

Big Ideas for Special Education

- Consider when additional resources (beyond general education supports) are needed to sustain or improve the intervention(s) being provided in order to assure FAPE.
- Require evaluating the effects of current and past interventions to determine whether
 - an appropriate instructional plan has been identified
 - the student remains significantly discrepant from peers or educational expectations

Implications for Students with ASD

Greater academic demands

- Many regular educators do not have special education experience or education
- Experienced special education teachers may need additional preparation to work effectively with students who have ASD
- Students with ASD tend to have a wide scope of abilities
- Educators learning the specific strategies that work for each student is critical to helping students with autism become independent, capable readers and learners

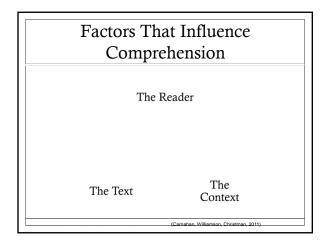


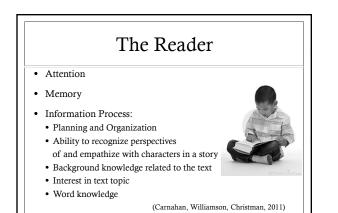
Reading Comprehension

Reading comprehension is an intentional, active, interactive process that occurs before, during and after a person reads a particular piece of writing.

Without comprehension, reading is nothing more than tracking symbols on a page with your eyes and sounding them out.

Joelle Brummitt-Yale







- Purpose for reading
- Environmental organization (physical organization, visual supports, group size, etc.)
- Environment or internal distraction
- Student comfort level

(Carnahan, Williamson, Christman, 2011)

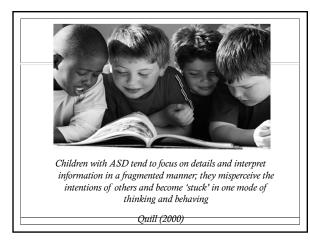


The Text

- Text Type (e.g., narrative, expository)
- Content
- Readability Level (including complexity of vocabulary and sentences)
- Picture Support
- Text Length

(Carnahan, Williamson, Christman, 2011)





Understandings needed to Obtain Reading Comprehension

- Author's vocabulary
- Style of writing
- Story structure
- Characters' social experiences and how these contribute to the development of motivations, goals, and actions within the story
- Develop sensitivity to the emotions of the characters and how emotions play a role in character's choices

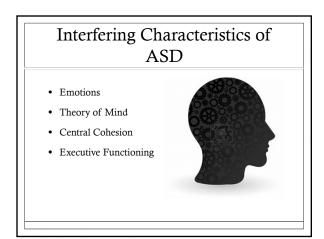
(Gately, 2008)

Challenges for Reading Comprehension

- of messages cognition emotions social situations
- Challenge to integrate language, social understanding, and emotional intent
 - Deficits in language and social
 - Difficulty interpreting and labeling
 - Difficulty integrating aspects of communication to gain meaning in

(Gately, 2008)

Challenges for Reading Comprehension • Intuiting the motivation of characters and appreciating their intent are higher level comprehension skills which may be difficult for students with ASD. (Gately, 2008)



Connecting Emotion to Comprehension Image: Constraint of the second se

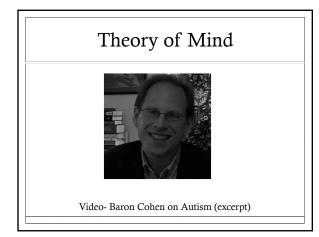
Theory of Mind

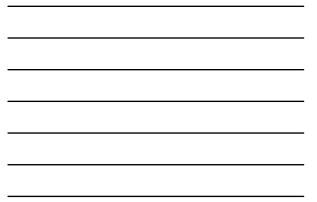
 The theory of mind is the ability to form representations of other people's metal states and to use these representations to understand, predict, and judge utterances and behavior. Impairment in theory of mind is theorized to be a symptom of autism, resulting in difficulties in making inferences and understanding perspectives, an important part in understanding texts

(Baron-Cohen, Leslie, & Firth, 1985)

