Autism Spectrum Disorder (ASD) & Literacy

Resources to Assist in Literacy Development in Students with ASD

Autism Spectrum Disorder (ASD) & Literacy

The START team is implementing a focused initiative related to students with ASD and literacy. This includes identifying key characteristics impacting literacy and specifically reading comprehension, and tools that may be helpful to supporting students with ASD. While students with ASD tend to demonstrate excellent word recognition and decoding skills, there are inherent challenges and impairment in the area of reading comprehension, often due to the fundamental characteristics of the disability (Randi, Newman, Grigorenko, 2010). While new research is emerging on literacy and ASD, studies conducted over the past 20-30 years have demonstrated that engaged behavior is the best predictor of academic gains in students with ASD (Carnahan and Williamson, 2010); that quality of the book reading is more impactful than the quantity of books read; and the manner in which they are engaged in reading experiences (Scarborough and Dobrich, 1994; Fleury, et al., 2013). Thus assuring the student is engaged in the activity is vital in assuring more overall positive outcomes in literacy.

The following tools and support strategies have been created that may be useful in supporting students in reading comprehension skills and interventions in educational settings. This includes defining levels of support that may be needed, a checklist of core ASD characteristics and aligning strategies as identified in evidence based practice research and resource texts; and more focused individualized, one-on-one interventions. The level of intervention required should be considered for each student based on benchmarks and baseline information collected and the needs of the individual.

Top 10 Impact on Literacy Checklist for Students with ASD

The START *Impact on Literacy Checklist for Students with Autism Spectrum Disorder (ASD): The Top 10* is a tool developed as a checklist to identify key characteristics that impact reading comprehension in students with ASD. Within those characteristics, three sub deficit areas were identified explaining how the corresponding characteristic may impact reading literacy. Strategies were then identified corresponding with each of the ASD characteristics and sub deficit areas. The tool was designed to provide guidance on strategies that have demonstrated through current research to be useful interventions for specific characteristics of ASD.

Tiered Supports for Literacy

Aligning with the Universal Supports design, a tiered support structure was defined to provide guidance in supporting the needs of students with ASD from the classroom level (Level 1), small group and teacher led instruction (Level 2); and a more intensive one-on-one intensive intervention (Level 3). The graphic below outlines this tiered support structure.

Literacy Interventions Supports for ASD: Elementary Age
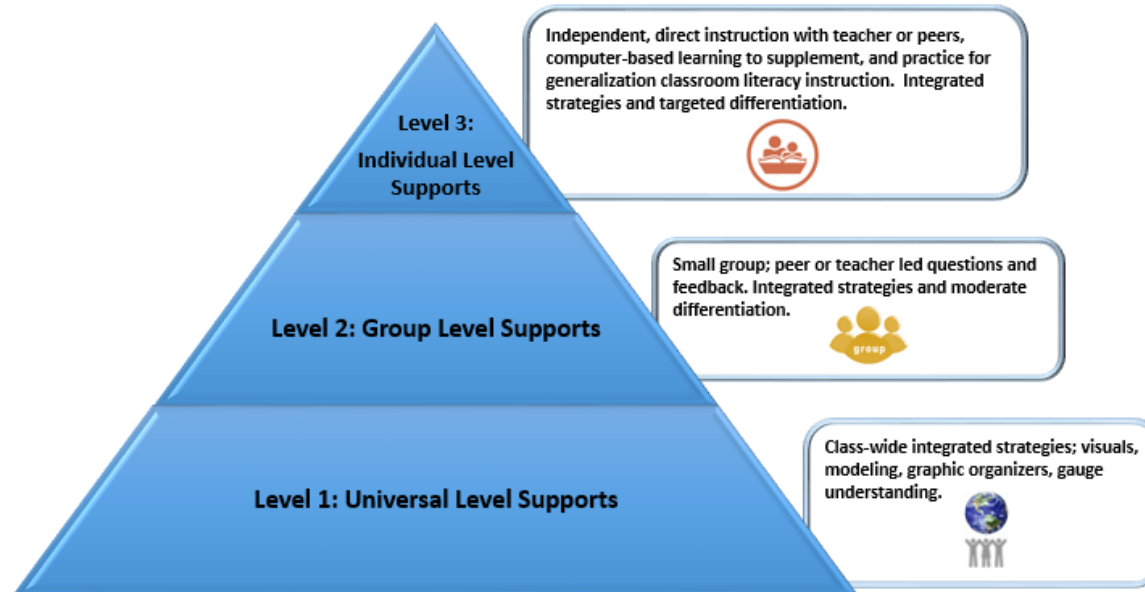
Level 1: Universal Level Supports
The first level of support is Universal Level Supports. This is considered a classroom level strategy that most educators already have integrated into their teaching environments (e.g. graphic organizers, worksheets). Go to Literacy Matrix Level 1 Universal Supports.

Level 2: Group Level Supports
The second level of support is Group Level Supports, and is a more rigorous intervention level with focus on students that require more intensive supports. The emphasis of this level of intervention is small groups, teacher led, peer assistance, and a moderate level of

differentiation. This is an intervention area in which the identified strategies can be implemented. These strategies can be found on the *START Impact on Literacy Checklist for Students with Autism Spectrum Disorder (ASD): Top 10*.

Below is an example using the *Joint Attention & Social Engagement* characteristic, with one of the sub-deficit areas identified and strategies for the sub-deficit area. Go to Literacy Matrix Level 2 Supports.

ASD Characteristic

Sub-deficit identified under characteristic (Joint Attention)

Strategies for deficit area

Joint Attention & Social Engagement: The ability to respond to and engage in shared, enjoyable experiences including looking to others to understand how they feel about their experiences and imitating others to learn new skills.

| How deficits in joint attention & social engagement may impact literacy | Lack of shared interest in the reading experience resulting in missed learning opportunities. | | | Shared Storybook Reading: Building Young Children's Language and Emergent Literacy Skills (Ezell & Justice, 2005)
Attending Strategy:
• Determine current attending baseline behavior by observing how long the child attends in two separate shared-reading sessions
• Establish an attending goal measured in either length of time or number of pages
• Select an attractive book with limited print on a topic that may be a preferred interest and incorporates flaps, moveable parts or textures.
• During shared reading session, the adult should read the book with enthusiasm and animation.
• When the target time or page has been reached, verbal praise should be provided to the child (e.g. "You did a great job listening to the story!") and then the session should be ended.
• A record of the child's attending time (measured in either minutes or number of pages read) should be maintained. The use of this strategy can be continued until the child is able to attend to the entire reading of one brief storybook. |

Level 3: Individual Level Supports
The third level of support is Individual Level Supports. This is the most differentiated, intensive instruction focusing on key challenges the student has related to ASD. Instruction is typically in a one-on-one setting delivered by a teacher or literacy coach. This level requires more rigorous data collection and targeted strategies. One sample intervention strategy is provided per ASD characteristic. The framework below is provided with the intent of individualizing the intervention based on the need of each student and provides strategies to target when implementing an intervention. Go to Literacy Matrix Level 3 Supports.

Skill Definition

- Define skill in observable and measurable terms

Setting

- Conducive to student need (one-on-one, group, classroom)
- Peers are trained to best assist student
- Provide meaningful reinforcement to student and peer(s) and fade as skills are acquired

Intervention Period

- Structured and appropriate length to meet needs of students
- Shorter sessions initially while acquiring new or difficult skills to build interest level and promote success

Materials

- High interest content initially
- Supports for teaching (note cards, graphic organizers, scripts, etc.)

Intervention Procedure

- Implementation of the intervention specifying and using defined strategies

Data

- Baseline assessment and benchmarks defined and reviewed
- Data collection throughout intervention and teaching to assure comprehension and progress in maintaining and generalizing content
- Alternate strategies and assure prerequisite skills if inadequate or no progress

ASD Literacy Intervention Strategies Matrix (Elementary Age)

The ASD Literacy Intervention Strategies Matrix for Elementary Age Students provides the tiered level of strategies and links to specific characteristics on the *Impact on Literacy Checklist for Students with ASD: The top 10* and provides examples of how they may be used. The intent of this tool is to provide examples of tiered interventions by ASD characteristic.

ASD LITERACY INTERVENTION STRATEGIES MATRIX
Elementary Age

Characteristics	Joint Attention & Social Engagement	ToM Emotional Reciprocity	Central Coherence	Executive Functioning	Restricted Interests & Patterns of Behavior	Prior Knowledge	Literal vs. Abstract Thinking	Pragmatics	Repetitive Patterns of Behavior	Language, Comm & Vocab
Level 1 **Universal Support Strategies used at classroom level across characteristics and across levels**	Communication Supports including: visual supports, PECS, functional communication training, alternative communication systems (voice output devices, computer, applications, etc.) Social Supports: visual supports, peer to peer, self-management, social narratives Behavior Supports: visual supports, prompting, time delay, reinforcement, structured work systems, naturalistic interventions, peer to peer supports, FBAs START PBIS Information or go to www.gvsu.edu/autismcenter and search on PBS									
Level 2 **Reading Comprehension Strategies Intervention in Small Group Setting**	Strategy Lessons	Strategy Lessons	Strategy Lessons	Strategy Lessons	Strategy Lessons	Direct, explicit instruction	Explicit instruction	Use of "wh" questions	Visualizing and Inferring Meaning	Building Vocabulary
Level 3 **Reading Comprehension One-on-One Intervention**	Peer supports, dialogic questions, prompting, reinforcement	Direct instruction, imitative context, modeling, prompting, reinforcement, peer supports	Visuals, modeling, prompting, reinforcement, peer supports	Prompting, dialogic questions, time delay, reinforcement, peer supports	Visuals, modeling, reinforcement, peer supports	WH questions, reciprocal questions, prompting, reinforcement, peer supports	Interest area, direct teaching, visuals, generalization, reinforcement, peer supports	Visuals, reciprocal questions, generalization, reinforcement, peer supports	Visuals, prompting, interest area, generalization, reinforcement	Visuals, modeling, peer supports, reinforcement

Impact on Literacy Checklist
for Students with Autism Spectrum Disorder (ASD)
The TOP 10

Student's Name (DOB):_____   Date:_____

Reading for comprehension is a complex process and the ability to read for understanding is dependent upon the interaction of a number of factors. Many of these factors are known to be deficient in students with ASD (Randi, et.al., 2010). Based on a literature review of characteristics of ASD that impact comprehension, this checklist was created to guide educators in identifying the primary ASD characteristics impacting reading comprehension. Once identified, strategies can be developed to address the areas of impact.

