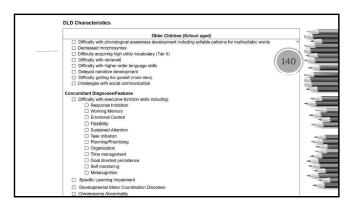


# Review: Specific components that may be impaired \* Perceive, discriminate, and manipulate phone page 73 (phonemic awareness) \* Language rules (morphosyntax) \* Convey the meaning of words and sentences (semantics). \* Narrative development \* The ability to carry on a conversation (conversational discourse) \* Social contexts (pragmatics) \* Higher order language skills to make inferences, understand verbal humor and resolving ambiguous

- X Language abilities are markedly below what would be expected for age.
- X The onset of language difficulties occurs during the developmental period, typically during early childhood.
- X Language deficits result in significant limitations in communication, with functional impact in daily life at home, school, or work.

### Additional Clinical Features

- May have discrepancy between verbal and nonverbal
- Frequently cooccurs with other neurodevelopment disorders (SSD, learning, ADHD, Autism, Developmental Motor Coordination)
- **x** Often genetically linked
- ✗ May have chromosome abnormalities





Student: Julia

Age at Time of Evaluation: 13;6 Current Age: 15

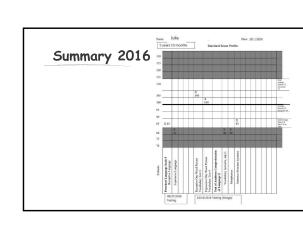
Diagnoses:

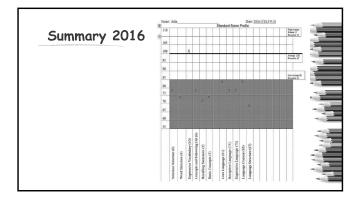
× DLD

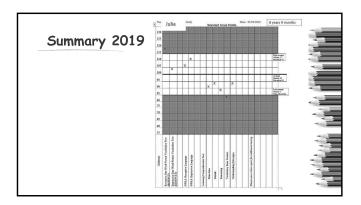
- X DVL1-related genetic disorder (The DVL1 gene is a protein-coding gene that controls cell proliferation and development. It's involved in many processes, including brain development, skeleton development, and cell transformations)
- ✗ Hypermobility Syndrome
- × ADHD

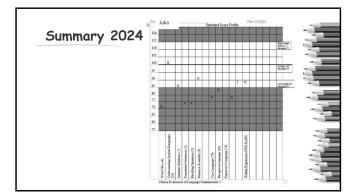
# Background

- x Full term, healthy
- $\mathbf{X}$  HX: ear and sinus infections (PE tubes and adenoids removed in 2015)
- Multiple language and psychology evaluations
- ✗ IEP (2016 kindergarten) language impairment (OT, PT, and ST services)
- ✗ IEP (2022-2023 middle school) OHI and Orthopedic
- Public school through 7<sup>th</sup> grade. Currently, private school
- x Very driven
- X Difficulty making last friendships



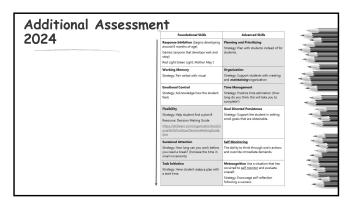






### Additional Assessment 2016

- Signific discrepancy between receptive and expressive vocabulary (2016)
   Narrative Development 3 year gap between narrative stage and chronological age (2016)
- \* Executive Skills Questionnaire: (2016) Difficulty with
  - Working memory
  - Sustained attention
  - Task initiation
  - Planning/prioritizing
  - Organization



### Discussion

- x Testing:
  - What did you find?
  - What other tests would you like to see



### **IEP 2016**

2016

Student is eligible for Special Education Services.

Primary Disability: Language Impairment

Secondary Disability: Speech Impairment, Orthopedic Impairment

Reasons of eligibility determination:
Based on the information contained in the school evaluation report (below average gross and fine motor skills, significantly below average writes expression scores, and below average scores in various speechlanguage subtests), a diagnosis of Congenital Antevertim of Femur by Dr. Wendy Schulte, and the updated information shared by members of the case conference committee, the committee agreed that Julia's education is impacted by her diagnosis and language difficulties. Julia is eligible with a primary disability of Language and Speech Impairment and a secondary area of Orthopedic Impairment according to indicators in Article 7. She is also eligible to receive occupational and physical therapy as related services.

