

Unraveling Difficult Sentences: Strategies to Support Reading Comprehension

Richard P. Zipoli, Jr., PhD¹

Abstract

The ability to understand sentences contributes to students' reading comprehension. However, many reading programs tend to underemphasize explicit instruction aimed at enhancing students' knowledge of sentence structures. Children with language impairments, students with learning disabilities, and English language learners may particularly benefit from instruction that targets potentially challenging sentence structures. This article is designed to help educators and clinicians more effectively identify and teach several sentence structures that can compromise elementary and middle school students' understanding of written text. Four types of sentence structures that may be difficult to process are introduced and systematically explored: (a) sentences with passive verb constructions, (b) adverbial clauses with temporal and causal conjunctions, (c) center-embedded relative clauses, and (d) sentences with three or more clauses. Information is presented on syntactic structures, sources of confusion, developmental considerations, assessment caveats, and instructional strategies.

Keywords

sentence comprehension, syntax, reading comprehension, reading instruction

As instructional emphasis shifts from beginning reading skills in early elementary grades toward an increasing emphasis on reading to learn and content area knowledge in late elementary and middle school grades, students are increasingly immersed in literate language (Nippold, 2007). A prominent feature of literate language is the longer and more advanced syntactic structures found in decontextualized academic discourse and written text, including sentence structures that appear with relatively low frequency during casual conversation, such as verbs with a passive voice, subordinate clauses, and sentences with multiple layers of embedding (Benson, 2009; Scott, 2009; Snow & Kim, 2010). Not surprisingly, an understanding of sentence structure, or syntax, is generally recognized as making a substantial contribution to students' comprehension of written text (Moats, 2000; RAND Reading Study Group, 2002; Scott, 2009; Snow & Kim, 2010; Spear-Swerling, 2015; Van Dijk & Kintsch, 1983).

Knowledge and use of complex sentences is also emphasized in the reading, writing, speaking, and listening domains of the Common Core State Standards for English and Language Arts (Roth, 2014). The Language standards, for example, call for third grade students to demonstrate a command of simple, compound, and complex sentences, as well

as coordinating and subordinating conjunctions (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). By the seventh grade, students should be able to explain the purpose of phrases and clauses and their function in particular sentences. They should also demonstrate the ability to choose among simple, compound, complex, and compound complex sentences to indicate relationships among concepts.

Unfortunately, many educators and clinicians appear to lack the syntactic knowledge and instructional skills needed to support students' comprehension of difficult sentence structures (Justice & Ezell, 2002; Moats, 2000; Moats & Foorman, 2003; Roth, 2014; Snow, Griffin, & Burns, 2005; Steffani, 2007). This is problematic because children with reading difficulties often demonstrate syntactic difficulties, although the precise nature of the association between

¹Department of Communication Disorders, Southern Connecticut State University, New Haven, CT, USA

Corresponding Author:

Richard P. Zipoli, Jr., Department of Communication Disorders, Southern Connecticut State University, 501 Crescent St., Davis Hall, 012-F, New Haven, CT 06515, USA.
Email: zipolir1@southernct.edu

syntactic and reading abilities remains to be determined (Scott, 2004; Oakhill & Cain, 2007; Nelson, 2010). As Scott (2009) noted, “If a reader cannot parse the types of complex sentences that are often encountered in academic texts, no amount of comprehension strategy instruction will help” (p. 189). The purpose of this article is to enhance the ability of reading and special education teachers, speech-language pathologists (SLP), and other specialized instructional support personnel to assist readers who experience problems comprehending challenging sentences. To enhance services for these students, four commonly misinterpreted syntactic structures are examined, and strategies are presented for assessment and intervention.

Sources of Confusion

An understanding of challenging sentence structures, and particularly how confusion arises when readers apply misleading processing strategies, helps to inform assessment and intervention activities. In this section, four sentence structures that readers might find difficult to comprehend are described: (a) sentences with passive verb constructions, (b) adverbial clauses with temporal and causal conjunctions, (c) center-embedded relative clauses, and (d) sentences with three or more clauses (Eisenberg, 2006; Merritt & Culatta, 1998; Owens, 2016; Paul & Norbury, 2012; Scott, 2009; Snow & Kim, 2010). Structural features and developmental considerations are examined, with emphasis on readers’ use of misleading processing strategies and the resultant confusions.

