The Importance of Teaching Syntax

By: Whitney Klein

Agenda

- Important of syntax relating to reading comprehension
- Overview and definitions
- Four difficult sentence structures identified
- Assessment
- Treatment
  - Intervention materials
  - Treatment Procedures
  - Instructional Sequence
- Goals
- Recommended Resources
- Questions
- References
Does this sound like any of your students?

- Reading comprehension isn’t improving
- Can’t answer inferencing questions although you have worked on it
- Trouble with retell- sentences just aren’t sounding right
- Written language and essays are full of grammatical errors and sentences that don’t make sense (i.e. simple structures over and over again)
- Weak grammar in general (i.e. use vocabulary word in a sentence, get same sentence structure over and over again)
- Can’t follow directions in class (working on following direction goal)
- Unsure of “processing difficulties” (Dudek-Brannan, 2018)
What is missing?

Syntax
Syntax

What is syntax?

- “The rules that teach us how to put words together to form a coherent sentence”
- “The rules that explain how to use a vocabulary word correctly in a sentence”
- The rules that show us how to use grammatically correct sentences in essays
- The rules that stress what words in a sentence are important, so we can UNDERSTAND what we are reading and UNDERSTAND directions we hear in class
- The rules that help us understand a sequence
- The rules that help us speak in an organized way and understand what others are saying
- (Dudek-Brannan, 2018)

Difficulties with syntax is the underlying cause for difficulties in so many other language areas!
Why is syntax so important?

- Early elementary years - learning to read. Late elementary years - shifting to increasing emphasis on reading to learn and content area knowledge
  - Prominent feature of literate language (decontextualized academic discourse and written text): longer and more advanced syntactic structures
  - These texts also have sentence structures that appear with relatively low frequency during casual conversation
    - Verbs with passive voice, subordinate sentences, and sentences with multiple layers of embedding
- “An understanding of sentence structure, or syntax, is generally recognized as making a substantial contribution to students’ comprehension of written text. (Zipoli, 2017)
- Knowledge and use of complex sentences in emphasized in the reading, writing, speaking, and listening domains of the Common Core State Standards for English and Language Arts (Roth, 2014).
- People with stronger language skills use more complex sentences than people who don’t.
Impact on our caseloads?

- Many educators and clinicians appear to lack the syntactic knowledge or instructional skills needed to support students’ comprehension of difficult sentence structures
  - We can be the experts!
- As educated adults, these skills are very easy for us.
- Many children with reading difficulties often demonstrate syntactic difficulties.
- “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”
- “We won’t be able to understand what we read if we can’t understand one sentence at a time.” (Scott, 2009)
- GOOD NEWS: “Working on problem sentences types not only improved sentence production (Balthazar & Scott, 2009), but it can also have carryover effects on reading abilities (Gillon & Dodd, 1995)” (Dudek-Brannan, 2018)
Important Terms - What is your syntax IQ?

- Sentence:
- Phrase:
- Clause:
- Simple sentence:
- Compound sentence:
- Complex sentence:
- Coordinating conjunction:
- Subordinating conjunction:
- Dependent Clause:
- Independent Clause:
Examples of Major Syntactic Forms