Check below the characteristics demonstrated by the student and how they may be impacting the student's reading comprehension. There are Level 2 comprehension strategies listed for each characteristic.

Characteristics & their Impact on Literacy for Students with ASD		Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.
1. Joint Attention & Social Engagement: The ability to respond to and engage in shared, enjoyable experiences including looking to others to understand how they feel about their experiences and imitating others to learn new skills.				
How deficits in joint attention & social engagement may impact literacy	Lack of shared interest in the reading experience resulting in missed learning opportunities.			**Shared Storybook Reading: Building Young Children's Language and Emergent Literacy Skills (Ezell & Justice, 2005)** Attending Strategy: • Determine current attending baseline behavior by observing how long the child attends in two separate shared-reading sessions • Establish an attending goal measured in either length of time or number of pages • Select an attractive book with limited print on a topic that may be a preferred interest and incorporates flaps, moveable parts or textures. • During shared reading session, the adult should read the book with enthusiasm and animation.

Characteristics & their Impact on Literacy for Students with ASD	Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.
			- When the target time or page has been reached, verbal praise should be provided to the child (e.g. "You did a great job listening to the story!") and then the session should be ended. - A record of the child's attending time (measured in either minutes or number of pages read) should be maintained. The use of this strategy can be continued until the child is able to attend to the entire reading of one brief storybook.
Lack of imitation skills to practice the behaviors of reading and to develop new interests.			- Differentiates print from pictures (Ezell & Justice, 2005) - Demonstrate tracking of print while reading the storybook by running finger beneath the words in a fluid left-to-right motion - Point to an illustration and state, "This pictures shows what is happening." - Point to print and explain, "These words tell the story." - After several sessions, determine whether the child can differentiate print from pictures by saying, "Show me the words that tell the story." - Praise a correct response and provide assistance if the child is unsure or responds incorrectly - Identifies directionality of left page to right page (Ezell & Justice, 2005) - During shared reading, state, "I read this page first (pointing to the left page), and I read this one next (pointing to the right page)". - After one to three reading session, say "Show me where I should read first—this page (pointing to the left page) or that page (pointing to the right page)." - Praise the child's correct response, and provide assistance if the child seems unsure or responds incorrectly. - Knows that print tells the story (Ezell & Justice, 2005) - On one or two occasions during shared reading, point to the print and explain to the child, "These are the words that tell this story." - After providing repeated explanations and modeling, check for understanding by saying, "Show me which part tells the story," or asking, "What do these words do?" - Praise the child's correct response. Provide assistance or further modeling if the child seems unsure or responds incorrectly. - Knows some letters of the alphabet (Ezell & Justice, 2005) - Select a letter that is used at least three times in a chosen storybook

Characteristics & their Impact on Literacy for Students with ASD	Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.
			- Before shared reading begins, explain to the child that he or she will be looking closely at some words and finding a selected letter. Tell the child what letter is and show a written example. - During shared reading, interrupt the story on two or three occasions when the target words appear and say, "Put your finger on the letter "t" in this word?" - Praise all attempts and correct responses. Provide prompting if the child responds incorrectly. - Continue practicing until the child is able to identify the target letter with consistency
Lack of social engagement that enhances vocabulary development and increases experiences for background knowledge.			• Shared Storybook Reading Turn-Taking Strategy (Ezell & Justice, 2005) - Determine the child's current turn-taking frequency by conducting a shared-reading session and offering five conversational turn-taking opportunities. Note the type of turns, if any, that the child takes (i.e. nonverbal, vocalizations, or verbal) - Establish a turn-taking goal by specifying the turn type to be targeted (e.g. five vocal turns during one reading session). - During shared reading, offer the child at least five opportunities to take a conversational turn by providing a comment or asking a question and then waiting expectantly at least 10 seconds for the child to respond. - If the child fails to respond after 10 seconds, provide assistance. Assistance for a nonverbal prompt would be gentle physical guidance to complete the response (e.g. guiding the child's finger to point to a picture). For a vocal or verbal prompts, provide the correct answer (e.g. "a train") and ask the child to try saying it, too. - Praise the child when he or she responds in any way, as this constitutes a completed conversational turn. - Keep a record of the child's number and types of turns taken during each reading session, and note whether assistance was required. A long-term goal would be consistent and independent responding to each turn-taking opportunity using the form of turn most appropriate for the child (e.g. nonverbal, vocal, or verbal).
OTHER (describe):			Further Reading: • Shared Storybook Reading: Building Young Children's Language and Emergent Literacy Skills (Ezell & Justice, 2005)

Characteristics & their Impact on Literacy for Students with ASD		Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.

2. Theory of Mind & Social / Emotional Reciprocity: The ability to recognize and interpret the thoughts, perspectives, intentions, and emotions of others to predict their behavior; Understanding emotions through descriptions of body language and facial expressions.

How deficits in Theory of Mind and Social / Emotional Reciprocity may impact literacy:	Difficulty understanding the perspectives and emotional states of characters and/or author.			• Strategies That Work: Teaching Comprehension for Understanding and Engagement (Harvey, S. & Goudvis, A., 2007) Strategy Lessons: Visualizing and Inferring • Inferring Feelings with Kindergartners - Purpose: Helping kids to better understand their own and others' feelings; introducing inferential thinking - Response: Verbal or visual clues given to label emotions Strategy Lessons: Activating and Connecting Background Knowledge • Text-to-Self Connections: Relating the Characters to Ourselves - Purpose: Linking the text to our life - Response: Coding the text T-S for text-to-self connections
	Difficulty predicting or making inferences about the future behavior of characters.			Strategy Lessons: Questioning (Harvey, S. & Goudvis, A., 2007) • Questioning That Leads to Inferential Thinking - Purpose: Making meaning through asking questions - Response: Chart of questions students ask and possible answers Strategy Lessons: Visualizing and Inferring (Harvey, S. & Goudvis, A., 2007) • Visualizing with Wordless Picture Books - Purpose: Visualizing to fill in missing information - Response: Drawing what you visualize
	Difficulty understanding the emotional states of characters based on body language and facial expression descriptions in the text.			Strategy Lessons: Activating and Connecting Background Knowledge (Harvey, S. & Goudvis, A., 2007) • Text-to-Self Connections: Relating the Characters to Ourselves - Purpose: Linking the text to our life - Response: Coding the text T-S for text-to-self connections

Characteristics & their Impact on Literacy for Students with ASD	Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.

3. Central Coherence: Understanding the central tenets of a passage and creating meaning from text details; the ability to integrate details in order to understand the "big picture" of a passage.

How deficits in central coherence may impact literacy	Over-focus on minor, irrelevant or concrete details in the passage thus missing the main idea(s) or overall purpose of the text.			Strategy Lessons: Monitoring Comprehension (Harvey, S. & Goudvis, A., 2007)
				• Notice When You Lose Your Way
				  - Connect and engage with presented text
				  - Model reading and reasoning through text
				  - Demonstrate think aloud with about confusing parts and use visual supports such as Brain Frames
				  - Repair broken comprehension verbally and depict repair using visual supports and create an anchor chart
				  - Provide opportunity for guided practice and sharing out regarding use of strategies
				
				Strategy Lessons: Determining Importance in Text (Harvey, S. & Goudvis, A., 2007)
				• Important to Whom?
				  - Purpose: Understanding that there may be a difference between what the reader thinks is most important and the writer's big ideas
				  - Resources: Article from magazines like *Time for Kids, Scholastic News, National Geographic* Explorer or writing from nonfiction trade books
				  - Responses: Response notebooks

	Comprehending all the rote facts in the passage but not blending them to understand the "big picture."			Strategy Lesson: Monitoring Comprehension (Harvey, S. & Goudvis, A., 2007)
				• Read, Write & Talk
				  - Connect and engage student in lesson by asking about traditional comprehension questions that target literal comprehension (e.g. who, what, where).
				  - Explain that readers need to stop, think and react as they read.
				  - Review a presented article.
				  - Model reading, stopping and recording of inner conversation—your questions, connections and confusions—using chart paper and markers.

Characteristics & their Impact on Literacy for Students with ASD	Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.

