

Teaching Inferencing Skills to Promote Students' Academic and Social Success

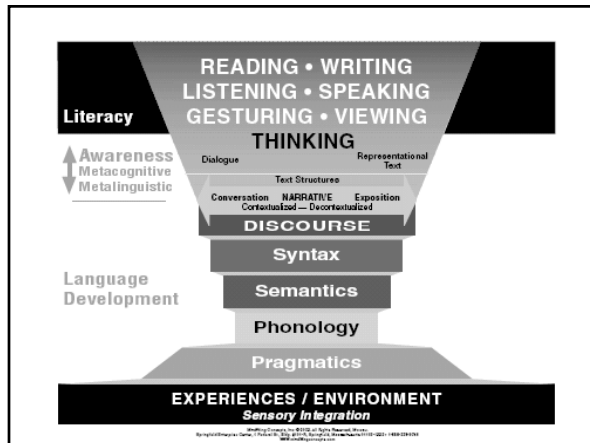
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Overview of the Challenge

- Communication is at the crux of interaction and interdependence among community members
- The ability to communicate is the most difficult and remarkable feat of humankind
- The ease with which most of us learn & use language blinds us to how complex the acquisition process really is
- As human beings, we use listening & speaking skills to connect with others in personal interactions and reading & writing skills to interact with individuals not physically present
- To succeed in Life, our students need to know how to:
 - Listen to understand (oral comprehension)
 - Speak to be understood (verbal expression)
 - Read to understand (reading comprehension)
 - Write to be understood (written expression) and
 - Think Socially (relate effectively)



Pragmatics: Social Language Skills

- The study of speaker-listener intentions & interactions, and all elements in the environment surrounding the message. These social language skills include:
- Nonverbal Communication (80-85% of message)
 - Fluent social & communication skills are dependent on the ability to infer emotional and other mental states based on facial expressions, vocal intonation and context
- Verbal Appropriateness
- Organizational Skills
- Sequencing Information
- Critical Thinking
- Identifying/Using Information
 - Main Idea ---Induction/Deduction
 - Inferences ---Judgments

Ciaranello, SLP, Palo Alto Unified School District

The Neurology of Social Intelligence

- Typical humans are “wired” in utero to begin interacting with caregivers in non-verbal “protoconversations” from the first breath drawn---a baby’s brain is ready to respond
- A protoconversation* is a duet where both infant and parent “seek harmony and counterpoint on one beat to create a melody”---watch any mother/baby communicate
- The shared “discussion*” centers on one central theme: emotions---a positive exchange of signals creates bonding
- Protoconversations remain our most basic template for interacting---the ability to get in synch emotionally with another person (as we did when we were babies) serves us through life, guiding us in every social interaction
- Precursors to empathy begin as early as the 1st week of life
- Typical neurology provides us with an aptitude for forming relationships, following a known developmental pattern

Goleman, 2006

Milestones in Pragmatics #1

Age: 0 - 6 months

- Watches speaker’s face when spoken to
- Varies responses to different family members
- Has a social smile
- Uses babbling for gaining attention & expressing demand
- Establishes eye contact

Age: 6 - 12 months

- Responds to “no”
- Responds to name & pats image of self in mirror
- Points to learn new vocabulary
- Tries to communicate by actions & gestures
- Plays pat-a-cake and peek-a-boo games

All Milestone Slides are adapted from LinguSystems’ *Guide to Communication Milestones*, 2008

Milestones in Pragmatics #2

Age: 1 - 2 years

- Follows simple directions, especially with a gestural cue
- Imitates adult behaviors and talks to self in play
- Exhibits verbal turn-taking
- Says social words, such as *hi, bye, please & thank you*
- Can identify others' general emotional states & engage in empathic behaviors

Age: 2 - 3 years

- Watches other children and briefly joins in their play
- Requests permission for items or activities
- Begins to use language for fantasies, jokes, and teasing
- Makes conversational repairs when necessary
- Begins to control behavior verbally rather than physically

Milestones in Pragmatics #3

Age: 3 - 4 years

- Takes turns and plays cooperatively
- Relates personal experience through verbalization
- Begins dramatic play, acting out whole scenes
- Expresses ideas and feelings

Age: 4 - 5 years

- Uses direct requests with justification
- Uses language to resolve disputes with peers
- Has good control of the elements of conversation
- Speaks of imaginary conditions, such as "What if..." or "I hope..."