Sentences With Passive Verb Constructions

A sentence has a passive voice when the agent (i.e., cause of action) and the recipient are reversed (Owens, 2016). Examine this example, based on a Hungarian folktale written by Ian Creanga (Institutul Cultural Roman, 2009), who described how “*the bear was tricked by the fox.*” Note that the bear is the recipient of the action and the fox is the agent. This sentence would be easier for many students to process if it had been written in the active form, with the first noun as the agent of the action: “The fox tricked the bear.”

A primary reason students are confused by passive sentences is overreliance on a *word-order strategy* (Owens, 2016; Paul & Norbury, 2012; Scott, 2009). To successfully comprehend these structures, students need to know how small function words with minimal lexical meaning, such as “was” and “by,” operate in a sentence with a passive verb construction. Otherwise, they might fail to recognize the passive voice and incorrectly infer an active construction with the first noun serving as the agent of the action. Thus, “*the bear* [recipient of action] was *tricked* by *the fox* [agent]” might be misinterpreted as meaning that the bear (agent) tricked the fox (recipient).

Students with syntactic difficulties might also experience confusion when reading passive sentences about events that differ from their expectations, background knowledge, or logic (Paul & Norbury, 2012; Wallach & Miller, 1988). “The lion was frightened by the mouse,” for example, might appear improbable to readers who believe that a large, fierce predator would not be afraid of a small mouse. In this case, students might inappropriately rely on a *probable-event strategy*, simply assuming that it was the powerful lion who frightened the tiny mouse.

The course of development for comprehension of sentences with passive verb constructions is relatively lengthy. Approximately half of 5-year-old children accurately comprehend reversible passive sentences (Owens, 2016), whereas 90% of children between the ages of 7.5 and 8 years comprehend reversible passives (Carlson, 1997, as cited in Justice & Ezell, 2002). Therefore, reversible passives may be particularly challenging for younger elementary students, as well as students with language or learning difficulties who might be more apt to rely on word order or probable-event strategies (Paul & Norbury, 2012). Passive verb constructions are often found in narrative and expository text, and the increasing complexity of passive sentences in content area texts can be difficult for late elementary, middle, and high school students (Scott & Balthazar, 2010).

Adverbial Clauses With Temporal and Causal Conjunctions

A clause is a group of related words that has a subject and a predicate. An independent clause can stand alone, but a dependent (or subordinate) clause cannot stand alone; dependent clauses are combined with independent clauses to make complex sentences. Consider the following example from *The Snowy Day*, a beloved Caldecott Medal book by Ezra Jack Keats (1962/1996, p. 23): “*Before he got into bed he checked his pocket.*” “He checked his pocket,” which can stand alone, is the independent clause. “Before he got into bed,” which cannot stand alone, is a dependent clause. More specifically, it is an adverbial clause, or a dependent clause that acts as an adverb by providing information about time, place, manner, condition, or reason (Justice & Ezell, 2002). In this sentence, “Before he got into bed,” describes when the protagonist, Peter, checked his pocket. Note that a temporal subordinating conjunction, “before,” introduces the adverbial clause.

An example of an adverbial clause with a causal subordinating conjunction can be found in this sentence about spheres and circles from *A Drop of Water: A Book of Science and Wonder*, by Walter Wick (1997, p. 15): “*Because they can form spontaneously, they are also shapes of nature.*” In this sentence, “They are also shapes of nature” is an independent clause. “Because they can form spontaneously” is an adverbial clause that provides a

reason why spheres and circles are shapes of nature. The word *because* functions as causal subordinating conjunction that introduces the adverbial clause.

Adverbial clauses with temporal and causal conjunctions can be a source of confusion for some school-age children, particularly students who have not yet developed a complete understanding of temporal and causal terms. Misunderstandings of these constructions have been attributed to use of three potentially misleading strategies. First, errant sentence comprehension can result from dependence on an *order-of-mention strategy* (Owens, 2016; Paul & Norbury, 2012; Wallach & Miller, 1988). Inspect this construction from *Harry Potter and the Sorcerer's Stone* (Rowling, 1997/1999, p. 223): "*Snape had just awarded Hufflepuff a penalty because George Weasley had hit a Bludger at him.*" Note that the clause noting the penalty appears before the clause that describes the reason for the penalty. A student might lack the insight that the linguistic ordering of the clauses in this sentence reverses the sequence of events. Therefore, the student might fail to fully understand the relationship between these two events. Second, some students may tend to equate an independent clause with the first event in a sequence (Owens, 2016). Examine the following sentence: "*After the storm hit the coast, the Red Cross arrived.*" A student using an *independent-clause-as-first-event strategy* might erroneously conclude that assistance from the Red Cross was available prior to the onset of the storm, since "the Red Cross arrived" is the independent clause in this sentence. Third, students might misinterpret sentences with temporal conjunctions when applying a *probable-order-of-event strategy* (Paul & Norbury, 2012). For example, the imperative sentence, "*Before you eat dinner, wash the dishes,*" might be misunderstood if this sequence of events deviates from a student's belief that dishes are usually washed only after one has finished eating.