			- Guide students in capturing their thinking in the margin of the presented article.
			- Encourage collaboration with a partner as groups reflect on the content, the process and any lingering questions.
			- Allow students to practice independently applying the strategy of Read, Write and Talk on their own.
			Strategy Lesson: Determining Importance in Text (Harvey, S. & Goudvis, A., 2007)
			• Important to Whom?
			  - Purpose: Understanding that there may a difference between what the reader thinks is most important and the writer's big ideas
			  - Resources: Article from magazines like *Time for Kids, Scholastic News, National Geographic* Explorer or writing from nonfiction trade books
			  - Responses: Response notebooks

Difficulty connecting information at the paragraph or chapter level.			Strategy Lessons: Monitoring Comprehension (Harvey, S. & Goudvis, A., 2007)
			• Knowing When You Know and Knowing When You Don't Know
			  - Purpose: Monitoring comprehension to clarify confusion and answer questions about the text
			  - Responses: Sticky noted coded "Huh?" for confused or with a light bulb for the reader's illumination
			Strategy Lessons: Summarizing and Synthesizing Information (Harvey, S. & Goudvis, A., 2007)
			• Writing a Short Summary
			  - Purpose: Distinguishing between a summary of the text and the reader's thinking
			  - Response: Two-column think sheet headed "What the Piece Is About/ What It Makes Me Think About"

Characteristics & their Impact on Literacy for Students with ASD		Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.
4. Executive Function: The ability to organize information and thoughts for coherency, self-monitor for comprehension, and execute plans of action.				

How deficits in executive functioning may impact literacy	Difficulty suppressing irrelevant background knowledge and shifting meaning to different contexts.			Strategy Lessons: Determining Text Importance (Harvey, S. & Goudvis, A., 2007)
				• Important to Whom?
				  - Purpose: Understanding that there may be a difference between what the reader thinks is most important and the writer's big ideas
				  - Response: Response notebooks

	Making irrelevant connections between contexts, concepts, or relationships.			Strategy Lessons: Activating and Connecting Background Knowledge (Harvey, S. & Goudvis, A., 2007)
				• Sifting the Topic from the Details
				  - Purpose: Distinguishing between key topics/concepts and supporting details
				  - Response: Two column note from headed Topic/Details; three column note form headed Topic/Details/Response

	Difficulty organizing and planning the reading experience (e.g. timelines for reading long texts) and self-monitoring for understanding (meta-cognition).			Strategy Lessons: Monitoring Comprehension (Harvey, S. & Goudvis, A., 2007)
				• Following the Inner Conversation
				  - Purpose: Listening to the inner voice and leaving tracks of thinking
				  - Responses: Sticky notes on a piece of paper on clipboards
				• Noticing When We Stray from the Inner Conversation
				  - Purpose: Monitoring the inner voice to focus thinking and "fix up" comprehension
				  - Responses: Two column-chart titled Why Meaning Breaks Down/What Do I Do About It

	OTHER (describe):			Further Differentiation/UDL Recommendation: • Visual-spatial displays for language and thought such as "Showing Causes/Effects" Brain Frame, "Showing Relationships" Brain Frame or "Categorizing" Brain Frame to collect relevant information and to focus attention on critical information, concepts and relationships

Characteristics & their Impact on Literacy for Students with ASD		Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.

5. Restricted Interests & Motivation: Abnormally intense preoccupation with specific interest areas or activities which impact motivation to read non-preferred text or results in getting stuck on words or phrases.

How intense interests and motivation can impact literacy	Intense focus on specific preferred interest areas so does not engage in reading in non-preferred areas interests.			Strategy Lessons: Activating and Connecting Background Knowledge (Harvey, S. & Goudvis, A., 2007) • Distracting Connections - Purpose: Teaching readers to identify distracting connections and fix up meaning - Response: Conversation (visually supported) Strategy Lessons: Monitoring Comprehension (Harvey, S. & Goudvis, A., 2007) • Read, Write and Talk - Purpose: Teaching readers to stop, think and react to informational text - Response: Jotting thinking and sketches in margins
	Gets stuck reading only certain words, phrases, or sections in text.			• Peer supports in pairs (Kluth & Chandler Olcott, 2008, p. 57) and learning stations (Kluth & Chandler Olcott, 2008, p. 60); direct instruction; interactive strategies: use of technology (Carnahan) and flashcards for vocabulary.
	Fails to monitor for comprehension (meta-cognition) due to focus on preferred interests and topics.			• Peer supports and asking questions; self-monitoring; visuals (Kluth & Chandler Olcott, 2008, p. 51) Strategy Lessons: Monitoring Comprehension (Harvey, S. & Goudvis, A., 2007) • Following the Inner Conversation - Purpose: Listening to the inner voice and leaving tracks of thinking - Response: Sticky notes on a piece of paper on clipboards Strategy Lessons: Noticing When We Stray from the Inner Conversation • Purpose: Monitoring the inner voice to focus thinking and "fix" comprehension

Characteristics & their Impact on Literacy for Students with ASD	Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.
			• Response: Two-column chart titled "Why Meaning Breaks Down/What to Do About It"

6. Prior Knowledge: The ability to apply relevant background knowledge to make global and abstract connections in text.

How deficits in applying prior knowledge can impact literacy	Difficulty accessing and applying relevant background knowledge in order to understand the context or situation in text.			• Direct instruction and visuals (connect content and student's background knowledge); visual storyboards connecting background to reading content. (Kluth & Chandler-Olcott, p. 125)

	Difficulty with word meanings (semantics) in context of the text.			• Interactive strategies: flashcards with teachers, in groups, and/or with peers and utilizing software/technology (Carnahan Presentation and Kluth, Chandler-Olcott, p. 124.)
				Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E., 2011)
				• Chapter 5: Building Vocabulary- Promising Practices to Improve Comprehension
				 - Direct, explicit instruction of unfamiliar or key words prior to reading (i.e. pre-teaching/ priming)
				  *See guidelines for selecting additional vocabulary to targeted for direct, explicit instruction on p. 120
				 - Teaching Vocabulary Through Synonyms
				  *See Steps to Teaching, Generalization, Use of Electronic and Visual Dictionaries and Use of Objects to Teach p. 123-

	Difficulty with comprehension of text requiring a lot of background social knowledge and social experiences (e.g. novels) versus those that require limited social understanding (e.g. technical text).			Strategy Lessons: Activating and Connecting Background Knowledge (Harvey, S. & Goudvis, A., 2007) • Text-to-Self Connections: Relating the Characters to Ourselves - Purpose: Linking text to our own lives - Response: Coding the text T-S for text-to-self connections • Building Background Knowledge Based on Personal and Text-to-Word Connections

Characteristics & their Impact on Literacy for Students with ASD	Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.
			- Purpose: Sharing connections to build understanding - Response: Coding the text T-W for text-to-world connections; listing student connections on a large chart

7. Literal (vs. Abstract) Thinking: Focus on factual information such as events and actual objects or people in the text and an absence of focus on concepts and generalizations often confused by a lack of understanding idioms, irony, figures of speech, innuendo, and sarcasm.

How literal vs. abstract thinking can impact literacy	Difficulty understanding figurative language (e.g. metaphors) and use of idioms, irony, innuendo, and sarcasm.			<u>Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E.)</u>
				• Chapter 4: Evidence-Based Practice for Improving Reading Comprehension in Learners with ASD
				  - Explicit instruction of idioms; transparent versus opaque idioms
				   **see recommended texts for idiom instruction on page 110

	Difficulty ignoring irrelevant factual information in text and missing context cues and information that enhances understanding.			<u>Strategy Lessons: Activating and Connecting Background Knowledge (Harvey, S. & Goudvis, A., 2007)</u>
				• Distracting Connections
				  - Purpose: Teaching readers to identify distracting connections and fix up meaning
				  - Response: Conversation (visually supported)
				• Strategy Lessons: Determining Text Importance
				  - Important to Whom?
				  - Purpose: Understanding that there may be a difference between what the reader thinks is most important and the writer's big ideas
				  - Response: Response notebooks

	Applying only one meaning to a word and failure to use context cues to recognize a different meaning is necessary.			<u>Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E., 2011)</u> • Chapter 5: Building Vocabulary- Promising Practices to Improve Comprehension • Teaching Vocabulary Through Synonyms

Characteristics & their Impact on Literacy for Students with ASD	Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.
			**see Steps for Teaching, Practice & Generalization and Other Application on page 124-126 • Connotation: Shades of Meaning **see Steps for Teaching page 142-144

8. Pragmatics: The ability to understand language and communication in social contexts and thus predict character intentions and behaviors.