Milestones in Pragmatics #4

Age: 5 - 6 years

- Begins to use word plays
- Uses threats and promises
- Asks meanings of words
- Asks questions for information
- Chooses own friends
- Takes more care in communicating with unfamiliar people
- Engages in cooperative play, such as making group decisions, assigning roles, and playing fairly

Age: 6 - 7 years

- Cognitively capable of "walking in someone else's shoes" and, on course to---
- Learn how to share, support, comfort & help---all aspects of empathy, the social emotion

How Social Cognition Evolves

1. **Joint Attention** (90% of infants who don't develop joint attention by age 1 are later diagnosed with ASD)
2. **Early Symbolic Communication** (pointing with index finger to communicate interest to another person)
3. **Imitation of Another's Movements**
4. **Parallel Play**
5. **Cooperative Play** (language typically develops simultaneously)
6. **Complex Interactions**
 - By age 4: Anticipates actions of others
Reads others' thoughts & emotions
Initiates language to share thoughts & ideas
 - By age 6: Learns that others may lie, cheat or steal to get what they want---
 - By age 7: Improves ability to perceive & understand the inner experience of another & to express that understanding through a supportive response
Empathy increases with age, like most developmental domains

Joint Attention

- **Definition:** consciously focusing your attention on the same event or object as another person
 - Not just looking at the same thing as someone else, but being *aware* that you're sharing this experience
 - Vitrally important to communication and language development in typical children
- Early joint attention behaviors indicate the young child's growing awareness of the need to **engage** other people and include:
 - Gaze following Showing/offering gestures
 - Proto-declarative pointing (highly predictive)
- Joint attention sets the stage for: Relatedness & emotional sharing
 - Intention reading
 - Inter-subjectivity (shared understanding)
- Neurotypical infants readily engage in peek-a-boo, pat-a-cake, and many other simple games with their parents which teach them:
Attention sharing Affect sharing & Social Reciprocity
and, how to: Regulate interaction & Anticipate what will come next
- These games are important precursors to the development of social communication
Twatman-Cullen, 2008

A Social-Pragmatic Theory of Language Development

- Young neurotypical children are not just trying to map *word to world*
- They're attempting to make sense of situations via *social referencing* (i.e., looking to others, especially parents, for clues as to how to behave, react, or interpret a situation)
- Adults "tell" the child how to experience a situation not just by teaching him a word, but by using a wide range of social-pragmatic cues (e.g., eye gaze, facial expression, body language, vocal tone)
- The child then learns to use that same word when he wants someone else to experience a situation in the same way (first words emerge at about age 1)
- Clearly, when a young child demonstrates social learning weaknesses, early intervention is the key! Parent-focused approaches are the most helpful at this stage because parents are their children's first and most powerful teachers!

Symbolic Communication: Common Pathways and Points of Departure from "Learners on the Autism Spectrum," Twatman-Cullen, 2008

Baby Games & Infants with Autism

- Infants with autism do not as readily engage in baby games as typical peers do. As a result:
 - ✓ They are missing out on opportunities to experience emotional regulation, affect and attention sharing, social reciprocity and anticipation...
 - ✓ The neurons that would normally be used in these activities are not getting activated, and the new neural pathways are not being built
 - ✓ They also prefer "sameness" to new activities, engaging in repetitive and self-stimulatory behaviors like rocking, twirling, flapping which are unilateral and nonsocial

Cascading Effects in Autism

- The infant with autism rejects baby games and thus:
- Misses out on experiences that would build joint attention skills (this is a stable characteristic of children with autism---they occur at all levels of the spectrum), emotion sharing, and relatedness
- Fails to develop *inter-subjectivity* (shared understanding with others)
- Without inter-subjectivity, the baby can't develop *intention reading* (the ability to "read" the message another person is trying to communicate)
- Without intention reading, the toddler can't develop symbolic communication
- If the preschooler with autism can't understand basic messages being communicated, how can s/he use abstract symbols (words) to represent those intentions later on in Kindergarten?
- Research has led to the development of specific intervention approaches that facilitate the emergence of these critical skills