Many 5-year-old students understand "before" and "after," but some school-age children continue to have difficulty comprehending adverbial clauses with these conjunctions, applying misleading strategies well into the school-age years (Owens, 2016; Paul & Norbury, 2012; Wallach & Miller, 1988). Full comprehension of the word *because* appears to develop at approximately 7 years, but some children continue to rely on an order-of-mention strategy, and consistent understanding of sentences with *because* might not be attained until between 10 and 11 years (Owens, 2016). Children with language impairments, students with learning disabilities, and English language learners are more likely to experience difficulties comprehending complex sentences with temporal and adverbial conjunctions. Temporal and causal conjunctions are commonly encountered in narrative and expository texts, and understanding of connective words and adverbial clauses is critically important for understanding academic text in social studies, science, and math (Westby, 2012).

Center-Embedded Relative Clauses

A relative clause is a dependent clause that acts as an adjective by providing information about the subject or object of an independent clause (Justice & Ezell, 2002). Relative clauses are often introduced by a relative pronoun, such as *that*, *who*, or *which*. Consider this example from *A Drop of Water: A Book of Science and Wonder* (Wick, 1997, p. 28): "*But in the cold air, water molecules that cling to particles form tiny ice crystals.*" In this sentence, the relative clause "that cling to particles" modifies or describes the subject "water molecules." Also note that this relative clause is embedded within the center of the independent clause, "water molecules . . . form tiny ice crystals," thus splitting the independent clause into two distal structures. This is an important observation because the greater the distance between related parts of a sentence, the more difficult the sentence will be to process (Owens, 2016).

Center-embedded relative clauses can pose processing difficulties when students remain reliant on a *word-order strategy* or a *Subject + Verb + Object strategy* (Owens, 2016; Paul & Norbury, 2012; Wallach & Miller, 1988). Thus, a student might read, "*water molecules that cling to particles form tiny ice crystals,*" and incorrectly conclude that particles, rather than water molecules, form ice crystals, based the last few words in the sentence (i.e., a recency effect). Lack of knowledge about how the center-embedded clause functions results in an inaccurate analysis: particles (Subject) form (Verb) ice crystals (Object).

Early elementary students often find center-embedded clauses to be challenging, and some older elementary and middle school students may continue to have difficulty comprehending sentences with center-embedded relative clauses (Owens, 2016; Sofier, 1999; Wallach & Miller, 1988). This is noteworthy because relative clauses occur regularly in narrative and expository text during the late elementary, middle, and high school years (Scott & Balthazar, 2010). Students with language impairments and learning disabilities who have limited auditory working memory may be particularly susceptible to problems understanding center-embedded clauses (Owens, 2016; Paul & Norbury, 2012).

Sentences With Three or More Clauses

As students move through elementary and middle school grades, they will increasingly encounter sentences with three or more clauses in all genres of text. An example can be found in Walter Wick's (1997, p. 9) *A Drop of Water: A Book of Science and Wonder*: "*Because water molecules cling to each other like tiny magnets, a drop of water can stay in one piece, even as it falls through the air.*" This 26-word complex sentence contains an independent clause ("a drop of water can stay in one piece") and two adverbial clauses.

Table 1. Challenging Sentences.

Structure	Source of Confusion	Misinterpretation
<p>Sentences with passive verb constructions</p> <ul style="list-style-type: none"> ▪ “The cat was chased by the dog.” ▪ “The cat was chased by the mouse.” 	<ul style="list-style-type: none"> ▪ Overreliance on a word-order strategy ▪ An event differs from background knowledge; probable-event strategy 	<ul style="list-style-type: none"> ▪ Cat chased dog ▪ Cat chased mouse
<p>Adverbial clauses with temporal and causal conjunctions</p> <ul style="list-style-type: none"> ▪ “Clap your hands after you touch your nose.” ▪ “After the storm hit, the Red Cross arrived.” ▪ “Before you eat dinner, wash the dishes.” 	<p>Poor understanding of temporal or causal conjunctions and . . .</p> <ul style="list-style-type: none"> ▪ Overreliance on an order-of-mention strategy ▪ Independent-clause-as-first-event strategy ▪ Probable-order-of-event strategy 	<ul style="list-style-type: none"> ▪ Clap hands, touch nose ▪ Red Cross arrived storm hit ▪ Eat dinner, wash dishes
<p>Center-embedded relative clauses</p> <ul style="list-style-type: none"> ▪ “The boy who lost the dog walked home.” 	<ul style="list-style-type: none"> ▪ Overreliance on a Subject + Object + Verb strategy and/or a recency effect (recalling the last few words) 	<ul style="list-style-type: none"> ▪ Dog walked home
<p>Sentences with three or more clauses</p> <ul style="list-style-type: none"> ▪ “We lost the game because our running back fumbled the ball after he was hit.” 	<ul style="list-style-type: none"> ▪ Deficits in attention, working memory, and/or processing speed 	<ul style="list-style-type: none"> ▪ Information from only one or two (of three) clauses is recalled; missing details

