participants find the extra subject "the room" (i.e., subject of the embedded clause "the room was dirty") distracting in (2) compared to (1), where it is not a subject. Indeed, we found significantly slower reading times and poorer comprehension for the sentences containing a syntactic competitor. This slowdown occurred in the verb phrase "will forget," which is the precise point in the sentence when the reader must determine who is doing the forgetting. Semantically speaking, there is only one possible subject: the mother. But increased reading times in sentences with syntactic distractors shows that it is the syntactic structure itself—which contains an embedded subject—that makes the sentence difficult, and that this occurs without regard to the actual meaning of the words (i.e., "room" is distracting because it is a subject, even though it can't possibly "forget"). This, together with a larger body of literature showing the same effect, is a strong indicator that brains carry out the kind of syntactic decoding discussed previously. It occurs as soon as the verb is read, and is impervious to lexical or background knowledge about whether the competing subject "the room" can actually be the subject of "will forget."

Looking at the effect of the semantic competitor, we observed slower reading times and increased looks backward in the sample sentences containing the word "toddler," but these effects did not appear until the end of the sentence. This means that the brain is working to make sense of the distracting word even after the eyes have passed it by. It is consistent with other research showing that readers recognize a poor "semantic fit" 50 to 100 milliseconds *after* they notice an incorrect syntactic structure (e.g., McElree & Griffith, 1998). Moreover, participants were almost twice as likely to choose the distracting noun as the answer to "Who will

Table 2

Sample Sentences Used to Examine How Brains Use Syntax and Lexical Information

Distractor Type	Sample Sentence
(1) No syntactic nor semantic distractors	The mother who yelled about the dirty room will forget about the mess.
(2) Syntactic distractor, but no semantic distractor	The mother who yelled that the room was dirty will forget about the mess.
(3) Semantic distractor, but no syntactic distractor	The mother who yelled about the dirty toddler will forget about the mess.
(4) Both syntactic and semantic distractors	The mother who yelled that the toddler was dirty will forget about the mess.
Comprehension Question	Who will forget about the mess?

Note. These samples are drawn from a study conducted by Tan et al. (2017).

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forget about the mess" when it occurred as the embedded subject as in Condition (4), compared to when it did not (Van Dyke, 2007).

This brief look into experimental psycholinguistics is meant to provide insight into the mechanisms of comprehension, and in particular, why the multivariate modeling research reviewed in this paper found that syntactic ability is such a strong predictor of reading comprehension. My experiments, and those of others, have demonstrated that comprehenders use syntactic structure as the basic scaffolding on which to build meaning. That structure is built extremely quickly and is, to a large extent (though not completely), impervious to particular lexical meanings. It is important to note that the research described here was conducted with typically developing college-aged adults. Thus, even the typical reader is susceptible to syntactic and semantic distraction during reading—this is how the brain's default language processing machinery works. In real life, readers will rarely encounter difficult sentences like the most difficult ones in (4), and in fact, we typically don't say or write such sentences exactly because they are difficult for our brains to process. But using them to push the brain to its limits provides important insights into how the mature adult brain processes language.

Notably, when we ran a study using similar materials with high-school-aged students with DLD, we actually found that the DLD students were *not* sensitive to the syntactic distractor—likely because their syntactic skills were so poor that they didn't even realize that there were two possible subjects in the sentence (Van Dyke et al., 2026). Similarly, in a separate study, we examined susceptibility to semantic distractors in a sample of non-college-attending 16- to 24-year-olds and found that those most susceptible had the poorest scores on measures of receptive vocabulary. We interpreted this as an indication that low-quality lexical representations are more easily confusable during sentence processing (Van Dyke et al., 2014). Poor readers tend to have weaker or less developed lexical representations, either because they read less or because they struggle with foundational skills like phonological decoding. Importantly, both the meaning and grammatical aspects of word knowledge matter; good readers don't only learn the meaning of words, but also what kinds of grammatical contexts a particular word fits into.

Taken together, this research reveals three things about how the brain comprehends language. First, syntactic structure is not decoration—it is the scaffolding the brain uses to assign meaning, and it is processed automatically and nearly instantaneously. Second, both syntax and vocabulary matter, and they operate at different points in the comprehension process: syntax is processed first, vocabulary fills in meaning afterward. Third, struggling readers are not just slow—they are processing language differently, either missing syntactic cues entirely or working with word knowledge too shallow to support accurate comprehension. Understanding this helps explain why syntax and vocabulary are not supplemental to reading instruction—they are central to it.