How deficits in pragmatics can impact literacy	Difficulty understanding perspectives or intentions based on the narration of characters and context cues.			• Use of "wh" questions (perspective taking) questions in matching exercises, flashcards, fill in the blank. Interactive peers and student retelling story using "wh" questions (Kluth pp 128-129)

	Focus on concrete details in narrative text (e.g., what a character said specifically) rather than focus on conversation and context cues to gain an understanding of plot and character development.			Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E. 2011)
				• Chapter 5: Building Vocabulary- Promising Practices to Improve Comprehension
				  - Connotation: Shades of Meaning
				    **see Steps for Teaching page 142-144

	Difficulty making inferences about characters' emotions and perspectives based on subtle cues or context in text.			Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E., 2011)
				• Chapter 5: Building Vocabulary- Promising Practices to Improve Comprehension
				  - Connotation: Shades of Meaning
				    **see Steps for Teaching page 142-144
				Strategy Lessons: Visualizing and Inferring Meaning (Harvey, S. & Goudvis, A., 2007)
				• Inferring with Text Clues
				  - Purpose: Teaching the inferring equation BK+TC= I (Background Knowledge + Text Clues= Inference)

Characteristics & their Impact on Literacy for Students with ASD		Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.
				- Response: Three-column chart titled Background Knowledge/Text Clues/Inference

9. Repetitive Patterns of Behavior: The desire for predictability that results in rigid adherence to schedules, routines, and thinking in an attempt to create "sameness."

| How repetitive patterns of behavior can impact literacy | Literal, concrete and inflexible thinking that prevents abstraction or understanding of text within context. | | | *Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E., 2011)*
• Chapter 5: Building Vocabulary- Promising Practices to Improve Comprehension
 - Connotation: Shades of Meaning
 **see Steps for Teaching page 142-144
 <u>Strategy Lessons: Visualizing and Inferring Meaning (Harvey, S. & Goudvis, A., 2007)</u>
• Inferring with Text Clues
 - Purpose: Teaching the inferring equation BK+TC= I (Background Knowledge + Text Clues= Inference)
 - Response: Three-column chart titled Background Knowledge/Text Clues/Inference |
| | Difficulty with multiple meanings of words; Likely to have a single meaning without considering context. | | | <u>Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E., 2011)</u>
• Chapter 5: Building Vocabulary- Promising Practices to Improve Comprehension
• Teaching Vocabulary Through Synonyms |
| | Difficulty generalizing knowledge or meaning from personal experience to the context of text. | | | <u>Strategy Lessons: Activating and Connecting Background Knowledge (Harvey, S. & Goudvis, A., 2007</u>
• Text-to-Self Connections: Relating the Characters to Ourselves
 - Purpose: Linking text to our own lives
 - Response: Coding the text T-S for text-to-self connections |

Characteristics & their Impact on Literacy for Students with ASD	Yes	No	If yes, reference *Level 2 Comprehension Strategies* listed for each characteristic.

10. Language, Communication & Vocabulary: The ability to understand the complexities of language, communication, and vocabulary to comprehend text.

How deficits in language, communication & vocabulary can impact literacy	Difficulty with communication skills that impact ability to answer questions or demonstrate knowledge.			Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E., 2007) • Chapter 6: Using Visual Tools to Improve Comprehension • Closed captions • Film and Visualization • Graphic Organizers • Previewing Text - Visual supports for receptive and expressive communication (e.g. Pragmatic Organization Dynamic Display Communication Books)
	Difficulty understanding vocabulary nuances (e.g. homographs (words spelled the same with more than one meaning) or homophones (words pronounced the same but with different meanings)).			Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E., 2007) • Chapter 5: Building Vocabulary- Promising Practices to Improve Comprehension • Homographs p.152 • Word Elements: Suffixes, Affixes, and Root Meanings pages 145-152
	Difficulty understanding pronouns used to represent previously identified persons, objects, or groups.			• *Drawing a Blank: Improving Comprehension for Readers on the Autism Spectrum (Iland, E.)* • Chapter 4: Evidence-Based Practice for Improving Reading Comprehension in Learners with ASD - Anaphoric Cueing page 111

Level 3-Intensive Literacy Intervention Model

A more focused, intensive support may be needed for some individuals with ASD. The following illustrates a framework for approaching a more specific, individualized intervention in a one-on-one setting with a student where there is individualized and targeted support. Each intervention follows the same general flow from collecting baseline data through the intervention session with student's response of correct or incorrect, further review of the material or altering intervention approach or materials if the concept is not being learned, or meeting the pre-defined target and preparedness to move to the next reading target. Reinforcement of the individual's behavior is also important to encouraging the behavior to happen again. Reinforcement is based on the individual and is not universal and what motivates one student may not motivate another. Finding what motivates each individual is very important to students with ASD and is especially significant when teaching a new or difficult skill. Reinforcers should be based on the indiv*idual student's interests and preferences* and delivered after the desired behaviors including progress toward an overall skill or target is achieved. While social praise may be motivating to some students, it is not necessarily effective for students with ASD. Using their areas of special interest or preferred routines may be more favorable which can be paired (or delivered at the same time as) social praise and keep them engaged and interested (Carnahan, Williamson, Quill 2010).

Process for Implementation of Level 3 Interventions
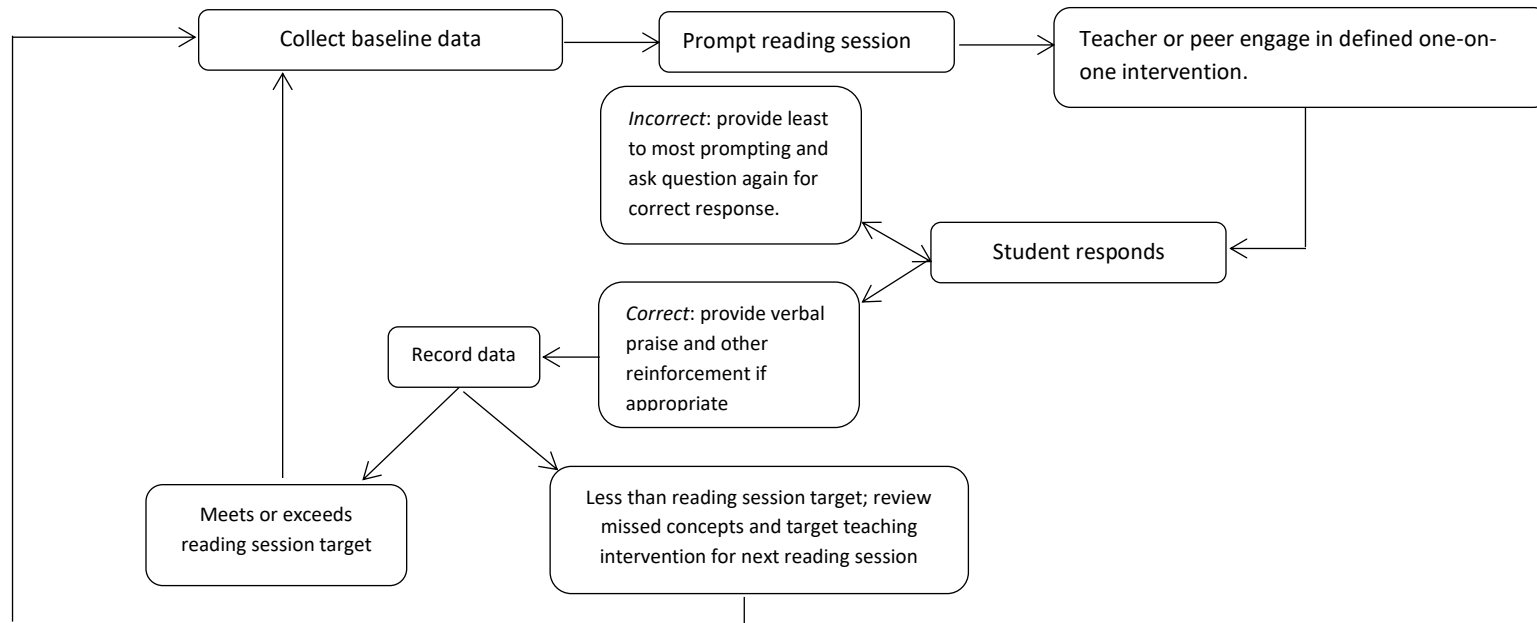
Examples of Level 3 Interventions for ASD Characteristics

The following examples integrate intervention procedures that address one or more sub-deficits of each characteristic.

1. Joint Attention and Social Engagement: ability to respond to and engage in shared, enjoyable experiences including looking to others to understand how they feel about their experiences and imitating others to learn.

Use dialogic intervention to engage the student in the reading experience connecting past knowledge with new information with teacher or peer prompting details of a reading passage by 1) asking questions; 2) requesting recall of the passage; 3) requesting completion of repetitive phrases; 4) posing questions that relate elements of a passage to the student's experiences; 5) ask open ended questions; and 6) providing feedback including correction or reinforcement with the intention of increasing interest and engagement in the passage being read while using least to most prompting protocol (Fleury & Schwartz, 2016).

Integrated Strategies: peer supports; dialogic questions, prompting, reinforcement.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	Students assigned reading content prior to group session. One teacher or general education peer is engaged in intervention and provide questions and feedback statements to an ASD student. Topics of interest may further engage the student. • General education peers are trained in supporting ASD student in intervention context and procedure. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are engaged in this intervention to keep them motivated to continue. • Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session. • If new material or procedure is new, intervention may need to start with shorter sessions or fewer dialogic questions and statements to promote success and time added incrementally as skills increase. • To learn a concept or content, more than one intervention session on similar or identical content may be needed to gain deep and sustained understanding and learning.
Materials	One content appropriate book, chapter, or designated reading content targeted per session. • Teacher prepares sufficient notecards or cues with dialogic questions and statements to meet the need of student participating in the intervention.

Step	Actions
	• Notecards can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student.