Early Intervention Programs

The Hanen Centre in Canada has developed two remarkable programs to support parents of children on the autism spectrum:

- *More Than Words: Helping Parents Promote Communication and Social Skills in Children with Autism Spectrum Disorder (1999)* and
- *TalkAbility: People Skills for Verbal Children on the Autism Spectrum---A Guide for Parents (2006)* (both books written by Fem Sussman, SLP)

The SCERTS Model is a comprehensive educational approach and multi-disciplinary framework that addresses the core challenges faced by children with ASD & related disabilities. It prioritizes goals and implements practices that focus on enhancing Social Communication, Emotional Regulation, and Transactional Supports. This approach can be used with a wide range of ages and developmental abilities.

The P.L.A.Y. Project is a home-based parental training program for 14 mo.-8 yr. old children with ASD developed by Dr. Rick Solomon (Ann Arbor, MI Center for Developmental & Behavioral Pediatrics), based on the DIR model of Greenspan & Weider, to help parents become their child's best play partner by providing effective, low cost, playful interventions.

Linking Language Development to Literacy in Early Childhood Settings

Set aside time daily to have extended discussions with young children

Answer questions, especially surrounding:

Temporal sequencing of events, so children will begin to follow directions and sequence actions in beginning narratives

"Cause/effect," so children will have some knowledge of the workings of the world and become aware of initiating events and reactions in real life, stories and beginning explanatory talk.

Problems and their solutions, so children will understand and be able to talk about problems which cause people's **internal responses (feelings)** and motivate their actions and words. Provide this information about your own intents as well.

Describe events and environmental objects with the child

Extend descriptions with "open-ended questions" & comments. Allow reciprocal Q & A

Provide personal narratives (stories/recounts) of your own day

Since you are serving as a model, try to include all the elements of narrative (story): character, setting, initiating event (problem/excitement), feeling, plan of action, attempts to carry out the plan and the consequence, as well as a statement about how the character (you, the child, a book character, etc...) felt as a result of the consequence.

Extend picture book reading with discussion

about your own and the child's personal reactions: their feelings, descriptions, etc...

Provide ample opportunities for children to TELL stories with no interruptions: this is narrative practice!

Social Intelligence

- Social Intelligence is a shorthand term for being intelligent not just *about* our relationships but also *in* them*
- **Social Awareness** refers to a spectrum that runs from instantaneously sensing another's inner state, to understanding her feelings & thoughts, to "getting" complicated social situations. It includes:
 - Primal Empathy: feeling with others; sensing non-verbal emotional signals
 - Attunement: active listening which results in a genuine sense of mutuality;
 - Empathic Accuracy: understanding another's thoughts, feelings, & intentions
 - Social Cognition: knowing how the social world works (Goleman, 2006)
- **Empathy** is the ability to understand what others feel and express that understanding in a caring way. It's considered the **social emotion** because it brings a sense of emotional connection to others.
- It has three important components:
 - ✓ cognitive (perspective-taking)
 - ✓ affective (emotional matching) and
 - ✓ behavioral (displays of concern)
- Empathy moves us past the self and into relational awareness
- Relational awareness is the root of inferring, and basic to all healthy relationships, as well as prosocial behavior, altruism, kindness and peace

Teaching Children Empathy, The Social Emotion Caselman, 2010

What Is Social Competence?

- Social competence is the ability to accommodate or adapt to ongoing social situations, which requires self-regulation, as well as synchrony with other individuals
- Social interactions demand moment-to-moment integration of multiple contextual, social, emotional and language cues
- An individual must simultaneously determine how to use body, eyes, facial expression, words and so much else:
 - At the right time and In the right place
- The complexity of social skills rivals the most complicated science! Many children struggle to develop these skills **intuitively**, via the usual, more subtle socialization methods used by parents & teachers---research explains why (Winner, 2004)
- For individuals with AS/HFA, social learning is a **cognitive** rather than an **intuitive** experience. Teach accordingly!
- Treatment should mitigate against The Matthew Effect:
 - The Rich get Richer and The Poor get Poorer!