What Should We Do in the Classroom?

Syntax should be a topic for active classroom instruction. One of the biggest myths in reading instruction today is that it is not necessary to teach syntax because it is acquired naturally from birth. Here are three key reasons why syntactic instruction cannot be ignored:

1. The language that is acquired naturally from birth is vastly different from the language needed to succeed in school (Nation et al., 2022). Since brains can only learn what they are exposed to, children simply cannot rely on casual language input if we hope they will be able to process the complex language found in books. Classrooms may be a student's

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only opportunity to encounter complex sentence structures, such as embedded clauses or unusual word orders, and receive help making sense of them.

2. The incidence of individuals who have language- or syntax-level processing difficulties is equal to that of those who have dyslexia (Hogan & Van Dyke, 2025). It's estimated that two students in every classroom have DLD, and this difficulty is often underdiagnosed. The easiest way to find these students is to listen to the phrasing in their oral reading. Students who do not produce fluent phrasings are likely to have syntactic deficits, even if they are entirely fluent in individual word reading (Breen et al., 2024). For these children, explicit instruction and/or visual scaffolding of syntactic forms is crucial.
3. Finally, as noted before, languages differ in how syntax is conveyed, especially with respect to word order. This means that a child's brain may be wired to process syntax in a completely different way from that required by English (e.g., adjectives come before nouns in English and after nouns in Spanish). Thus, syntactic instruction in the classroom could be vital for helping that child decode the linguistic structures he is expected to master.

Considering these points, it is clear that teachers should be prepared to discuss syntax in their classrooms. Yet doing so can feel daunting. I conducted an informal survey of 182 educators and found that 43% of classroom teachers said the biggest barrier to teaching syntax was a lack of confidence, and 51% reported the biggest barrier was not having time for it. It is my hope that this article will convince the latter group that it is worth making the time.

The issue of low confidence is a critical one. To address it, I believe it is important to shift conceptions of what syntax instruction looks like away from something formal and structured (like a scope and sequence for decoding instruction) and toward making syntax an everyday topic that cuts across all instructional blocks and subjects. Teachers of all subjects and grades can learn how to spot challenging sentences in the materials they already use and highlight them for explicit discussion. There are now several studies that have shown improved outcomes from instruction about syntactic structures, although these are all within the context of supplemental intervention delivery rather than general classroom instruction (e.g., Balthazar & Scott, 2024; Cleave et al., 2015; Gillam et al., 2012; Owen Van Horne et al., 2023). For example, complex structures like passives, wh-questions, coordinating conjunctions, and subordinate clauses can be taught via a combination of methods such as (a) "bombardment," the repetitive exposure of a particular structure; (b) contextualization, situating a structure within a passage or story; and (c) meta-linguistic instruction, explicit discussion of what structures mean.

When choosing examples for classroom activities, intuitions are usually correct about which sentences will be difficult to comprehend. In case a technical definition is helpful, the syntactic constructions that are particularly difficult are those that do not follow the subject-verb-object pattern that is typical in English, or that tax a reader's memory because related ideas are separated by other information. The sentences in my research (see Table 2) exemplify this, since the subject "the mother" is separated from the verb "will forget" by distracting information. Table 3 gives further examples of challenging constructions, with example questions that teachers could use in explicit discussions of what these structures mean.

While these examples may seem best suited for older learners, these constructions can occur in books suitable for any grade level. Indeed, relative clauses are estimated to be 6 to 50 times more frequent in picture books than in speech to children. Even at the youngest age, it is helpful to focus on whether a student can identify "who" did "what" to "whom" (Eberhardt & Gillis, 2025). Answering this series of questions enables a learner to see the relationships between entities in a text. The "Instructional Moves" in Table 3 include example questions to fuel this type of discussion. Crucially, the queries about "Who did what to whom?" must be at the sentence level, because that's where the basic building blocks of comprehension occur.

Crucially, the queries about "Who did what to whom?" must be at the sentence level, because that's where the basic building blocks of comprehension occur. Querying at the paragraph or full-text level can obscure basic relational misunderstandings and make it impossible for a student to understand the broader gist or main idea of a text.