Intervention Procedure	• Procedure used in a one-on-one setting with a teacher or peer and the ASD student.
	• Example using dialogic intervention approach where teacher or peer poses questions or statements related to the assigned reading, and use least to most prompting:
	   - Ask questions about the reading that targets vocabulary and where there is a specific response such as what, where, who, when about a picture. (Example: a picture of the Sam I Am refusing to eat "WHO is that?"—with emphasis on WHO). Verbally prompt if student does not know the answer by saying "it is Ssssss (beginning sound of Sam; add Saaaa, then Sssaaammm) in least to most prompting. Add sounds and words as needed to assist in accurate responses.
	   - Request recall of a (repetitive) statement. (Example: WHAT food would Sam I Am NOT eat?—with emphasis on WHAT and NOT). Verbally prompt if student does not know the answer with beginning letter sounds, adding words as needed, for example "gr….".
	   - Request completion of repetitive phrases. (Example: "I do not like green eggs and ____, I will not eat them Sam I ___."—start with leaving out one word, and increase number of words the student has to fill in as he or she masters this approach). Verbally prompt if student does not know the answer with beginning letter sounds, adding words as needed.
	   - Pose questions that relate elements of a passage to the student's experiences. (Example: "Sam I Am does not like green eggs and ham…what food is not your favorite?"—start with very simple questions and increase in complexity as student masters). If student does not respond and known foods are not a preference, provide examples, such as "do you like raisins…(no!)…exactly…you do not care for eating raisins!"
	   - Ask open ended questions to explain what is happening in pictures or illustrations that may have more than one answer. (Example: "What is happening in this picture?"—these may be difficult so the student may start with one or two word responses and increase length or details as this is practiced). For example, if there is a picture of a fox and box…and no response…." He will not eat green eggs and ham with a fox…will he eat them in a box? Why? (Allow time for response or "time delay") …. does he like them?"

Data	• Document current benchmark data from standardized tools. • Baseline data collected for assigned reading in a one on one setting prior to dialogic intervention consisting of verbal questions or statements (i.e. 3-10) administered by the teacher or peer to elicit a response and recording accuracy of responses • One on one post-intervention session consisting of a defined number of dialogic questions or statements (i.e. 3-10) administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. - If gains are being made through intervention, continue with intervention implementation and fade in additional details.

Step	Actions

	- If the student is not making gains, reduce number of concepts, complexity of material, and/or assure general education student is trained and able to work with the student and deliver the intervention with fidelity.
	  - Conduct post-intervention data collection consisting of a defined number of dialogic questions or statements (e.g. 3-10) administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. Review any discrepancies between pre and post reading quiz responses with an accuracy of predefined mastery level or greater.
	  - If reading target not achieved, adjust targets, prompts, and target in next session.
	• Record data on mastery to target; reintroduce and target concept for less than predefined mastery on quiz; move to next session if greater than predefined mastery level.

2. Theory of Mind & Social/Emotional Reciprocity: ability to recognize and interpret the thoughts, perspectives, intentions, and emotions of others to predict their behavior; Understanding emotions through descriptions of body language and facial expressions.

Provide teacher, peer, and peer group cooperative *models* for promoting imitation through *direct instruction* promoting recall of the content read and subsequently testing knowledge in a Model-Lead-Test (MLT) framework (Randi, Newman, Grigorenko, 2010; Knight & Sartini, 2015).

Integrated Strategies: direct instruction, imitative context statements, modeling, least to most prompting, reinforcement, peer supports.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	Students assigned reading content prior to group session. Teacher and general education peers *model* appropriate responses during one on one or small group instruction consisting of teacher or general education peers and 1 ASD student. • General education peers are trained in supporting ASD student in intervention context and procedure. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are engaged in this intervention to keep them motivated to continue. • Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session.

	• If new material or procedure is new, intervention may need to start with shorter sessions or fewer responses required to promote success and time added incrementally as skills increase. • To learn a concept or content, more than one intervention session on similar or identical content may be needed to gain deep and sustained understanding and learning.
Materials	One content appropriate book, chapter, or designated reading content targeted per session. • Teacher prepares imitative context statements prior to the peer group intervention. • Notecards can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student.

Intervention Procedure	• Using the Model-Lead-Test (MLT) approach:
	  - Model: teacher makes statements to the individual or small group, promoting imitation of statement in choral response. Questions can also be asked to clarify text. An example, a book about animals: Teacher: "My turn. A dog is a mammal."
	  - Lead: teacher asks response from students or as a group. An example: "With me. A dog is an example of a ___." Followed by the teacher and group together saying "mammal." The protocol is continued with examples and non-examples of the concept until students can accurately respond independently. Teacher should observe and may ask ASD student to respond independently to assess understanding, verbally prompting with partial responses as needed (i.e. With me. A dog is an example of a mmmmm or mammm…., etc.)
	  - Test: when testing the teacher would say "Your turn. What is an example of a mammal?" If responses are correct the teacher should provide verbal praise; if the response is incorrect, the teacher should correct (i.e. that's a reptile, a dog is a mammal) and additional examples provided. Teacher can ask ASD student directly the answer to the question; or may ask a peer first, and then ask the ASD student the same question to assure imitative responses.

Data	• Document current benchmark data from standardized tools.
	• Collect baseline data prior to each group or individual session consisting of a defined number of verbal imitative statements (i.e. 3-10) administered by the teacher or peer to elicit an imitative response and recording accuracy of responses.
	• Post-intervention session consisting of a defined number of imitative statements (i.e. 3-10) administered by the teacher or peer to elicit an imitative response and recording accuracy of responses.
	  - If gains are being made through intervention, continue with intervention implementation and fade in additional details.
	  - If the student is not making gains, reduce number of concepts, complexity of material, and/or assure general education student is trained and able to work with the student and deliver the intervention with fidelity.
	  - Review any discrepancies between pre and post reading quiz response with a pre-defined accuracy target (i.e. 85%).
	• Record data on mastery to target; reintroduce and target concept for less than predefined mastery on verbal or written quiz; move to next session if greater than predefined mastery level.

3. Central Coherence: lacks ability to integrate details and facts to understand overall picture.

Increase central coherence by: 1) accessing and building background knowledge; 2) creating mental images through picture walk; 3) making connections through the use of a graphic organizer; 4) engaging in consistent discussions using reciprocal questioning modeling; and 5) summarizing understanding through story recall of causal connections and chains (Nguyen, Leytham, Whitby, & Gelfer, 2015).

Integrated Strategies: visuals, graphic organizers, modeling, prompting, peer supports, reinforcement.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	Students assigned reading content prior to group session. One teacher or general education peer is engaged in intervention and provide questions and feedback statements to an ASD student. Topics of interest may further engage the student. • General education peers are trained in supporting ASD student in intervention context and procedure. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are engaged in this intervention to keep them motivated to continue. • Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session. • If new material or procedure is new, intervention may need to start with shorter sessions or fewer response opportunities to promote success and time added incrementally as skills increase. • To learn a concept or content, more than one intervention session on similar or identical content may be needed to gain deep and sustained understanding and learning.
Materials	One content appropriate book, chapter, or designated reading content targeted per session. • Graphic organizer worksheets or notecards which can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student.
Intervention Procedure	• Procedure used in a one-on-one setting with a teacher or peer and the ASD student. • Baseline data collected for assigned reading prior to intervention taking place in the form of questions (similar to table below) administered by the teacher or peer to elicit a response and recording accuracy of responses. • Table below outlines steps for teaching reading comprehension, with a focus on Weak Central Coherence (WCC) and Theory of Mind (ToM) skills and as defined by (Nguyen, Leytham, Whitby, & Gelfer, 2015). • Implementation model below to aid in understanding details as they relate to bigger picture.

Step	Description	Example
1. Access and Build Background Knowledge	1. Before Reading: Visual Support Presenting the student with information related to the text (Williamson & Carnahan, 2010). 2. Before Reading: Pre-teaching Vocabulary Teaching key terms to mastery using PTM (Koppenhaver, 2010)	1. "Look at this card. Today, we will read about animals." 2. "Draw a line from the picture to the word" or "Point to _____." (PTM; Fossett & Mirenda, 2006)
2. Create Mental Images	1. Before Reading: Picture Walk Previewing a story using pictures (Zimmerman & Hutchins, 2003).	1. "Look at this picture. What do we see?" or "Can you describe what the picture looks like?"
3. Make Connections	1. During Reading: Graphic Organizer A visual representation of the story (e.g., events, sequence, characters; Stringfield, Luscre, & Gast, 2011).	1. "Now that we have filled in our graphic organizer, what connection can we make?" What are the details? What is the main idea?
4. Engage in Consistent Discussions	1. After Reading: Reciprocal Questioning Modeling for students how to generate and answer questions (Whalon & Hanline, 2008).	1. "We just read about a problem. Why is a good question word to find out about the problem? Why is the character on fire?"
5. Summarize Understanding	1. After Reading: Story Recall Teaching students to create causal connections and causal chains (Diehl, Bennetto, & Young, 2006).	1. "What is the main idea of the story that we just read?" or "What is the story about?" "What are "x" details about the story?"

- Run post-intervention data collection with questions posed in baseline and record accuracy.

Note. Adapted from *First grade teachers' perceptions of the five strands of effective reading instruction and their possible influence on daily instructional practices* by Nguyen (2013 p. 203). Copyright 2013 by Neal Nghia Nguyen.