### **IEP 2016**

### Goals

- 1. Follow directions 2 step novel directions
- 2. Writing write name legibly
- 3. Reading Recall details of story
- 4. Pragmatics- related responses in peer interactions
- 5. Articulation distortion of /s, z, ch, and sh/ in all word positions
- 6. Expressive Language word structure and syntax (verbs and inflections)
- 7. Receptive Language Tier I vocabulary basic concepts
- 8. Fine and Gross Motor Goals

Category for special education occurred in the 2022-2023 school year when Julia entered middle school



### Eligibility

Student is eligible for Special Education Services

Primary Disability: Other Health Impairment Secondary Disability: Orthopedic Impairment

Reasons of eligibility determination:
Julia is eligible for Other Health Impairment based on outside ADHD diag
The case conference committee determined that supports and accommodati
have academic success.

### **IEP 2024**

The selected accommodations are based on the needs of the student established in the discussion of his or her present levels of academic achievement and functional performance. The selected accommodations are intended to increase the student's access to and progress in the general closuation curriculum. These accommodations constitute an integral part of the student's free appropriate public electation.

- Accommodations

   Student provided with additional breaks

   Student works best in a small group

   Student is provided preferential scating

   Student is provided with extra time

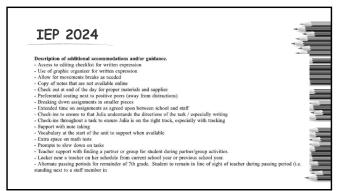
   Directions and content read aloud to the student (text to speech)

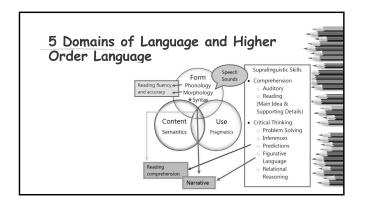
   Student has use of a calculator in classwork, homework and assets

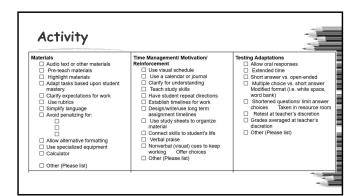
### **IEP 2024**

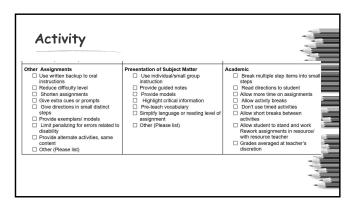
### Goals:

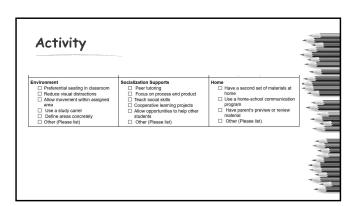
- 1. Peer Interaction conversational cues
- 2. Written Expression compose a written response with two direct quotes and at least one explanation of how the quote supports











# Phonology: 6 syllable patterns Morphosyntax: Subject/predicate & increase morphosyntax in writing Semantics: Tier II vocabulary, etymology for spelling, morphology as attached to meaning Pragmatics: options in a situation (flexibility in thinking)

### Julia's Current Goals

- Higher Order Language: imbedded in all other goals
- xPhonology: Try closed syllable first, if that does not sound right, what would-you try next?(open syllable)
- ${\tt x}$  Morphosyntax: What does it mean if the sentences says, "Should have"?. Why is the subject not in the first part of the sentence (prepositional phrase, subordinating clause, etc.).
- ${\it x}$  Morphology/Vocabulary: What is the meaning of that affix and how does it change the word?
- ${\tt x}$  Pragmatics: idioms/cliches/common expressions and meaning within the context, flexibility, main idea and important details to conversations, taking listener's perspective (emotional control)

### Julia's Current Goals

### **Executive Function**

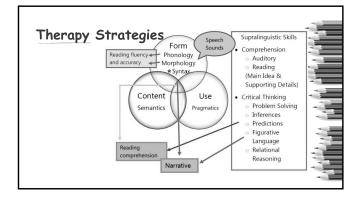
- Selective and sustained auditory attention for nonpreferred task
- Sustained attention, planning/prioritizing, organization writing