The ability to understand and produce sentences with multiple clauses is an important and protracted attainment that develops throughout the school-age years (Eisenberg, 2006; Nippold, 2014; Scott & Balthazar, 2010). English language learners and students who have deficits in attention, working memory, and processing speed may be more likely to experience difficulties comprehending sentences with multiple clauses (Owens, 2016; Pavlenko, 2008).

Information on challenging sentence structures and potential sources of confusion is summarized in Table 1.

Assessment

Teachers and clinicians should consider previewing written text for potentially challenging sentence structures and actively monitoring for difficult sentences during reading activities. They should also look for opportunities to assess students’ sentence-level comprehension rather than assuming that students will have implicitly mastered sentence structures (Snow et al., 2005).

Sentence comprehension can be informally probed prior to or during reading activities. A student’s comprehension of passive constructions can be assessed by asking the student to paraphrase a sentence or answer a directed question (Carnine, Silbert, Kame’enui, & Tarver, 2010; Scott, 2009). After encountering, “The lion was frightened by the mouse,” for example, a reader could be asked to tell what happened in her own words. She could also be asked, “Who was frightened?” A “Simon Says” format for following directions can be used to quickly assess younger elementary students’ comprehension of complex sentences with temporal conjunctions (e.g., “Simon says, ‘clap your hands, after you touch your nose.’ . . . Simon says, ‘before you point to the ceiling, stomp your feet.’”). Understanding of sentences with center-embedded relative clauses can be readily

assessed with directed questions. After reading, “The sheriff who captured the outlaw was wearing a holster,” for example, a student could be asked, “Who was wearing a holster?” Finally, comprehension of sentences with multiple clauses can be informally probed by asking students to paraphrase sentences, recalling as many details as possible.

When difficulties are suspected, educators and clinicians can employ or create criterion-referenced assessments to further explore potential areas of weakness, establish baseline levels of performance, and document student progress (Paul & Norbury, 2012; Salvia, Ysseldyke, & Bolt, 2007). Criterion-referenced assessments examine a student’s ability to attain a certain level of performance on a particular skill or behavior. For example, a special education teacher might ask a student who appears to have difficulty with center-embedded relative clauses to answer a series of yes–no questions about 10 stimulus sentences with these clauses. If the student falls below a predetermined criterion (e.g., 80% accuracy), understanding of center-embedded relative clauses might become an individualized education program objective and intervention target.

Intervention

General Principles

The teaching procedures and instructional sequence that follow reflect three general principles. First, many diverse learners, including students with language impairments and learning disabilities, will benefit from receiving instruction in both the oral and written modalities (Eisenberg, 2006; Fey, Long, & Finestack, 2003; Paul & Norbury, 2012; Scott & Balthazar, 2010). The second principle is that many students will benefit from being taught about sentence structure by strategically integrating reading and writing

activities. Although it is not the primary focus of this article, instruction on sentence writing can be an effective approach to support sentence-level reading comprehension (Hochman, 2011; Saddler, 2012; Scott, 2009). The third principle is that teaching will be more effective when explicit instruction on sentence structures is combined with opportunities to practice skills during activities embedded within the general education curriculum (Eisenberg, 2006). A corollary of this principle is that students should also receive ample opportunities to practice with sentences that are encountered in authentic text (e.g., content area textbooks) or generated during student writing (Eisenberg, 2006; Paul & Norbury, 2012; Scott & Balthazar, 2010).

The next two sections focus on (a) teaching activities and (b) an instructional sequence that can be used to improve students' comprehension of challenging sentence structures.