Data	• Document current benchmark data from standardized tools.
	• Baseline data collected prior to intervention on ability to respond to 5 areas defined in the table.
	• One on one post-intervention session questions administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses based on the table provided.
	  - If gains are being made through intervention, continue with intervention implementation and fade in additional details.
	  - If the student is not making gains, reduce number of concepts, complexity of material, and/or assure general education student is trained and able to work with the student and deliver the intervention with fidelity.
	  - Conduct post-intervention data collection consisting of a defined number of dialogic questions administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. Review any discrepancies between pre and post reading quiz responses with an accuracy of predefined mastery level or greater.

	- If target not achieved, adjust targets, prompts, and target in next session. • Record data on mastery to target; reintroduce and target concept for less than predefined mastery on quiz; move to next session if greater than predefined mastery level.

4. Executive Function: ability to organize and plan information and thoughts for coherency, self-monitoring for comprehension, and execute plans of action.

It may be helpful for children with ASD with executive functioning deficits to actively be engaged during book reading including the use of dialogic reading prompts and the level of reading prompts may need to be adjusted depending on the individual student (Fleury et al. 2014).

Integrated Strategies: least to most prompting, shared reading, "wh" dialogic questions, time delay, reinforcement.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	One teacher or general education peer is engaged in intervention and provide questions and feedback statements to an ASD student. Topics of interest may further engage the student. • Adult or peer ask questions of the student providing needed levels of prompting. • General education peers are trained in supporting ASD student in intervention context and procedure. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are engaged in this intervention to keep them motivated to continue. • Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session. • If new material or procedure is new, intervention may need to start with shorter sessions or fewer dialogic questions and statements to promote success and time added incrementally as skills increase. • To learn a concept or content, more than one intervention session on similar or identical content may be needed to gain deep and sustained understanding and learning.
Materials	One content appropriate book, chapter, or designated reading content targeted per session • Teacher prepares sufficient predefined number of dialogic questions and statements to meet the need of student participating in the intervention.

	• Notecards can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student.
Intervention Procedure	• Procedure used in a one-on-one setting with a teacher or peer and the ASD student. • Using dialogic intervention approach (shared reading) where teacher or peer poses questions or statements related to the assigned reading, and uses least to most prompting, providing reinforcement through verbal praise for correct responses: - Ask questions about the reading that targets vocabulary and where there is a specific response such as what, where, who, when about a picture. (Example: a picture of the Brown Bear looking at the green frog "WHO is that?"—with emphasis on WHO). Verbally prompt if student does not know the answer by saying "it is Grrr (beginning sound of green frog; add greeee, then Ggreeeeeennnn) in least to most prompting. Add sounds and words as needed to assist in accurate responses. - Request recall of a (repetitive) statement. (Example: WHAT color was the frog? —with emphasis on WHAT and COLOR). Verbally prompt if student does not know the answer with beginning letter sounds, adding words as needed, for example "gree….". - Request completion of repetitive phrases. (Example: "Brown ____, Brown _____ what do you _____"—start with leaving out one word, and increase number of words the student has to fill in as he or she masters this approach). Verbally prompt if student does not know the answer with beginning letter sounds, adding words as needed. - Pose questions that relate elements of a passage to the student's experiences. (Example: "Brown Bear sees lots of animals, what animals do you see in your yard?"—start with very simple questions and increase in complexity as student masters). If student does not respond and known foods are not a preference, provide examples, such as "do you see elephants…(no!)…exactly…you do not see elephants in back yards, do you see dogs?" - Ask open ended questions to explain what is happening in pictures or illustrations that may have more than one answer. (Example: "What is happening in this picture?"—these may be difficult so the student may start with familiar texts and one or two word responses and increase length or details as this is practiced). For example, if there is a picture yellow duck…and no response…." He saw a yellow duck. What did the yellow duck see? (Allow time for response or "time delay").
Data	• Document current benchmark data from standardized tools. • Baseline data collected for assigned reading in a one on one setting prior to dialogic intervention consisting of verbal questions or statements (i.e. 3-10) administered by the teacher or peer to elicit a response and recording accuracy of responses • One on one post-intervention session consisting of a defined number of dialogic questions or statements (i.e. 3-10) administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. - If gains are being made through intervention, continue with intervention implementation and fade in additional details. - If the student is not making gains, reduce number of concepts, complexity of material, and/or assure general education student is trained and able to work with the student and deliver the intervention with fidelity.

	- Conduct post-intervention data collection consisting of a defined number of dialogic questions or statements (i.e. 3-10) administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. Review any discrepancies between pre and post reading quiz responses with an accuracy of predefined mastery level or greater. - If reading target not achieved, adjust targets, prompts, and target in next session. • Record data on mastery to target; reintroduce and target concept for less than predefined mastery on quiz; move to next session if greater than predefined mastery level.

5. Restricted Interests & Motivation: intense preoccupation with specific interest areas or activities which impact motivation to read non-preferred text or results in getting stuck on words or phrases.

Using *student's interests* to motivate learning including theme based instruction, in organized blocks of time, and links to *topics of interest* and past knowledge to new information using a *story map* (Carnahan, Williamson & Christman, 2011); use *peers* to increase social interaction by having peer *model* and complete same assignment.

Integrated Strategies: visuals, graphic organizers/story maps, peer supports, modeling, reinforcement.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	ASD student sits with one general education peer or teacher and each (silently) read the same passage of interest to the ASD student. • General education peers are trained in supporting ASD student in intervention context and procedure to increase fidelity of implementation. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are learning to keep them motivated to continue. • Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session. • Defined reading time with breaks after each intervention session; tolerance and ability of student should be considered. • If new material or procedure is new, intervention may need to start with shorter sessions or reduce response difficulty to promote success with time added incrementally as skills increase. • To learn a concept or content, more than one intervention session on similar or identical content may be needed to gain deep and sustained understanding and learning.

Materials	• Reading content on a topic of intense interest to the student
	• Reading content should connect existing (background) knowledge about a topic to new information.
	• Worksheet including fillable lines or boxes for what is known about a topic, new details, and what is the same and different. Align to student area of interest.
	   - Notecards can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student.
	   - Technology can be used in place of notecards, for example if there are questions or vocabulary information at the end of an online chapter, it can be referenced on line. Practice texts can also be referenced through technology if appropriate and motivating for the student with ASD.
	   - A white board or flip chart may also be used in place of or along with notecards to help vary the teaching style and to promote generalization.

Intervention Procedure	• Collect baseline competency after covering lesson passage that is of *no specific interest* to the student and asking them to complete a worksheet, for example:
	   - What I know about (topic): 1_____ 2_____3_____
	   - What are new details in the passage about (topic): 1_____ 2_____3_____
	   - What is the same? _____
	   - What is different? _____
	• Teacher conducts lesson covering targeted reading passage of interest to student with ASD in a one on one setting or in small group with 2-5 general education students and 1 ASD student.
	• Teacher prompts the ASD student saying "you are going to read with a friend(s) about (topic)."
	• ASD student and one peer sit within 5 feet of each other (e.g. across from each other on the floor, at a table, or across from each other).
	• Peer says "we get to read about (topic)…when we are done, we get to answer (number of) questions about what we already know about (topic), and (number) new things we learned about (topic)."
	• Student and peer read passage and write down details. Worksheet contains:
	   - What I know about (topic): 1_____ 2_____3_____
	   - What are new details in the passage about (topic): 1_____ 2_____3_____
	   - What is the same? _____
	   - What is different? _____
	• Teacher/peer reviews worksheet to make sure each detail is completed and encourages completion, using verbal prompting as needed (example: what is one more thing you read that you did not know about [topic])?"
	   - Peer can prompt with additional details (example if the topic is trees: "I see you read one detail is a kind of tree is maple…the passage mentioned other types trees, like Ever……(green)," while trying to let the student figure out the name of the tree.

	• After the reading passage is completed, both the ASD student and peer answer their questions on their own sheet of paper and then read their answers to each other.
	  - Adjust number of details based on ability of the student and fade in additional number of response details as the student learns the concept and story.
	• Provide continual reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are learning to keep them motivated to continue. Fade reinforcement frequency as they gain the targeted skill.
	• Monitor and provide reinforcement to the general education peer to promote continued effort and interest.
	• Compare baseline test to post-intervention test scores.
	  - Review any discrepancies between pre and post reading responses with a targeted accuracy of pre-defined target (i.e. 85%) or greater to consider target achieved.
	  - If reading target not achieved at pre-defined target (i.e. 85%) correct, adjust number of details required, discuss passage, prompt to promote correct responding.
	• Record data on mastery to target; reintroduce and target concept for less than predefined target (i.e. 85%) on quiz; move to next session if greater than pre-defined target (i.e. 85%).

Data	• Document current benchmark data from standardized tools.
	• Data: collect both baseline and post-intervention data.
	  - If gains are being made through intervention, continue with intervention implementation.
	  - If the student is not making gains attempt new topic, or reduce number details to recall.

6. Prior Knowledge: ability to apply relevant background knowledge to make global and abstract connections in text.

The ability to read for meaning involves more than word recognition and oral language. It is additionally important to have a meaning based representation of the text (situation model) integrated with prior knowledge and experience which is considered essential for text comprehension (Ricketts, Jones, Happe, Charman, 2012).