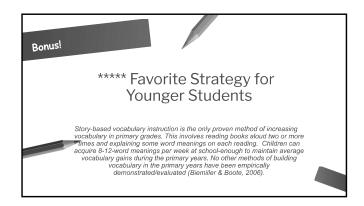


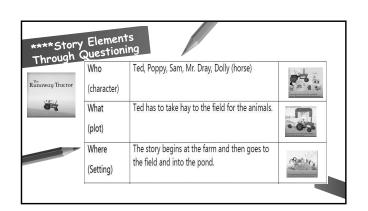
### Activity

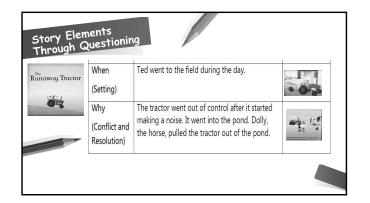
- x Thoughts on current goals
- Classroom suggestions
- Home suggestions

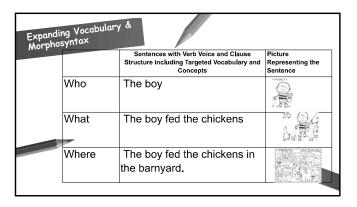


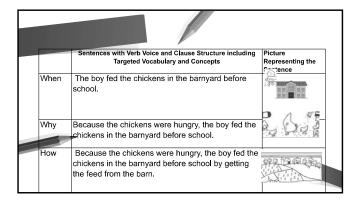


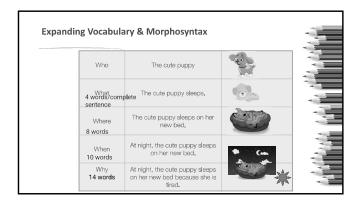


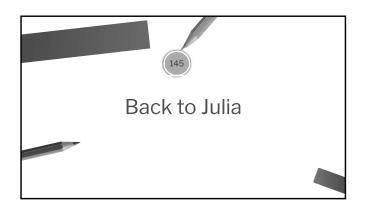


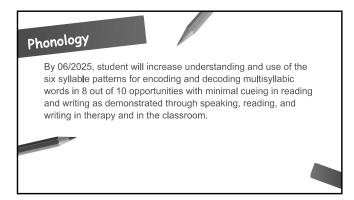


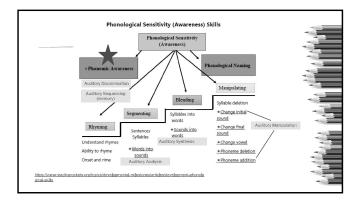


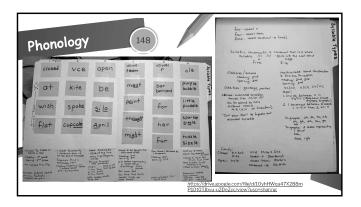












Vocabulary/ Semantics

- 1. By 4th grade, the struggling reader is faced with increasing reading comprehension demands that includes exposure to thousands of unfamiliar words (Nagy & Anderson, 1984).
- Vocabulary instruction improves students' reading comprehension and writing quality, as well as listening vocabulary and their speaking vocabulary (Joshi, 2006; kame'enui & Baumann, 2012)

3. Students should be provided with (1) explicit vocabulary instruction, (2) repeated exposures to new words, (3) sufficient opportunities to use words in activities such as discussion and writing, and (4) strategies to help determine word meanings independently (Farstrup & Samuels, 2008; O'Conner, 2007).

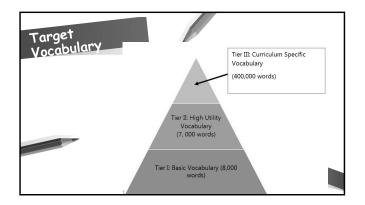
4. Preview possible new vocabulary words *before* reading For ck, McKeown, and Kucan, 2013).