Table 3

Challenging Sentence Constructions and Instructional Responses

Name	Example	Instructional Moves	Comprehension Questions
Subject Relative Clauses	The girl who likes school never misses the bus.	Notice that the same subject has two verbs in this sentence.	Who likes school? Who never misses the bus?
Object Relative Clauses	The girl who the teacher likes never misses the bus.	Notice that the girl is the subject of one verb (*misses*) and the direct object of another (*likes*).	Who does the teacher like? Who never misses the bus?
Passives	The girl was called on during class.	Notice the girl isn't really the "do-er" here, even though that noun occurs first. Who was the "do-er"? (*likely the teacher*)	Who called on the girl?
Cleft Constructions	It was the boy who was singing loudly at his seat.	How does the meaning of the sentence change when you use the phrase "It was the..." (*Emphasis is placed on the noun phrase following "It was"*)	Who was singing loudly? When would you say "It was the boy who was singing loudly at his seat" instead of "The boy was singing loudly at his seat"?
Post-Nominal Nouns	The principal, a skilled educator, has transformed syntax instruction at our school.	Notice that there are two subjects—both the principal and the skilled educator. Do they refer to the same person? Why are there commas?	Who transformed syntax instruction? What did the principal do? What did the educator do?
Post-Nominal Adjectives	The people responsible for the project will meet tomorrow.	What's the difference between saying "the people responsible" and "the responsible people"? What's another way of saying this sentence using the word who? (*The people who are responsible for the project will meet tomorrow.*)	Who will meet tomorrow? Who is responsible for the project?
Sentential Complements	We believe our team is amazing!	Is the thing that we believe just "our team" or is it the entire sentence "our team is amazing"?	What do we believe?

Querying at the paragraph or full-text level can obscure basic relational misunderstandings and make it impossible for a student to understand the broader gist or main idea of a text.

Another technique for building syntactic comprehension is to help students find the rhythm in language. (Recall how important rhythm was in decoding *Jabberwocky!*) A substantial amount of experimental literature shows that students who produce appropriate pauses and intonation shifts at syntactic phrases and clauses are better comprehenders—and this is true for both elementary- and high-school-level readers (e.g., Breen et al., 2024; Wagner & Watson, 2010 for review). Techniques that help students chunk a text into its phrases (e.g., "scooping") can promote comprehension. One complication with this recommendation, however, is that teachers can often be unsure where the correct scoop boundaries should be. Cascade Reading (cascadereading.com) is a freely available reading technology that can help with this. A teacher can transform any text (e.g., from their curriculum) into the Cascade Format, which places syntactic phrases on separate lines and adds visual cues to indicate which phrases should be associated together. The Cascade Reading website includes an Explorer tool that automatically identifies parts of speech, phrases, and linguistic functions (e.g., subjects, direct objects, prepositional phrases). This tool was designed to address the "low confidence" issue for teachers, as the program analyzes the structure and shows the relationships within a sentence, even if a teacher isn't sure about them.

Finally, helping students to read above their current level is crucial. Promoting growth in a student's syntactic ability requires exposure to advanced-for-them syntactic structures; however, it is important to stretch students' ability while still scaffolding their growth. Presenting students with texts in the Cascade Format is a proven way to do this. A randomized controlled trial with 4th and 5th grade students (Van Dyke & Dempsey, 2026) demonstrated that re-

peated reading in the Cascade Format, even with no explicit instruction, leads to improved comprehension and the ability to "hear how the sentence should sound" (i.e., the rhythm of language). This is an answer to all those teachers who—rightfully so—are reluctant to reduce students' actual reading time. The Cascade Format provides helpful syntactic scaffolding while giving students the opportunity to actually practice reading.

Conclusion

Syntax is the anchor that makes comprehension possible. Just as phonological awareness and letter-sound correspondences allow a reader to decode words, syntactic knowledge allows a reader to decode the meaning in a sentence. Evidence from language science reveals the causal link between syntactic knowledge and comprehension—if syntactic relationships between the people, things, and events in a sentence are misunderstood, then a reader's entire conceptual understanding goes awry. Comprehension strategies are important for monitoring and correcting situations when this happens, but without addressing a reader's syntactic ability, misunderstandings become the norm rather than the exception. In today's classrooms, which contain roughly 2 to 3 students with clinically significant language impairments, a multitude of home languages that may work quite differently than English, and a growing susceptibility to distraction, the biggest support we can give students is a solid linguistic foundation that includes the ability to decode syntactic structures. ■

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