Integrated Strategies: engagement of student with "wh" questions related to their personal background knowledge and connecting to text-specific information; re-reading of text to verify validity of predictions, reciprocal questioning; least to most prompting; reinforcement.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	Students assigned reading content prior to group session. One teacher or general education peer is engaged in intervention and provide questions and feedback statements to an ASD student. Topics of interest may further engage the student. • General education peers are trained in supporting ASD student in intervention context and procedure. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are engaged in this intervention to keep them motivated to continue. • Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session. • If new material or procedure is new, intervention may need to start with shorter sessions or fewer dialogic questions and statements to promote success and time added incrementally as skills increase. • To learn a concept or content, more than one intervention session on similar or identical content may be needed to gain deep and sustained understanding and learning.
Materials	One content appropriate book, chapter, or designated reading content targeted per session • Teacher prepares sufficient notecards related to questions/responses related to the text to meet the need of student participating in the intervention. • Notecards can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student. • Technology can be used in place of notecards, for example if there are questions or vocabulary information at the end of an online chapter, it can be referenced on line. Practice texts can also be referenced through technology if appropriate and motivating for the student with ASD. • A white board or flip chart may also be used in place of or along with notecards to help vary the teaching style and to promote generalization.

Intervention Procedure	• Procedure used in a one-on-one setting with a teacher or peer and the ASD student.
	• Select a text the student has a strong interest and knowledge of, for example "Thomas the Tank Engine".
	• Using "wh' questions where teacher or peer poses questions or statements related to the assigned reading, and use least to most prompting:
	  - Ask questions about the reading that targets vocabulary and where there is a specific response such as what, where, who, when about the main idea of the text; ask questions related to the detail of the text.
	  - Connect background knowledge of Thomas to recalling details of a story. Example: "Who" is the main character in the story (Thomas); "where" does Thomas live? "Why" was Thomas mad at Gordon?

	- Prompt student to ask question of teacher or peer related to reading, for example, "now it's your turn to ask me 3 questions about the story". Use least to most prompting to promote continued responding.
Data	• Document current benchmark data from standardized tools.
	• Baseline data collected for assigned reading in a one on one setting prior to intervention session consisting of verbal questions or statements administered by the teacher or peer to elicit a response and recording accuracy of responses
	• One on one post-intervention session consisting of a defined number of WH questions and reciprocal questioning administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. 　- If gains are being made through intervention, continue with intervention implementation and fade in additional details. 　- If the student is not making gains, reduce number of concepts, complexity of material, and/or assure general education student is trained and able to work with the student and deliver the intervention with fidelity. 　- Conduct post-intervention data collection consisting of a defined number of dialogic questions or statements (i.e. 3-10) administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. Review any discrepancies between pre and post reading quiz responses with an accuracy of predefined mastery level or greater. 　- If reading target not achieved, adjust targets, prompts, and target in next session.
	• Record data on mastery to target; reintroduce and target concept for less than predefined mastery on quiz; move to next session if greater than predefined mastery level.

7. Literal vs. Abstract Thinking: focus on factual information such as events and actual objects or people in the text and an absence of focus on concepts and generalizations often confused by a lack of understanding idioms, irony, figures of speech, innuendo, and sarcasm.

Children with ASD have difficulty interpreting figurative language and vocabulary and may take it literally. A student's performance on some reading tasks may not be an indicator of understanding of the meaning of text (an example would be "I am feeling under the weather" as a reference for my not feeling well). Targeting instruction in vocabulary is an important part of each school day and for students with ASD, teaching fewer words in a set with more depth than teaching more words in a cursory approach with a focus on semantic relationships (Carnahan, Williamson, Quill, 2010). Vocabulary can be practiced while using texts that are based in factual information and initially can be focused around the student's area of high interest and fact-based information.

Integrated Strategies: high area of interests, direct teaching, visuals, generalization, reinforcement.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	Students assigned reading content prior to group session. One teacher or general education peer is engaged in intervention and provide questions and feedback statements to an ASD student. Topics of interest may further engage the student. • General education peers are trained in supporting ASD student in intervention context and procedure. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are engaged in this intervention to keep them motivated to continue. • Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session. • If new material or procedure is new, intervention may need to start with shorter sessions or fewer dialogic questions and statements to promote success and time added incrementally as skills increase. • To learn a concept or content, more than one intervention session on similar or identical content may be needed to gain deep and sustained understanding and learning.
Materials	One content appropriate book, chapter, or designated reading content targeted per session • Teacher prepares sufficient notecards related to questions/responses related to the text to meet the need of student participating in the intervention. • Notecards can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student. • Technology can be used in place of notecards, for example if there are questions or vocabulary information at the end of an online chapter, it can be referenced on line. Practice texts can also be referenced through technology if appropriate and motivating for the student with ASD. • A white board or flip chart may also be used in place of or along with notecards to help vary the teaching style and to promote generalization.
Intervention Procedure	• Procedure used in a one-on-one setting with a teacher or peer and the ASD student. • Select a text the student has a strong interest and is fact based. For example, if the student loves sports*, I am Jackie Robinson*. • Prepare 2 sets of notecards. One with a set of terms from the text and one term per cards, a second set with one response to each card (if you have 5 vocabulary words, there should be 5 response cards. Depending on the student's background and ability, start with 2-3 words. • Run a baseline session initially with the total set of questions. • To run procedure, use the same cards as used in baseline:

	- Lay vocabulary words face-up on a table so the student can select an answer (or match an answer). - Show the student a question card by presenting the card to the student and present the question, for example "the main character in the story was_____" - Let the student select the card. Set the student up for success the first time by providing a positional prompt if needed, for example moving the correct answer closet to the student. If the student is correct, provide strong verbal praise. If incorrect, say "oh, nice try, but that is NOT the main character, try again". If the student still does not give the correct response, tell the student which response is correct, and present the question again so the student can select the correct answer. Provide verbal praise for the response.

Data	• Document current benchmark data from standardized tools.
	• Conduct a baseline session initially with the total set of questions and responses and record correct versus incorrect responses. Do not provide feedback on responses when administering the baseline test.
	• Collect data on correct/incorrect responses during the session.
	• One on one post-intervention session consisting of all of the terms covered that day (and tested in baseline).
	  - If gains are being made through intervention, continue with intervention implementation and fade in additional terms.
	  - If the student is not making gains, reduce number of concepts, complexity of material, and/or assure general education student is trained and able to work with the student and deliver the intervention with fidelity.
	  - Conduct post-intervention data collection administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. Review any discrepancies between pre and post reading quiz responses with an accuracy of predefined mastery level or greater.
	  - If reading target not achieved, adjust targets, prompts, and target in next session.
	• Record data on mastery to target; reintroduce and target concept for less than predefined mastery on quiz; move to next session if greater than predefined mastery level. Assure mastery of the concept and deep understanding of terms before moving to additional terms or material.

8. Pragmatics: ability to understand language and communication in social contexts and thus predict character intentions and behaviors.

Children typically learn pragmatic skills through symbolic play and sharing of information. Students with ASD have challenges with connecting an object to a concept being read thus using words to represent the same object. To aid in reading comprehension including prediction and summarization, generating and responding to questions related to main ideas, inferences, character perspectives including question-answer scenarios and reciprocal questioning (Carnahan, Williamson, Quill, 2010).

Integrated Strategies: peer supports, visuals, reciprocal questions, question-answer scenarios, generalization of terms, reinforcement.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	Students assigned reading content prior to group session. One teacher or general education peer is engaged in intervention and provide questions and feedback statements to an ASD student. Topics of interest may further engage the student. • General education peers are trained in supporting ASD student in intervention context and procedure. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are engaged in this intervention to keep them motivated to continue. • Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session. • If new material or procedure is new, intervention may need to start with shorter sessions or fewer dialogic questions and statements to promote success and time added incrementally as skills increase. • To learn a concept or content, more than one intervention session on similar or identical content may be needed to gain deep and sustained understanding and learning.
Materials	One content appropriate book, chapter, or designated reading content targeted per session • Teacher prepares sufficient notecards related to questions/responses related to the text to meet the need of student participating in the intervention. • Notecards can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student. • Technology can be used in place of notecards, for example if there are questions or vocabulary information at the end of an online chapter, it can be referenced on line. Practice texts can also be referenced through technology if appropriate and motivating for the student with ASD. • A white board or flip chart may also be used in place of or along with notecards to help vary the teaching style and to promote generalization.

Intervention Procedure	• Procedure used in a one-on-one setting with a teacher or peer and the ASD student. Due to the social deficits of some students with ASD, using a trained peer may be beneficial to the student with ASD.
	• Collect baseline data on content to be covered in intervention.
	• Using the reciprocal questioning and question-answer approaches, the following related to a young girl being frustrated with her younger sister always wanting to be like her…
	  - The peer (or teacher) sits with the student with ASD at a table or on the floor.
	  - The peer and student with ASD have cards with questions provided by the teacher related to the story read

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- The peer questions the student with ASD one of the questions, and they record the response on the white board. The peer provides feedback on whether the response was correct or incorrect, and they need to try again. The peer can partially prompt a response by saying "oops, that's close but think about (something related to the detail); further prompting, remember, Sally was the main character, and she was the oldest in her family…. what do you think Sally's sister will do when Sally gets mad at her for wearing her shoes?" Prompt: do you think Sally's sister will stop wearing her shoes or not really care (one is the correct answer); why do you think that?" The peer then provides feedback and positive verbal reinforcement and checks the box on the data sheet with a correct or incorrect response. The session can also be video recorded for observation after the session for feedback to the peer.
- The ASD student then poses a question back to the peer. This should be a back and forth scenario. The peer should intentionally answer incorrectly to prompt the student with ASD to say "wrong! Or Try again!"