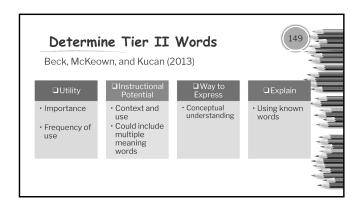
## Julia's Vocabulary Goals

By 06/2025, Julia will use Tier II high content/low frequency in (phrase/sentence/conversation) that will be heard or seen in a variety of context in 8/10 of the opportunities with moderate to minimal for speaking, listening, reading, and writing in everyday opportunities.

By 06/2025, Julia will use etymology to support understanding of spelling of what appears to be irregular spelling patterns through in depth vocabulary analysis in 8/10 of the opportunities with moderate to minimal for vocabulary knowledge during therapy sessions to generalize to reading and spelling.

x By 06/2025, Julia will use morphology to support understanding meaning through in depth vocabulary analysis in 8/10 of the opportunities with moderate to minimal for vocabulary knowledge during therapy sessions to generalize reading and spelling.





# \*\*\*Examples

Roll of Thunder Here My Cry (Mildren Taylor)

"Mama(S) put (P)down her pencil and frowned at the open ledger before her.

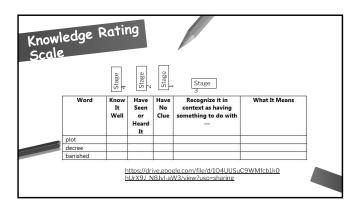
"The heat swooped low over the land clinging like an invisible shroud **(blanket)**, and through it people moved slowly, lethargically, as if under water.

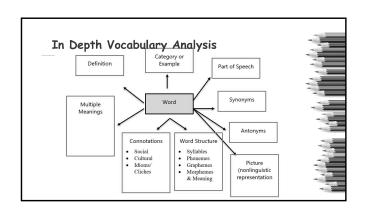
"Before us the narrow, sun-splotched road wound like a lazy red serpent dividing the high forest bank of quiet, old trees on the left from the cotton field...".

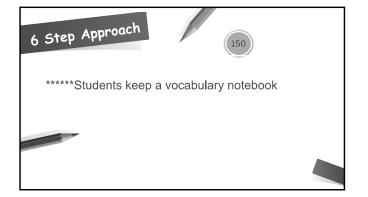
### Vocabulary Instruction

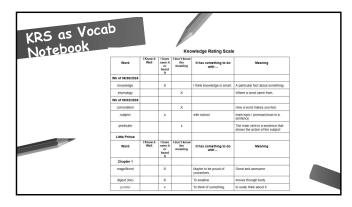
- Students must encounter words in context more than once to learn them.
- Instruction in new words in context. Dictionary definition does not typically support learning new words for students with language impairments. They will often copy words that they do not know within the definition. Use a dictionary such as <a href="https://www.onelook.com">www.onelook.com</a> for a user friendly definition.

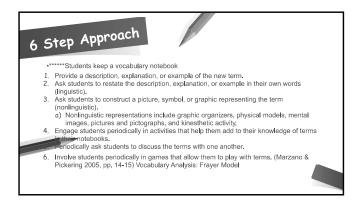
  One of the best ways to learn a new word is to associate an image with it
- Direct instruction on words that are critical to new content produces the nost powerful learning. (Review of the literature by Marzano, Pickering, and Pollack, 2001)

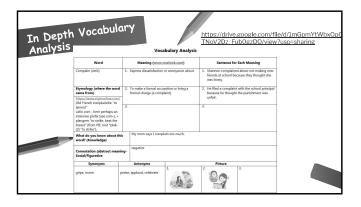


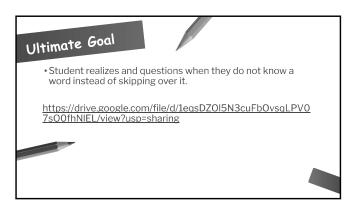


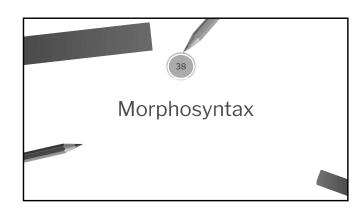










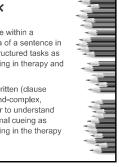


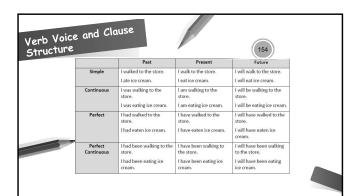
**xVerb voice and clause structures**—structures that contain a subject and a verb—affect comprehension and recall. Readers recall independent clauses ("He used the help system") faster than dependent clauses—clauses containing a subordinating conjunction ("Before he used the system . . .") (Townsend, Ottaviano, and Bever 1979, Creaghead and Donnelly 1982).