### APPENDIX C

**Examples of Major Syntactic Functions**

<table>
<thead>
<tr>
<th>FORM</th>
<th>CATEGORY</th>
<th>EXAMPLE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Simple</td>
<td>Tommy is crying. Milk is good</td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td>A little boy is crying. The milk is good</td>
</tr>
<tr>
<td></td>
<td>Compound</td>
<td>A little boy and little girl are crying</td>
</tr>
<tr>
<td>Object</td>
<td>Direct</td>
<td>Jennifer told Helen. He kicked her. Jennifer gave the ball to Helen</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
<td></td>
</tr>
<tr>
<td>Complement</td>
<td>Following copula be</td>
<td>It is cold. They are tired</td>
</tr>
<tr>
<td></td>
<td>Following an intransitive verb</td>
<td>Jack seems pleased. It works well</td>
</tr>
<tr>
<td>Predicate</td>
<td>Simple</td>
<td>The girl wants a cookie</td>
</tr>
<tr>
<td></td>
<td>Complete</td>
<td>The girl wants a cookie</td>
</tr>
<tr>
<td></td>
<td>Compound</td>
<td>The boy caught and threw the ball</td>
</tr>
<tr>
<td></td>
<td>Nominal Predicate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prepositional noun</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prepositionless noun</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Qualificative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adverbial</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verb Predicate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verb standing alone</td>
<td></td>
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<tr>
<td></td>
<td>Prepositional object</td>
<td></td>
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<tr>
<td></td>
<td>Prepositionless object</td>
<td></td>
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<tr>
<td></td>
<td>Adverb</td>
<td></td>
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<tr>
<td></td>
<td>Adverbal clause</td>
<td></td>
</tr>
</tbody>
</table>

### Appendix C (continued)

| Phrase     | Noun                            | the boy, a child, a short nap                                               |
|           | Verb                            | came, has already come                                                       |
|           | Prepositional                   | in the back, on the refrigerator                                            |
|           | Adjective                       | very expensive, quite outrageous                                            |
|           | Adverb                          | right there, over here, rather quietly                                     |
|           | Infinitive                      | The manager needs to tell us                                               |
|           | Gerund                          | Jumping through the hoops was easy                                          |
|           | Participle                      | Being early, we decided to help                                             |
| Clause     | Independent                     | I am right, aren't I?                                                       |
|           | Dependent (noun)                | That you are coming is unbelievable                                        |
|           | Dependent (adverb)              | Judy called because I've been so sad                                        |
|           | Dependent (adjective)           | The house that caught fire is for sale                                     |
|           | Dependent (comparative)         | She is more relaxed than he is                                             |

| Sentence   | Simple                          | The cows in the pasture are eating                                          |
|           | Compound                        | The wind is howling and it is raining                                       |
|           | Complex                         | The wind is howling louder than I imagined                                  |
|           | Compound-complex                | It's Friday and the man whom I love is busy                                |
|           | Declarative                     | I love the summer                                                           |
|           | Imperative                      | Tell me you love the summer                                                |
|           | Exclamatory                     | It's summer!                                                                |
|           | Interrogative                   | When do you think it will rain?                                            |
|           | Wh- question                    | Do you think it will rain?                                                 |
|           | Yes/No question                 | It will rain, won't it?                                                    |
|           | Tag question                    |                                                                           |
Add in school age development glossary

https://centerforspeech.sharepoint.com/:b:/g/ES8PyEFvpYVJuuE12li-IJ0B7gH2Ir55dXQrnBIDyEM0fQ?e=ks790r
► Unraveling Difficulty Sentences: Strategies to Support Reading Comprehension
► The Ultimate Guide to Sentence Structure
► The Syntax Bundle
► The Informed SLP
Where to begin?

- I know my student struggles with sentence structure, but what do I target?
- What types of sentences are the MOST difficult to process?
- According to Zipoli (2017), the following four sentence types are most difficult:
  - 1) Sentences with passive voice
  - 2) Sentences with adverbial clauses and casual/temporal conjunctions
  - 3) Sentences with relative clauses
  - 4) Sentences with three or more clauses
Sentences with passive verb constructions

- A sentence has a **passive voice** when the agent, or “doer” of an action, and the recipient of that action are reversed.

- A sentence has an active voice when the “doer” of an action (the agent) comes before the receiver of the action.
  - Active: The boy threw the ball
  - Passive: The ball was thrown by the boy.
  - Active: The students completed the assignment.
  - Passive: The assignment was completed by the students.

- Easier to process active sentences
Sentences with Passive Verb Constructions Continued....... 