- Collect post-intervention data by administering the same questions at baseline.
- Advance to the next reading target when current goals are met.
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- Document current benchmark data from standardized tools.
- Baseline data collected for assigned reading in a one on one setting prior to intervention by the teacher or peer to elicit a response and recording accuracy of responses
- Data collected during the intervention on a simple correct/incorrect data recording sheet.
- One on one post-intervention session consisting of a defined number of questions administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses.
  - If gains are being made through intervention, continue with intervention implementation and fade in additional details.
  - If the student is not making gains, reduce number of concepts, complexity of material, and/or assure general education student is trained and able to work with the student and deliver the intervention with fidelity.
    - Conduct post-intervention data collection consisting of a defined interventions administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. Review any discrepancies between pre and post reading quiz responses with an accuracy of predefined mastery level or greater.
    - If reading target not achieved, adjust targets, prompts, and target in next session.
- Record data on mastery to target; reintroduce and target concept for less than predefined mastery on quiz; move to next session if greater than predefined mastery level.
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9. Repetitive Patterns of Behavior: The desire for predictability that results in rigid adherence to schedules, routines, and thinking in an attempt to create "sameness."

Individuals with ASD typically maintain various forms of repetitive behavior. It is often difficult to break these patterns and may affect interests in reading and engaging in the material, especially since reading and comprehending is highly demanding on cognitive processing. Attachment to routines can actually be used as a strength with well-implemented instructional strategies. Using schedules following the same reading routine for ongoing predictability of schedule and expectations can be helpful while integrating the student's area of interest can be naturally reinforcing and further engage the student (Carnahan, Williamson, Quill, 2010).

Integrated Strategies: visuals (schedules), peers, prompting, high interest materials, generalization, reinforcement.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	Students assigned reading content prior to group session. One teacher or general education peer is engaged in intervention and provide questions and feedback statements to an ASD student. Topics of interest may further engage the student. • Establish similar routine including frequency, location, individuals engaged; when changes are needed prepare the student through social narrative, explanation if appropriate, or visuals. • General education peers are trained in supporting ASD student in intervention context and procedure. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are engaged in this intervention to keep them motivated to continue. • Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session. • If new material or procedure is new, intervention may need to start with shorter sessions or fewer dialogic questions and statements to promote success and time added incrementally as skills increase.
Materials	One content appropriate book, chapter, or designated reading content targeted per session in an area of high interest to the student. • Teacher prepares sufficient notecards related to questions/responses related to the text to meet the need of student participating in the intervention. • Notecards can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student.

	• Technology can be used in place of notecards, for example if there are questions or vocabulary information at the end of an online chapter, it can be referenced on line. Practice texts can also be referenced through technology if appropriate and motivating for the student with ASD. • A white board or flip chart may also be used in place of or along with notecards to help vary the teaching style and to promote generalization.

Intervention Procedure	• Procedure used in a one-on-one setting with a teacher or peer and the ASD student.
	• Reference the visual schedule saying "next on our schedule is reading with our friend" and the group breaks into their pairs.
	• Example intervention, with student's high interest area Mickey Mouse.
	  - Run baseline by administer plain worksheet with vocabulary reading content questions from an assigned reading text. Use appropriate questions/matching/fill in the blank based on the skill level and need of the student and record correct and incorrect responses on simple data sheet. Do not correct responses that were not correct.
	  - Show the Mickey Mouse doll and say something like "now we get to work with a friend, and once you answer 5 questions on the worksheets you get to hold your Mickey Mouse for 1 minute."
	  - Provide a worksheet as a graphic organizer with pictures of Mickey Mouse asking questions about details of the story.
	  - Incorporate Mickey Mouse visuals and prompt as needed, for example "What would Mickey Mouse say one detail of the story is?" They can draw a line to answer or it could be fill in the blank or multiple choice. Modify questions and this approach as needed to fit the capability and needs of each student.
	  - Prompt and provide correct answers if the student responds incorrectly. For correct answers respond with "yes, great, let's go to the next question".
	  - When finished with the first 5 questions, say "you did awesome…great job! You get 1 minutes to hold your Mickey Mouse doll, and then we will do the next 5 questions".
	  - Follow this for the length of the intervention.
	  - When completed with material or at end of intervention specific target, administer post-intervention worksheet with no prompting or support. Measure correct and incorrect responses.
	  - When finished, say something like "you did awesome today and worked so hard…you get 5 minutes to play your Mickey Mouse game on the IPAD! Only provide access to this when all questions have been completed and at the end of the intervention.

Data	• Document current benchmark data from standardized tools. • Baseline data collected for assigned reading in a one on one setting prior to intervention administered by the teacher or peer to elicit a response and recording accuracy of responses • One on one post-intervention session consisting of intervention administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. - If gains are being made through intervention, continue with intervention implementation and fade in additional details.

- If the student is not making gains, reduce number of concepts, complexity of material, and/or assure general education student is trained and able to work with the student and deliver the intervention with fidelity.
  - Conduct post-intervention data collection consisting of a defined intervention administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. Review any discrepancies between pre and post reading quiz responses with an accuracy of predefined mastery level or greater.
  - If reading target not achieved, adjust targets, prompts, and target in next session.
- Present similar questions in different ways on the worksheet to assure generalization.
- Record data on mastery to target; reintroduce and target concept for less than predefined mastery on quiz; move to next target if greater than predefined mastery level.

10. Language, Communication, and Vocabulary: ability to understand the complexities of language, communication, and vocabulary to comprehend text.

Communication is a core deficit in children with ASD, and expressive language is key to developing literacy skills. It is very important that individuals working with children with ASD understand language development and its impact on acquiring literacy skills. Further, due to variability of skills in children with ASD and their language and literacy development, the implementation of interventions may be vastly different because of their level of ASD affectedness and it is important to understand numerous strategies and techniques to facilitate language and literacy skills to achieve their highest potential. Connecting literacy to communication requires consideration of phonological awareness and phonics, morphology, syntax, semantics, metalinguistic skills, transaction, and stance (Carnahan, Williamson, Quill, 2010).

Integrated Strategies: visuals, graphic organizers/story maps, peer supports, modeling, reinforcement.

Step	Actions
Skill Definition	Define target skill to be achieved for the student participating in intervention in observable, concrete, and measurable terms.
Setting	Students assigned reading content prior to group session. One teacher or general education peer is engaged in intervention and provide questions and feedback statements to an ASD student. Topics of interest may further engage the student. • General education peers are trained in supporting ASD student in intervention context and procedure. • Provide reinforcement through verbal feedback and other motivating objects or activities as appropriate for the ASD student while they are engaged in this intervention to keep them motivated to continue.

	• Monitor and provide feedback and meaningful reinforcement to the general education peer to promote continued effort and interest.
Intervention Period	Structured and length appropriate for need and capacity of student(s) involved in session. • If new material or procedure is new, intervention may need to start with shorter sessions or fewer dialogic questions and statements to promote success and time added incrementally as skills increase.
Materials	One content appropriate book, chapter, or designated reading content targeted per session • Teacher prepares sufficient notecards related to questions/responses related to the text to meet the need of student participating in the intervention. • Notecards can be used by teacher or peer and the number of questions should be tailored to the needs, capacity, and tolerance of the ASD student. • Technology can be used in place of notecards, for example if there are questions or vocabulary information at the end of an online chapter, it can be referenced on line. Practice texts can also be referenced through technology if appropriate and motivating for the student with ASD. • A white board or flip chart may also be used in place of or along with notecards to help vary the teaching style and to promote generalization.
Intervention Procedure	• Procedure used in a one-on-one setting with a teacher or peer and the ASD student. • Example intervention for metalinguistic skill development to better understand what the author's intended message. • Connect text to background information in areas of high interest to make predictions • Collect baseline data on reading content administered with no strategies or reinforcement. When done with the baseline test, say, let's work with our friend. • Peer verbally or in written form asks the student with ASD a question about a story related to dogs while the student's intense interests are type of dogs. • Peer presents "wh" questions at built in stopping points to make predictions in the form of what kind of dog was the dog in the story (i.e. Chester)? Do you think made it home after the kids found him in the woods? What is Chester going to do if a stranger tries to feed him? Do you think he is scared? Adapt the questions based on the skills level and need of each student. • Provide least to most prompting, verbal social praise and access to motivating reinforcement at the end of the work session to maintain engagement. • Administer post-intervention worksheet to measure impact of interventions.
Data	• Document current benchmark data from standardized tools. • Baseline data collected for assigned reading in a one on one setting prior to dialogic intervention consisting of intervention administered by the teacher or peer to elicit a response and recording accuracy of responses

	• One on one post-intervention session consisting of a defined intervention administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses.
	  - If gains are being made through intervention, continue with intervention implementation and fade in additional details.
	  - If the student is not making gains, reduce number of concepts, complexity of material, and/or assure general education student is trained and able to work with the student and deliver the intervention with fidelity.
	  - Conduct post-intervention data collection consisting of a defined interventions administered by the teacher or peer to elicit a response to the question or statement and recording accuracy of responses. Review any discrepancies between pre and post reading quiz responses with an accuracy of predefined mastery level or greater.
	  - If reading target not achieved, adjust targets, prompts, and target in next session.
	• Record data on mastery to target; reintroduce and target concept for less than predefined mastery on quiz; move to next session if greater than predefined mastery level.

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