Teaching Procedures

Several teaching procedures that can be used to increase students' understanding of difficult sentences are presented below. Emphasis is given to showing how particular procedures can be used to target specific sentence structures.

Directed questions. The strategic use of questions to scaffold and enhance comprehension has been recognized as an effective teaching strategy in the general and special education literature (Marzano, Norford, Paynter, Pickering, & Gaddy, 2001; Swanson & Hoskyn, 1998). Carnine et al. (2010) described a direct instruction sequence that can be used to teach older elementary and middle school students to comprehend sentences with active and passive verbs (Carnine et al., 2010). After receiving explicit instruction on both the active and passive voice, students are asked a series of directed questions about three to five pairs of sentences that are initially presented in an active voice and then in a passive voice.

Example 1:

A special education teacher provides reading instruction to a small group of sixth grade students with learning disabilities. The students in this group have demonstrated difficulties comprehending sentences with passive verbs during reading activities. After modeling how to respond to questions about active and passive sentences, the teacher provides each student with opportunities for guided practice.

Instructor: "I'll say a sentence and then ask you a question. . . . 'Diego found Rebecca.' . . . Who was found?"

Student: "Rebecca."

Instructor: "Who did the finding?"

Student: "Diego."

Instructor: "Now listen to a different sentence. . . . 'Diego was found by Rebecca.' . . . Who was found?"

Student: "Diego."

Instructor: "Who did the finding?"

Student: "Rebecca."

Pictorial support. Visual supports, including pictographic representations, are a powerful way to present new information to students (Kame'enui, Carnine, & Dixon, 2002; Marzano et al., 2001). Pictures are well suited for teaching younger students to recognize and understand active versus passive verb constructions. Following the provision of explicit instruction and teacher modeling, for example, students could be asked to draw pictures representing sentences with active and passive verbs (Paul & Norbury, 2012).

Example 2:

Two students in a second grade-reading group appear to have trouble understanding sentences with passive verb constructions. Their reading teacher provides these students with explicit instruction on verbs with active and passive voices, while drawing simple pictures depicting sentences with active and passive verbs. She then provides opportunities for the students to draw sentences, initially picking exemplars that are consistent with their background knowledge and expectations:

"Now it's your turn to draw a picture. Draw, 'The cat chased the mouse.'"

Once the students have accurately drawn a sentence with an active verb construction, they are asked to draw a second sentence with a passive verb construction.

"Let's try a different sentence. 'The mouse was chased by the cat.'"

After the two students demonstrate increased mastery of sentences with active and passive verbs during drawing tasks, the reading teacher will progress to an extension activity, comparing and contrasting iterations of these sentences by drawing "silly" sentences:

"The mouse chased the cat." . . . "The cat was chased by the mouse."

Sentence starters. Students with language impairments and learning disabilities tend to use short, simple sentences with active verb forms (Justice, 2010; Paul & Norbury, 2012). Sentence starters are an effective technique for helping these students to understand and write more elaborated sentences, including complex sentences with adverbial clauses that begin with temporal or causal conjunctions (e.g., *before*, *after*, *because*, *although*, *until*; Hochman, 2011). Writing exercises with sentence starters can be used after providing initial instruction on how temporal and causal conjunctions are used to introduce clauses in complex sentences.

Example 3:

A special education teacher is working with a fourth grade student with impaired reading comprehension. The student has difficulty comprehending complex sentences with adverbial clauses, and her writing samples are characterized by unelaborated sentences with a paucity of subordinating conjunctions.

Instructor: *“We’ve learned that conjunctions are used to join ideas within sentences. I’m going to demonstrate how the conjunctions ‘before,’ ‘after,’ and ‘because’ can be used to write complex sentences. I’ll write about my summer, and each sentence will start with a dependent clause that begins with one of these conjunctions.”*

The teacher writes the conjunctions **Before**, **After**, and **Because** on the whiteboard. He then models how to write sentences that begin with these conjunctions:

Before we went on vacation, our car was repaired.

After we returned from vacation, my grandparents visited.

Because there was thunder, we got out of the water.

“Now I want each of you to write three sentences about your summer. Be sure to use each of these conjunctions—at the beginning of a dependent clause—to start a sentence.”

Picture sequencing. Young elementary students can be asked to manipulate picture sequences to enhance their understanding of adverbial clauses with temporal and causal conjunctions (Paul & Norbury, 2012; Wallach & Miller, 1988). The following example shows how a clinician might introduce guided practice with a picture sequencing activity.