- Main reason students are confused: overreliance on a word-order strategy
- To process a passive sentence, you have to hold the receiver in your short-term memory long enough to hear the agent AND then reorganize the order of the agent/action/receiver to understand it.
- Students have to understand small function words: “was” and “by” and how they operate within a sentence.
- Another area of confusion: “When reading passive sentences about events that differ from their expectations, background knowledge, or logic”.
  - i.e. The lion was frightened by the mouse.
- Lastly, passive verb constructions are often found in narrative and expository text, and the increasing complexity of passive sentences in context areas can be difficult for late elementary, middle, and high school students.
Adverbial clauses with temporal and causal conjunctions

- Clauses: groups of words with a subject and a predicate - some stand alone and some can’t
  - Independent clause: clause that can stand-alone “The children ate dinner”
  - Subordinate clause (i.e. dependent clause): clause that cannot stand alone. It MUST be attached to an independent clause “because it was night time”

- Two types of subordinate conjunctions:
  - Coordinating conjunctions: cohesive devices that connect parts of a sentence together FANBOYS
  - Subordinate conjunctions: explain relationships between parts of sentences; such as “why” or “when” something happened.
Subordinating Conjunctions

- Temporal and casual conjunctions are types of subordinating conjunctions.
- **Temporal conjunctions:** words that connect clauses or words within clauses.
  - They explain WHEN
  - words like “before”, “after”, “while”
- **Casual conjunctions:** words that also connect clauses or words.
  - They explain WHY
  - Words like “because”, “since”, “therefore”
- **Adverbial clauses:** clauses that contain adverbs
  - Adverb describes how something is done
  - Words like “excitedly”, “soon” “slowly”
Find each structure in the sentence:

“Since we got ready quickly, we had time to go out to breakfast.”

1. Casual conjunction
2. Subordinate/dependent clause
3. Adverbial clause
4. Independent clause
Difficulties with adverbial clauses with temporal and causal conjunctions

- Confusion for children who have not yet developed a complete understanding of casual and temporal terms.
- Dependence on “order-of-mention strategy”
  - Happy Potter Excerpt: “Snape had just awarded Hufflepuff a penalty because George Weasley had hit a Bludger at him”
- Dependence on “independent-clause-as-first-event strategy”
  - “After the storm hit the coast, the Red Cross arrived.”
- Dependence on “probable-order-of-event” strategy
  - Before you eat dinner, was the dishes
- “Children with language impairments, students with learning disabilities, and ELL students are more likely to experience difficulties comprehending complex sentences with temporal and adverbial conjunctions. Temporal and casual 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.”
Center-embedded relative clauses

- Relative clause: dependent clause that acts as an adjective by providing information about the subject or object of an independent clause.
  - Usually start with a relative pronoun; “that”, “who”, “which”
  - “But in the cold air, water molecules that cling to particles form tiny ice crystals.”
    - Relative clause: “that cling to particles” modifies or describes the subject water molecules
  - Difficulties when students rely on a word-order strategy (subject +verb+object)

- Early elementary and some older elementary and middle school students may continue to have difficulty with comprehending sentences with center-embedded relative clauses
  - Important for us to know because relative clauses occur regularly in narrative and expository texts.

- Students with language impairments and learning disabilities who have limited auditory working memory may be particularly susceptible to problems understanding center-embedded clauses.
The ability to understand and produce sentences with multiple clauses is extremely important.