Characteristics of Social Competence

- Children with typical language development acquire & refine social language skills from early preschool until at least adolescence (hopefully, across the lifespan)
- Students with age-appropriate social language skills are apt to have friends and be chosen by their peers for party invitations, sports teams & other extra-curricular activities
- They are likely to conduct themselves well on the playground, in the classroom, and outside of school
- Children with good social skills are usually sensitive to the feelings of others and are kind and considerate
- These students are usually able to see and try alternative solutions to problems before coming to an adult
- They are aware of rules & feel bad about breaking them
- These kids persist at a task even though frustrated by it
- Students with this set of skills demonstrate high EQ

How to Raise a Child with High EQ, Shapiro

Social Learning Challenges

- Students with Language Impairment (LI):
 - experience a poor quality of social interactions
 - exhibit greater deficits in social cognitive processing, particularly decoding emotions & solving social problems
 - struggle to infer how someone else feels
 - have trouble thinking of appropriate strategies to handle social conflicts, and knowing when a conflict has been resolved
 - encounter difficulty with reading comprehension, interactive school tasks, and unstructured time at school
 - are unlikely to acquire & keep friends by compromising and taking other actions to nurture long-term relationships
- Social interactions are **dynamic** and depend heavily on both verbal and **nonverbal** communication
 - This may be the main reason children with LI and/or children who have difficulty relating to others (ASD) experience impaired social interaction skills

Adapted from Social Language Development Test--

Elementary

Language & Theory of Mind

- Language reflects the "activity in the mind." Research is showing that language competence can predict Theory of Mind (ToM) skills (Berndsen, 2005)
- ToM is the ability to attribute mental states (beliefs, desires, emotions & intentions) to self and others in order to predict behavior (Lantz, 2002; Berndsen, 2005)
- The term "perspective taking" (PT) is another way to describe ToM
- Students with LI are often on the fringe of social-interaction because they may be unable to take the perspective of another person
- If this is the case, then they may have a social-cognitive disorder, or ToM difficulty, since language competence is linked to this capacity
- PT is the cognitive component of empathy (Caselman, 2010)
- ToM impacts pragmatic language skills & social interactions, including comprehension of lies, surprises, secrets, mistakes & tricks
- It also influences the ability to make inferences so students with deficits in PT often demonstrate difficulty with interpreting abstract meanings and understanding what is being discussed or read

Adapted from LinguSystems' Free Download

Perspective Taking vs. Literalness

- PT is a social executive function that requires processing & responding to multiple levels of information simultaneously within a limited timeframe
- PT is a key element of successful social interaction, especially when resolving conflicts and simply "getting along" with others day-to-day
- Literalness reveals difficulty with intentionality and is one of the most common problems facing even the highest-functioning individuals w/ASD: Q: "Could you pass the salt?" A: "Yes" The listener understands the literal meaning of the words, but not the speaker's intent (to get the salt)
- Because the central deficit of individuals with ASD is in the realm of understanding experience-sharing forms of social interaction, they can handle factual info.---*who, what, when, where*. However, abstracting & inferring pose unique challenges, so *how* and *why* questions are difficult
- Students who do cannot take someone else's perspective often have difficulty "getting it" in many contexts including:
 - comprehending what they read (character motivation, etc.)
 - realizing why school rules are important
 - appropriately interpreting everyday interactions
- The social growth & acceptance of such children depend on developmentally appropriate, systematic, explicit training to help them understand and express their own perspectives, and to recognize other people's perspectives as well

Social Intelligence at School

- The skills needed to successfully interact socially within the academic environment include:
 - Detect, understand, & use nonverbal communication
 - Make logical inferences
 - Read other people's emotions
 - Predict what others intend to do and why
 - Interpret context clues to grasp situation dynamics
 - State problems clearly
 - Propose appropriate solutions to problems
 - Evaluate the pros & cons of completed social interactions
 - Use tact, be considerate, avoid being rude or hurtful
 - Consider the long-term relationship consequences of remarks or action
 - Propose strategies to resolve conflicts