### Julia's Goals: Morphosyntax

By 06/2025, Julia will identify subject and predicate within a sentence skill in order to understand the main idea of a sentence in 8 out of 10 opportunities with minimal cueing in structured tasks as demonstrated through speaking, reading, and writing in therapy and in the classroom.

By 06/2025, Julia will increase understanding of written (clause structure: compound sentences/complex/compound-complex, adverb, preposition, relative clauses) skills in order to understand and express in 8 out of 10 opportunities with minimal cueing as demonstrated through speaking, reading, and writing in the therapy and in the classroom.





### Types of Clauses



### Independent Clause

An independent clause is complete sentence including a subject and predicate and may include an object.

### Dependent Clause

A dependent clause (also known as a subordinate clause) is not a complete sentence but supports the independent clause. The dependent clause can be in front of or after the independent clause.

## Types of Sentence Structures

### Simple Sentence

A simple sentence is one independent clause – a complete sentence

### Compound Sentence

A compound sentence is two or more independent clauses. Compound sentences are sentences that are joined together using a coordinating conjunction. These include: for, and, nor, but, or, yet, so. These are referred to as FANBOYS.

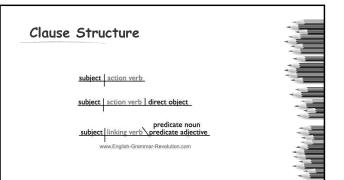
### **Complex Sentence**

A complex sentence has one independent clause and one or more dependent clauses.

### Compound/Complex Sentence

A compound/complex sentence has 2 or more independent clauses and one or more dependent clauses.





### Examples

Sentences

Find the subject and predicate of each sentence.

Once when I was six years old, I (subject) saw (predicate) a magnificent picture in a book, called True Stories from Nature, about the primeval forest.

Once when I was six years old (is a dependent clause - a phrase that cannot stand by itself because it does not have a complete thought)

### Examples

- whole, without chewing it." (HINT: In the book, it said is a prepositional phrase and does not have a subject)
- 2. I(s) pondered(predicate) deeply, then, over the adventures of the jungle.

Twain, Mark. The Adventures of Tom Sawyer. New York: Modern Library, 2001. (1876) Examples From Chapter 2: "The Glorious Whitewasher"

> But Tom's energy did not last. He (s) began to think (P) of the fun he had planned for this day, and his sorrows(S) multiplied (P). Soon the free boys (S) would come tripping (P) along on all sorts of delicious expeditions, and they (S) would make (P) a world of fun for him for having to work-the very thought (S) of it burnt (P)him like fire. He got out his worldly wealth and examined it-bits of toys, marbles, and trash; enough to buy an exchange of WORK, maybe, but not half enough to buy so much as half an hour of pure freedom. So he returned his straitened means to

than a great, magnificent inspiration. He (S) took (P) up his brush and went tranquilly to work. Ben Rogers (S)hove (P) in sight presently—the very boy, of all boys, whose

his pocket, and gave up the idea of trying to buy the boys.

### 3. And after some work with a colored pencil, I (subject) succeeded(P) in making my first drawing. (HINT: And after some work with colored pencils is a dependent 4. The grown-ups' (S) response, this time, was to advise(P) me to lay aside my drawings of boa constrictors, whether from the inside or the outside, and devote myself instead to geography, history, arithmetic, and grammar.