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.
Table 1. Challenging Sentences.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Source of Confusion</th>
<th>Misinterpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentences with passive verb constructions</td>
<td>▪ Overreliance on a word-order strategy</td>
<td>▪ Cat chased dog</td>
</tr>
<tr>
<td>▪ “The cat was chased by the dog.”</td>
<td>▪ An event differs from background knowledge; probable-event strategy</td>
<td>▪ Cat chased mouse</td>
</tr>
<tr>
<td>▪ “The cat was chased by the mouse.”</td>
<td>▪ Poor understanding of temporal or causal conjunctions and . . .</td>
<td></td>
</tr>
<tr>
<td>Adverbial clauses with temporal and causal</td>
<td>▪ Overreliance on an order-of-mention strategy</td>
<td>▪ Clap hands, touch nose</td>
</tr>
<tr>
<td>conjunctions</td>
<td>▪ Independent-clause-as-first-event strategy</td>
<td>▪ Red Cross arrived storm hit</td>
</tr>
<tr>
<td>▪ “Clap your hands after you touch your nose.”</td>
<td>▪ Probable-order-of-event strategy</td>
<td>▪ Eat dinner, wash dishes</td>
</tr>
<tr>
<td>▪ “After the storm hit, the Red Cross arrived.”</td>
<td>▪ Overreliance on a Subject + Object + Verb strategy and/or a recency effect (recalling the last few words)</td>
<td>▪ Dog walked home</td>
</tr>
<tr>
<td>▪ “Before you eat dinner, wash the dishes.”</td>
<td>▪ Deficits in attention, working memory, and/or processing speed</td>
<td>▪ Information from only one or two (of three) clauses is recalled; missing details</td>
</tr>
<tr>
<td>Center-embedded relative clauses</td>
<td>▪ Overreliance on a Subject + Object + Verb strategy and/or a recency effect (recalling the last few words)</td>
<td></td>
</tr>
<tr>
<td>▪ “The boy who lost the dog walked home.”</td>
<td>▪ Deficits in attention, working memory, and/or processing speed</td>
<td></td>
</tr>
<tr>
<td>Sentences with three or more clauses</td>
<td>▪ Overreliance on a Subject + Object + Verb strategy and/or a recency effect (recalling the last few words)</td>
<td></td>
</tr>
<tr>
<td>▪ “We lost the game because our running back fumbled the ball after he was hit.”</td>
<td>▪ Deficits in attention, working memory, and/or processing speed</td>
<td></td>
</tr>
</tbody>
</table>
Assessment

- Assess students’ sentence level comprehension
  - Passive construction: ask student to paraphrase a sentence or answer a directed question
  - Temporal Conjunctions: “Simon Says” game
    - Simon says “clap your hands after you touch your nose”
  - Center-Embedded relative clauses: assessed with directed questions
  - Multiple clauses: informally probed by asking students to paraphrase sentences, recalling as many details as possible
  - Criterion-referenced assessments
- The Test of Early Grammatical Impairment (free!)
- The Structured Photographic Expressive Language Test- 3rd Edition
- Sentence level subtests- formulating sentences, grammatical judgement, sentence combine.
- Language sample!
Intervention - general principles

- Instructional sequence and teaching procedures reflect three general principles
  1) 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, Finestalk, 2003; Paul & Norbury, 2012; Scott & Balthazar, 2010)
  2) Many students will benefit from being taught about structure by strategically integrating reading and writing activities.
  3) Teaching will be more effective when explicit instruction on sentences structures is combined with opportunities within the general education curriculum.
Intervention for Syntax:

- Syntax does not have many pre-packaged intervention options out there for school-aged students.
- Ebbel’ 2014 review of grammar interventions (provided on next slide)
- Dr. Karen’s Ultimate Guide to Sentence Structure (on drive)
- Dr. Karen’s Ultimate Guide to Sentence Structure Bundle (on drive)
- *The Syntax Handbook: Everything you have Learned About Syntax... But Forgot* by Laura M. Justice and Helen K. Ezell
- *The Acquisition of Complex Sentences* (Dissel, 2004)
- Story Champs
- A Systematic Approach Toward More Effective Language Therapy
- Teacher’s Guide to Effective Sentence Writing (What Works for Special-Needs Learners)
  - [https://www.amazon.com/Teachers-Effective-Sentence-Special-Needs-Learners/dp/1462506771](https://www.amazon.com/Teachers-Effective-Sentence-Special-Needs-Learners/dp/1462506771)
- Shape Coding
  - [https://www.moorhouse.surrey.sch.uk/shape-coding](https://www.moorhouse.surrey.sch.uk/shape-coding)
- All agree that explicit approached (metalinguistics) are most important and promising for therapy of school-aged children
- Increasing your syntactic knowledge and feeling confident teaching is will allow you the tools to diagnosis and pick a great treatment approach!
Intervention - teaching procedures (Zipoli, 2017)