Example 4: An SLP has a small intervention group consisting of first grade students with language impairment. Each of the three students has difficulty understanding complex sentences with temporal conjunctions. Following explicit small group instruction on the words *before* and *after*, the clinician engages the students in an interactive storybook reading with *A Snowy Day* (Keats, 1962/1996). She then gives each child two pictures from the book. One picture shows the protagonist, Peter, sleeping in his bed. The other picture shows Peter reaching into his coat pocket and checking for a snowball. The SLP then rereads the following sentence, *“Before he got into bed he checked his pocket”* (p. 23), and asks the children to arrange the pictures in order based on this target sentence.

Sentence combining. Sentence combining involves merging simple *kernel sentences* to produce complex sentences (Saddler, 2012). This versatile procedure can be used to facilitate comprehension of complex sentences with (a) adverbial clauses with temporal or causal conjunctions, (b) center-embedded relative clauses, and (c) multiple clauses.

Example 5:

A special education teacher is providing reading instruction to a fifth grade student with a learning disability. The student demonstrates difficulty comprehending complex sentences in his science and social studies textbooks, including sentences with center-embedded relative clauses and sentences with multiple clauses. The special education teacher, who has previously introduced the student to relative clauses and relative pronouns, uses several sentences related to content in the next science unit to teach the student how to combine sentences.

Instructor: *“Now let’s combine two simple sentences to make a single complex sentence with a relative clause. We’ll start with these two simple sentences.”*

Two kernel sentences are written on the whiteboard:

Marie Curie won two Nobel prizes.

Marie Curie discovered the element radium.

“Let’s use the relative pronoun ‘who’ to change the second sentence into a relative clause. Our relative clause could be, ‘who discovered the element radium.’”

The relative clause is written on the whiteboard:

who discovered the element radium

“Let’s try placing the relative clause in the center of the sentence.”

The instructor writes a complex sentence with a center-embedded relative clause on the whiteboard:

Marie Curie, who discovered the element radium, won two Nobel prizes.

She then underlines the center-embedded clause and points at the subject that it modifies: Marie Curie.

Marie Curie, who discovered the element radium, won two Nobel prizes.

“Here we can see how the relative clause acts like an adjective; it describes the subject of the sentence, Marie Curie.”

Sentence decomposition. Sentence decomposition or segmentation involves breaking a syntactically complex sentence down into simpler sentences (Carnine, Silbert, & Kame’enui, 1997). This procedure is ideal for teaching comprehension of sentences with center-embedded relative clauses and sentences with multiple clauses (Paul & Norbury, 2012; Scott & Balthazar, 2010; Wallach & Miller, 1988).

Table 2. Specific Teaching Procedures.

Potential Learning Objective	Teaching Procedure
<ul style="list-style-type: none"> ▪ Comprehend sentences with passive verb constructions 	<ul style="list-style-type: none"> ▪ Directed questions ▪ Pictorial support
<ul style="list-style-type: none"> ▪ Comprehend sentences with adverbial clauses that have and temporal or causal conjunctions 	<ul style="list-style-type: none"> ▪ Sentence starters ▪ Picture sequencing ▪ Sentence combining
<ul style="list-style-type: none"> ▪ Comprehend sentences with center-embedded relative clauses 	<ul style="list-style-type: none"> ▪ Sentence combining ▪ Sentence decomposition
<ul style="list-style-type: none"> ▪ Comprehend sentences with three or more clauses 	<ul style="list-style-type: none"> ▪ Sentence combining ▪ Sentence decomposition

Example 6:

A reading teacher is providing supplemental instruction to a small group of third grade students with reading difficulties. Each of the students demonstrates difficulty comprehending long sentences with three or more clauses. The instructor uses a sentence from *A Drop of Water: A Book of Science and Wonder* (Wick, 1997, p. 9), which is used in the school's third grade curriculum, to introduce the sentence decomposition procedure.

Instructor: "This is a long sentence from the science book that we are reading. The sentence contains a lot of information."

The sentence is written on the whiteboard:

This sphere stretches because of the drop's weight and motion, but surface tension helps keep the drop together, as if it were held in an elastic skin.

"Now watch me break this sentence down into several shorter sentences."

The sentences are written in succession on the whiteboard:

The sphere stretches.

The weight and motion of the water drop cause the stretching.

Surface tension helps keep the water drop together.

The surface tension acts like an elastic skin.

"Notice how each of these short sentences tells us about a different idea."

The specific objectives and teaching procedures that an instructor focuses on will depend on which sentence structures are problematic for a given student. Table 2 presents an overview of potential learning objectives and corresponding teaching procedures.