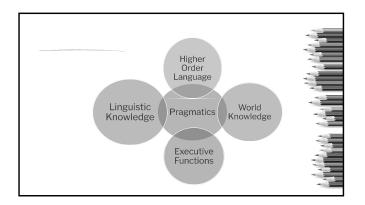
### Morphosyntax

https://drive.google.com/file/d/1HLwsh4qM UEhBJ-mgmNulfKrPMVoMf7yo/view?usp=s haring (32:46)

# **Pragmatics**

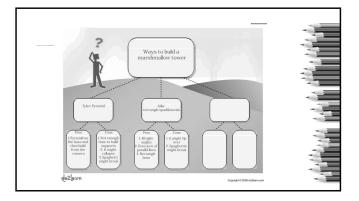
Pragmatics is the most complex aspect of linguistic functioning, as it requires integration of information across numerous cognitive systems Consequently, for intervention to yield effective long-term outcomes, clinicians need to approach pragmatics as an integrative domain combining (Martin & McDonald, 2003).

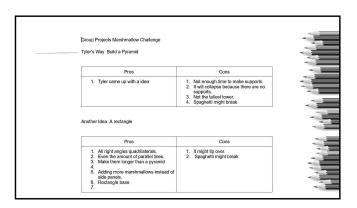




### Julia's Goal

By 06/2025, Julia will be able to express pros and cons and appropriately defend the most effective manner to complete a group project in 8 out of 10 opportunities with minimal cueing structured tasks as demonstrated through classroom opportunities (Executive function: Flexibility in thinking)





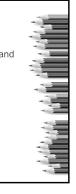
### **Executive Function**

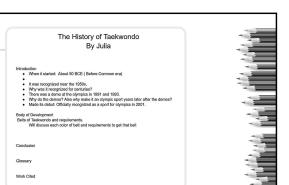
EF difficulties have been documented in populations with communication impairments, including individuals with developmental language disorders (<u>Henry, Messer, & Nash, 2012</u>; <u>Im-Bolter, Johnson, & Pascual-Leone, 2006</u>).

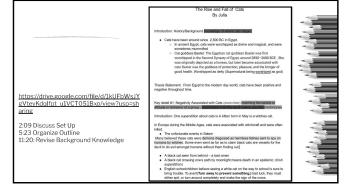
\*\*\*\* Crosswalk between Executive Skills and Language: Appendix C page 50

### Julia's Goals

- By June 2025, Julia will increase skills for selective and sustained attention with minimum assistance during nonpreferred activities as measured by decreased drawing/doodling and active participation in task or conversation.
- By June 2025, Julia will increase skills for sustained attention, planning/prioritizing, organization) with moderate assistance during writing of a paper from planning through completion)







### Classroom Suggestions: SMART

★ SLOW DOWN: Slowing down your rate of speech to allow more processing time.

 $\mathbf{X}$  (E)MPHASIZE: Emphasizing key points when giving directions or classroom instruction

✗ ADD VISUALS: Adding visual cues to auditory information or using pictures/anchor charts as well as including writing key words on the white board.

Cross et al., 2019; Crosskey & Vance, 2011; Dickinst et al., 2014; Dockrell et al., 2010; Ebbels et al., 2019; Hagen et al., 2017; Matheson & Hutchison, 2014; Saxton et al., 2005)

### Classroom Suggestions: SMART

★ REPEAT INSTRUCTIONS: If directions are lengthy or have complex sentence structures, repeat with reduced information.

\* TIME TO RESPOND: Allow a few extra seconds for the student to process the verbal information and respond before cueing or moving on to another student

Cross et al., 2019; Crosskey & Vance, 2011; Dickinsor et al., 2014; Dockrell et al., 2010; Ebbels et al., 2019; Hagen et al., 2017; Matheson & Hutchison, 2014;

### Take Aways

- Neurodevelopmental Disorder impacting speaking, listening, reading, and writing
- ☐ 7.6% of all children (1 in 14)
- ☐ 6 x more likely to have anxiety & 3 x more likely to have depression
- ☐ Adults with DLD are 2 x more likely to go over a year without employment
- More likely to be diagnosed with: LD, attention for selective and maintaining



### Conclusion

Developmental language disorder (DLD), (AKA: specific language impairment),

- ☐ Communication disorder that interferes with speaking, listening, reading, and writing
- ☐ Not explained by other conditions, (hearing loss, autism, or lack of exposure to language or learning experiences)
- □ DLD effects at least 1 in 14 students upon entering school. (1-2 students in a classroom)
- ☐ Understanding and treating DLD leads to student success in a variety of environments.