- Directed questions
- Pictorial support
- Sentence starters
- Picture sequencing
- Sentence combining
- Sentence decomposition
Directed Questions

- Strategic use of questions to scaffold and enhance comprehension
- Carinine et. Al (2010): Direct instruction sequence used to teach older elementary and middle school students to comprehend sentences with active and passive voice
  - 1. explicit instruction on active and passive voice
  - 2. students then asked a series of directed about 3-5 pairs of sentences that are initially presented in active voice then passive voice.
Pictorial Support

- Visual supports
- Pictures great for younger students to recognize and understand active vs. passive verb constructions.
- Draw pictures representing sentences with active and passive verbs
Sentence Starters

- Effective technique for helping students understand and write more elaborate sentences, including complex sentences with adverbial clauses that begin with temporal or causal conjunctions.
- Use this AFTER explicit instruction on how temporal and causal conjunction are used to introduce clauses.
- Example: Write “before”, “after”, and “because” on whiteboard.
- Models writing a sentence starting with these words. Ask student to write sentence using your model.
Picture Sequencing

- Manipulate picture sequences to enhance their understanding of adverbial clauses with temporal and casual conjunctions

- Example:
  1. explicit instruction of the words “before” and “after”
  2. Read a story, have 2 pictures from the book representing these words.
  3. Say “Before he got into bed, he checked his pocket”
  4. Child arranges pictures in the correct order
Sentence Combining

- Combining simple sentences to produce complex sentences.
- Can be used to facilitate comprehension of complex sentences with adverbial clauses with temporal or causal conjunctions, center-embedded relative clauses, and multiple clauses.
- Example:
  - Student has difficulty comprehending complex sentences in his science and social studies textbook including sentences with center-embedded relative clauses and sentences with multiple clauses.
  - 1. Introduce student to relative clauses and relative pronouns
  - 2. Use several sentences related to content in the next science unit to teach how to combine
  - “Let’s combine two simple sentences to make a simple complex sentence with a relative clause”
  - Write relative clause on the board and explain which sentence it “attaches” to
  - Model the complex sentence on the board
Sentence Decomposition

- Also called “sentence decomposition”
- Breaking a syntactically complex sentence down into simpler sentences
- Ideal for teaching comprehension of sentences with center-embedded relative clauses and sentences with multiple clauses
- Example:
  1. Take long, complex sentence from a science text book
  2. “watch me break this sentence down into several shorter sentences”
  3. write each sentence on the white board
  4. “Notice how each of these short sentences tells us about a different idea”
Table 2. Specific Teaching Procedures.

<table>
<thead>
<tr>
<th>Potential Learning Objective</th>
<th>Teaching Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Comprehend sentences with passive verb constructions</td>
<td>▪ Directed questions</td>
</tr>
<tr>
<td>▪ Comprehend sentences with adverbial clauses that have and temporal or causal conjunctions</td>
<td>▪ Pictorial support</td>
</tr>
<tr>
<td>▪ Comprehend sentences with center-embedded relative clauses</td>
<td>▪ Sentence starters</td>
</tr>
<tr>
<td>▪ Comprehend sentences with three or more clauses</td>
<td>▪ Picture sequencing</td>
</tr>
<tr>
<td></td>
<td>▪ Sentence combining</td>
</tr>
<tr>
<td></td>
<td>▪ Sentence decomposition</td>
</tr>
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<td></td>
<td>▪ Sentence combining</td>
</tr>
<tr>
<td></td>
<td>▪ Sentence decomposition</td>
</tr>
</tbody>
</table>
Interventions - instructional sequence

1. Teacher modeling
   - Lessons begin with clear explanations of targeted sentence structures and the purpose of the lesson: learning to understand challenging or “tricky” sentences, model comprehension AND production of sentence structures using clear, concise language with demonstrations with multiple examples
   - Visual and auditory cues are very effective methods to make syntactic features more explicit to students
   - Color-coded strips

2. Guided practice
   - After instructor explains and models targeted sentences, students should be provided with many opportunities for guided and independent practice.
   - Instructional scaffolds should be systematically faded through guided practice.
   - Could use Dr. Karen’s Ultimate Guide to Syntax Bundle (on drive)
Interventions - instructional sequence continued...