Theory of Mind (TOM)

- Ability to make inferences about the emotional states of others (Baron-Cohen, Leslie, & Firth, 1985)
- Ability to infer the full range of mental states of others and the ability to reflect on one's own and other's actions (Baron-Cohen, 2001)
- Recognizing that other's perceptions and feelings are different from our own (Carnahan et al., 2011)





Interference of TOM on Reading Comprehension

- Difficulty understanding the motivation of characters
- Predicting what characters will do based on emotional states
- Literal understanding of the world that translates to a literal understanding of the text

(Carnahan et al., 2011)

Interference of TOM on Reading Comprehension

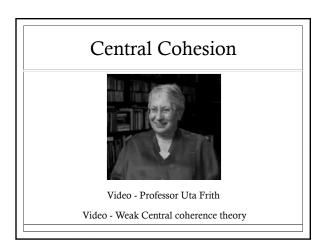
- Understanding what others are thinking
- Understanding deception, metaphors, sarcasm, jokes, and irony
- Developing one's imagination which may contribute to the difficulty with higher order understanding of narratives

(Baron-Cohen, 2001)

Interference of TOM on Reading Comprehension

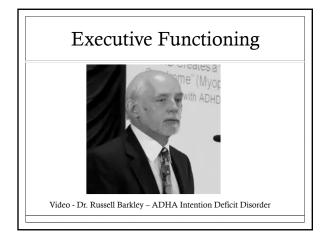
- Difficulty making inferences and comprehending information that is not factual (Saldana & Firth, 2007)
- Failure to take on character's perspective





Impact of Weak Central Coherence

- Attention to detail rather than the whole
- Difficulties relating big idea with details
- Attend to detail or step of routine rather than
- Difficulty pulling information together for a higherlevel meaning, often resulting in meaning being created in pieces, at the expense of contextual understanding
- Difficulty understanding the overall narrative of a story, with a stronger recall of specific details





Interventions for Children with Executive Skills Deficits

Children with developmental executive skill deficits also fit this developmental progression from external to internal.

Children with underdeveloped executive skills can be supported in one of two ways:

1. By intervening at the Level of the Environment.

2. By intervening at the Level of the Person.

(Baruch-Feldman,2009)

Intervening at the Level of the Environment

Changing the physical or social environment to reduce problems

Changing the way cues are provided to prompt the child to perform tasks or behave in certain ways

Changing the nature of the task

(Baruch-Feldman, 2009)

Intervening at the Level of the Person

The goal of this strategy is to change the student's capacity for using executive skills.



- 1. Teaching student ways to develop or fine tune executive skills that are needed.
- 2. Motivating student to use the executive skills that he/she has but is reluctant to employ.

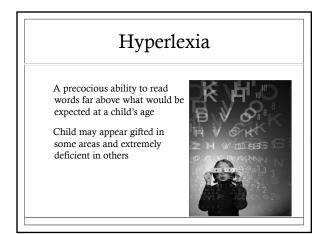
(Baruch-Feldman,2009)

Teaching Thinking and Organizational Skills in Addition to Content Knowledge

1. Initially teachers become the frontal lobes for the child.

- 2. After having walked the child through the process many times the teacher can then begin to reduce the level of supervision and support.
- The next step might be to begin to transfer the responsibility to the child by asking a more general question (e.g. "What do you need to do?")
- 4. The transfer is complete when the child reaches the point when he/she asks himself/herself "What do I need to do"? and either refers to the list independently without prompting from the parent or remembers the steps on the list and can perform the task without referring to the list itself.