Instructional Sequence

Although different teaching procedures can be implemented depending on the type of sentence structures to be addressed, instructors should follow a consistent teaching progression that emphasizes explicit instruction with opportunities for guided practice and authentic applications.

Teacher modeling. Lessons should typically begin with clear explanations of targeted sentence structures and the purpose of the lesson: learning to understand challenging or "tricky" sentences. It is essential for instructors to model comprehension and production of sentence structures using clear, concise, and consistent language, as well as demonstrations with multiple examples (e.g., Carnine et al., 2010).

Visual and auditory cues are very effective methods to make syntactic features more explicit to students (Kame'enui et al., 2002; Paul & Norbury, 2012). When initially teaching students about sentences with passive verb constructions, small function words with minimal lexical meaning should be emphasized. An instructor might underline small function words, for example, to make them more prominent on a whiteboard: *The cat was chased by the dog.* The instructor might also place spoken stress on the same function words when reading the sentence aloud. This initial scaffolding can help to reduce students' overreliance on word order strategies. The same method can be employed to make temporal and causal conjunctions more salient during sentence starter activities: *After the storm hit the coast, the Red Cross arrived.* By signaling the presence of a temporal conjunction at the beginning of an adverbial clause, the visual cue might facilitate deeper processing, lessening the likelihood that students will revert to a potentially a misleading order-of-mention strategy.

Visual cues can also be used to enhance the explicitness of sentence combining activities. Target sentences can be presented with underlined clues or key words placed in parentheses (Saddler, 2012). Examine the two kernel sentences that were used to model the creation of a complex sentence with a center-embedded relative clause in Example 5:

Marie Curie won two Nobel prizes.

Marie Curie discovered the element radium.

The provision of a key word, the relative pronoun *who* in parenthesis at the end of the second sentence, would have enhanced the explicitness of the demonstration:

Marie Curie discovered the element radium. (who)

Color-coded strips are another method of making sentence structures more conspicuous (Paul & Norbury, 2012). Consider this example of a complex sentence with a center-embedded relative clause from *The Jungle Book* (Kipling, 1894/2012, p. 56): “*Bagheera, who did not know much about Kaa, was naturally suspicious.*” The relative clause, “who did not know much about Kaa,” could be placed on a colored strip of paper and physically moved in and out of the remaining sentence (“*Bagheera . . . was naturally suspicious*”). This would allow students to more clearly see how the subject, Bagheera, has been split from the rest of the independent clause. It would also promote a deeper understanding of how the relative clause functions to tell the reader about Bagheera. These important insights might decrease students’ tendency to be misled by a recency effect when interpreting this sentence. Put another way, students will be better able to recognize that it was Bagheera, not Kaa, who was naturally suspicious.

Guided practice. After the instructor has explained and modeled targeted sentence structures, students should be provided with ample opportunities for guided and independent practice (Saddler, 2012; Smith, 1999). Guided practice can occur during whole class, small group, or individual discussions depending on student needs and the method of service delivery. Timely corrective feedback should be given during practice, drawing students attention to relevant syntactic structures and missed cues. Instructors should also be alert for teachable moments, facilitating discussions on *where* students have applied misleading processing strategies and *how* errant strategies have caused students to misunderstand sentences.

Instructional scaffolds should be systematically faded during guided practice (Kame’enui et al., 2002). Scaffolding can be faded by gradually removing visual and auditory cues, such as underlining, colored paper strips, and stress on small function words when speaking. This step is formally integrated within sentence combining, for example, when students transition from *cued* exercises (i.e., with underlined clues or key words placed in parentheses) to *open exercises* where kernel sentences are combined without visual cues (Saddler, 2012).

Authentic application. Generalization will be enhanced when students receive opportunities for guided practice that is embedded within classroom literacy activities (Eisenberg, 2006). Instructors can also help students to carryover their knowledge and skills by utilizing challenging sentences from authentic resources. Potential sources of sentences include trade books, literature series, content-area texts,

magazines, and online materials (Saddler, 2012). Moreover, students may find this contextualized practice to be more engaging and motivating than isolated practice that is limited to drills and worksheets. The following vignettes briefly exemplify potential applications.