- 3. Authentic application
  - Generalization will be enhanced when students receive opportunities for guided practice that is **embedded within classroom literacy activities**
    - i.e. content-area texts, literature series, magazines, online articles.

- 4. Early elementary application
  - Co-teaching!

- Middle school application
  - Creative ways to include direct instruction in the general education classroom and/or resource classroom
  - Educate special education teacher on importance of direct teaching
## Goals for Language Expression

**Base Goal #1: Student will say/write sentences**

To make goals more specific to syntax/grammar, but not specific to sentence type:

- **Student will say/write sentences with appropriate syntax/grammar.**

  (you can use just “syntax” or just “grammar” in the goal if needed)

To make goals relevant to a specific sentence type/skill:

- **Student will say/write sentences with conjunctions.**
- **Student will say/write complex sentences with correct conjunctions.**
- **Student will say/write complex sentences with temporal/causal conjunctions.**
- **Student will say/write complex sentences with 3 or more clauses.**
- **Student will say/write complex sentences with temporal/causal conjunctions and adverbial clauses.**
- **Student will say/write complex sentences with relative clauses.**
- **Student will say/write complex sentences with 3 or more clauses.**

## Goals for Language Comprehension

**Base Goal #2: Student will answer questions about sentences.**

To make goals relevant to a specific sentence type/skill:

- **Student will answer questions about sentences.**
- **Student will answer questions about sentences with passive voice.**
- **Student will say/write sentences with correct syntax.**
- **Student will answer questions about sentences.**
- **Student will answer questions about complex sentences.**
- **Student will answer questions about sentences with relative clauses.**
- **Student will answer questions about sentences with temporal/causal conjunctions.**

*You can also use this same framework for other, simpler sentence types when these challenging sentence types are too difficult.*

### Table 3. Recommended Resources.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General information on syntax</td>
<td>This book provides an overview of English syntax, including clauses and sentence types. Includes numerous examples and exercises.</td>
</tr>
<tr>
<td>Instruction, intervention, and writing-reading connections</td>
<td>Sections on “Syntactic and Morphologic Development” and an appendix on “Background Grammar” provide developmental perspectives on the acquisition and mastery of sentence structures.</td>
</tr>
<tr>
<td>Schumaker, J. B., &amp; Sheldon, J. B. (1998). <em>Fundamentals in the sentence writing strategy</em>. Lawrence: University of Kansas, Center for Research on Learning.</td>
<td>This article describes distinctive grammatical features of expository (informational) text. The article also addresses assessment and intervention with older students who have language impairments.</td>
</tr>
<tr>
<td>This chapter provides intervention strategies targeting grammar in oral and written language. Includes procedures for structured intervention and contextually embedded activities.</td>
<td></td>
</tr>
<tr>
<td>LANGUAGE! is a comprehensive literacy curriculum that integrates oral and written language. Grammar and usage are included as an instructional component in six-step lessons.</td>
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</tr>
<tr>
<td>The <em>Framing Your Thoughts Sentence Structure Program</em> uses sequential instruction and multisensory activities that progress from simple to complex sentence building. Graphic symbols are used to help explain sentence structure.</td>
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</tr>
<tr>
<td>This book provides evidence-based instructions on assessing and teaching sentence-level skills to students in Grades 2–12. Includes exercises.</td>
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</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
Questions?
References


https://www.theinformedslp.com/qa_treatingsyntax.html