(Baruch-Feldman, 2009)



Symptoms of Hyperlexia

Significant difficulty in understanding verbal language

- Difficulty in socializing and interacting appropriately with people
- Abnormal and awkward social skills
- Specific or unusual fears
- Fixation with letters or numbers
- Echolalia (Repetition or echoing of a word or phrase)
- Memorization of sentence structures without understanding
- Intense need to keep routines, difficulty with transitions, ritualistic behavior

Additional Symptoms

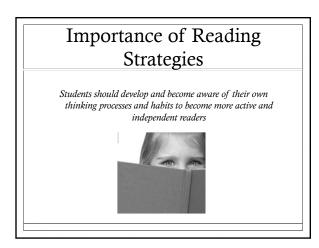
- Normal development until 18-24 months, then regression
- Listens selectively/appears to be deaf
- Strong auditory and visual memory
- Self-stimulatory behavior (hand flapping, rocking, jumping up and down
- Think in concrete and literal terms, difficulty with abstract concepts
- Auditory, olfactory and / or tactile sensitivity
- Difficulty answering "Wh-" questions, such as "what," "where," "who," and "why" (AutismKey)

Evidence-Based Practices for Students with ASD and Hyperlexia Pre-teaching basic factual concepts Multiple thematic exposure Noticing and relating the content to the title Primer paragraphs to present facts Visualizing through drawing and writing Explicit instruction in idioms Anaphoric cuing (resolution of ambiguity of pronouns) Directly teaching skills uses by good readers Story mapping and graphic organizers



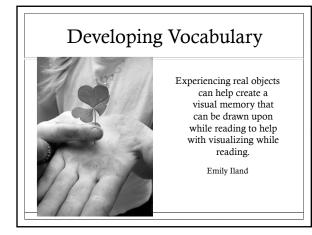
Anaphoric Cuing

- Difficulties in understanding pronouns
- Pronouns may not be correctly linked to referent
- Visual cuing assists in "making a match"
- See Handout An Analysis of Problematic Cohesion



More Evidence Based Reading Strategies

- Think-alouds
- Reciprocal questioning intervention
- Priming background knowledge
- Picture walks
- Visual maps
- Understanding narrative text
- Emotional thermometers
- Social stories



Shades of Meaning			
Shades of Meaning is a phrase that is used to describe the small subtle differences meaning between similar words or phrases Connotation is the attitudes and feeling associated with a word			
Cool	Tepid	Warm	Hot
	aning is a phra caning between is the attitudes	aning is a phrase that is used eaning between similar words is the attitudes and feeling as	aning is a phrase that is used to describe the eaning between similar words or phrases is the attitudes and feeling associated with a

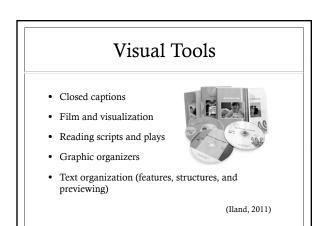
Try Your Skills

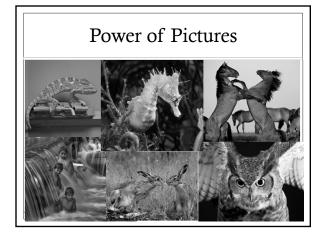
Put the works in order from weakest to strongest

- 1. Grumpy, cross, furious
- 2. Lump, particle, speck, chunk
- 3. Sip, swig, swallow, gulp
- 4. Wreck, destroy, damage
- 5. Shining, sparkling, glittering, dazzling
- 6. Pretend, fake, phoney
- 7. Boring, dull, tedious, uninteresting.

Teaching Word Elements: Prefixes, Suffixes and Root Meanings

- Explicit instruction and definition of roots and affixes provide concrete and predictable patterns
- Provide graphic or visual organizers to scaffold learning
- Teach strategy to analyze word identifying and removing segments to reveal root word.





Summary

- Reading is a complex process that integrates many skills and abilities
- The core features of socialization, emotion, and communication differences in students with ASD many interfere with developing adequate comprehension
- All students can improve skills and expand their abilities to read and comprehend varying levels of text to become literate adults



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- Professor Uta Frith<u>http://www.youtube.com/watch?v=xsdrzVReyUw</u>
- Weak Central coherence theory: http://www.youtube.com/watch?v=QXn2nIceM-EFrom
- Emotion to Comprehension with Stanley Greenspan and Lindamood-Bell Autism: http://www.youtube.com/watch?v=306hSpNltlc&list=PLEA7AE73B 0278677F&index=1&feature=plpp_video