Early elementary application. An SLP collaborates with a first grade teacher to co-teach a mini-lesson on passive verb constructions. This whole-class activity starts with explicit instruction on active and passive verb forms. The instructors then proceed to an interactive discussion based on pictures from Mercer Mayer’s (1967) *A Boy, a Dog, and a Frog*. The SLP points to the appropriate picture and says, “*Here we could say, ‘The frog followed the boy’*” as the classroom teacher writes the sentence on a whiteboard. The SLP then says, “*Now, I’ll say it another way. . . . ‘The boy was followed by the frog’*” as her colleague writes the new sentence on the board. Next, the SLP starts a whole class discussion by asking, “*Do these two sentences mean the same thing . . . or do the two sentences have different meanings?*” The instructors ensure that two students with language impairment actively participate and receive timely corrective feedback as needed. An added benefit of this lesson is that other students in the class, including several English language learners, might also improve their understanding of passive verb constructions.

Middle school application. Consider a special education teacher who co-teaches in a sixth grade science class where several students read substantially below grade level. Several of the students have trouble understanding complex sentences, including sentences with center-embedded relative clauses and multiple clauses. In the process of previewing an upcoming reading, the special education teacher notes several examples of these structures in the sixth-grade science text. Anticipating that some students will have difficulty understanding these structures, she and the general education teacher plan to review the sentence decomposition procedure that she had previously taught in the science class. They pick two examples of sentences with center-embedded relative clauses and two examples of sentences with multiple clauses from the textbook. At the start of the next lesson, the teachers lead the class through guided practice with these four sentences.

Summary

The information and procedures presented in this article can be used to enhance students’ ability to unravel difficult sentences. It should be noted that other potentially challenging syntactic structures were not addressed (e.g., elaborated noun phrases, nonfinite verb phrases, nominal clauses, and intra- and inter-sentential pronouns; Eisenberg, 2006; Nippold, 2007; Scott, 2009). Educators and clinicians are encouraged to pursue information about these

Table 3. Recommended Resources.

Resource	Description
General information on syntax	
<ul style="list-style-type: none"> ▪ Justice, L. M., & Ezell, H. K. (2007). <i>The syntax handbook: Everything you knew about syntax . . . but forgot</i>. Greenville, SC: Thinking Publications. ▪ Owens, R. E. (2016). <i>Language development: An introduction</i> (9th ed.). Upper Saddle River, NJ: Pearson. ▪ Scott, C. M., & Balthazar, C. H. (2010). The grammar of information: Challenges for older students with language impairments. <i>Topics in Language Disorders, 30</i>, 288–307. 	<p>This book provides an overview of English syntax, including clauses and sentence types. Includes numerous examples and exercises.</p> <p>Sections on “Syntactic and Morphologic Development” and an appendix on “Background Grammar” provide developmental perspectives on the acquisition and mastery of sentence structures.</p> <p>This article describes distinctive grammatical features of expository (informational) text. The article also addresses assessment and intervention with older students who have language impairments.</p>
Instruction, intervention, and writing-reading connections	
<ul style="list-style-type: none"> ▪ Eisenberg, S. L. (2006). Grammar: How can I say that better? In T. A. Ukrainetz (Ed.), <i>Contextualized language intervention: Scaffolding pre-K-12 literacy achievement</i> (pp. 145–194). Eau Claire, WI: Thinking Publications. ▪ Greene, J. (2009). <i>LANGUAGE! The comprehensive literacy curriculum</i>. Longmont, CO: Sopris West. Voyagersopris.com ▪ Greene, V. E., & Enfield, M. (2005) <i>Framing your thoughts</i>. Dallas, TX: Language Circle Enterprises. Projectread.com ▪ Saddler, B. (2012). <i>Teacher’s guide to effective sentence writing</i>. New York, NY: Guilford. ▪ Schumaker, J. B., & Sheldon, J. B. (1998). <i>Fundamentals in the sentence writing strategy</i>. Lawrence: University of Kansas, Center for Research on Learning. 	<p>This chapter provides intervention strategies targeting grammar in oral and written language. Includes procedures for structured intervention and contextually embedded activities.</p> <p><i>LANGUAGE!</i> is a comprehensive literacy curriculum that integrates oral and written language. Grammar and usage are included as an instructional component in six-step lessons.</p> <p>The <i>Framing Your Thoughts Sentence Structure Program</i> uses sequential instruction and multisensory activities that progress from simple to complex sentence building. Graphic symbols are used to help explain sentence structure.</p> <p>This book provides evidence-based instructions on assessing and teaching sentence-level skills to students in Grades 2–12. Includes exercises.</p> <p>This resource is a component of the strategic instruction model developed by researchers at the University of Kansas. Students are taught to recognize and write 14 sentence patterns.</p>

structures in order to expand their ability to anticipate and address difficult sentences. Toward this end, resources with further information on syntax and additional instructional activities are listed in Table 3.

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