Adapted from LinguSystems' Free Download

Defining Social Inferencing

- When making a social inference, you use what you see and hear to make a guess about what is happening in a social situation (real or pictured) and why
- To do so, you must:
 - pay attention to relevant details and ignore irrelevant ones
 - interpret facial expression, body language & paralanguage
 - use environmental context and other clues combined
 - generalize concrete and abstract knowledge of human characteristics, interactions & concepts
 - recall, remember, know, think, believe, understand "facts"
 - figure out people's intentions and predict their actions
- This process begins at a very early age:
typical infants as young as 2 months respond to another person's facial expressions by imitating a smile & pulling back from a frown

Checklist for Social Inferencing

- Uses appropriate eye gaze & pays attention to other people's eye gaze
- Interprets eye signals correctly & facial expressions appropriately
- Interprets gestures appropriately & others' emotions accurately
- Modifies communication to show emotional support for others
- Guesses people's intentions and correctly predicts their actions
- Identifies causes & predicts consequences of comments & behaviors
- Detects & understands the clues in everyday social situations
- Learns social behavior rules through observation & personal experience
- Recognizes making social errors & learns from mistakes
- Recognizes when others need assistance and helps spontaneously
- Detects when others are busy and would not welcome distractions
- Detects the intent of a playful remark (doesn't take it too seriously)
- Responds appropriately to hints used as gentle or indirect commands
- Justifies inferences clearly to others
- Demonstrates expected behaviors in varied social situations
- Resolves conflict through perspective taking

Michelle Garcia Winner's Insights

- Social cognitive deficits result from a syndrome of weaknesses that prevent the development of the social cognitive knowledge needed to support the presentation of "appropriate" social skills
- The **I Laugh** Approach developed by Michelle Garcia Winner is an evidence-based framework for assessing & treating social cognitive learning disabilities. It explains how social cognitive deficits adversely affect classroom performance as well as interactions with peers and adults. The acronym stands for:
 - I = Initiating novel activities
 - L = Listening actively
 - A = Abstracting & Inferencing
 - U = Understanding Perspective
 - G = Gestalt: *the Big Picture*
 - H = Humor & Human Relatedness
- Michelle and her associates are currently developing a behavioral checklist called the Social Thinking-Social Communication Profile™ to help identify where an individual may fall on a perspective taking spectrum. The degree of impairment in can help determine prognosis, as well as generate therapeutic implications.
- Go to www.socialthinking.com – Click on "What is Social Thinking?" and down the left-hand column, you will find Hot Buttons for multiple resources

Teaching "Social Thinking"

- In a traditional, behaviorally-based social skill training program, we teach a student *what to do* in a given situation, then reinforce that behavior, regardless of IQ
- This approach doesn't address the cardinal deficits of the disorder or honor the complexity of students w/AS or HFA
- In teaching *social thinking* and related skills, using a cognitive-behavioral approach, we teach the student with average to above-average IQ *how people think* in different situations, plus what social behaviors are expected, based on that teaching
- It is through the experience of communication within close relationships that children gain entry into the "community of mind" (Astington & Baird*, 2005)
- The relationship quality between the child and his communicative partner is systematically related to the frequency with which they interact in context-rich discourse about mental states*
- Let's add the 4th "R" to K-12 education for students with Social Learning Weaknesses: reading, writing, 'rithmetic, and relating to achieve better outcomes for all our students!

CommunicationLab

Ellen Pritchard Dodge

- 10 week interactive classroom-based SLP program for grades K-8 to teach "What Good Communicators Do" to target students & peers, in context
- 30 minute whole group sessions combine brainstorming, problem-solving & role-playing with teacher & SLP co-teaching all children
- Lessons focus on the core communication skills needed by all students for academic & social success; peer modeling promotes behavior change
- Teachers are given specific weekly generalization strategies
- Parents are sent weekly letters, explaining each lesson, with suggested carryover activities for target behaviors attached
- Flexible model which can be taught on a 1:1, small group basis (to pre-teach/reinforce concepts with follow-up), as well as whole group
- Creates a home-school connection for reinforcement of critical social language skills needed for academic success
- Free electronic Communication Profile from Alex Kelly provides baseline www.alexkelly.biz/TalkaboutAssessmentTool

See Text Handout (pages 1-3) for Teaching Social Inferencing using Role Play via The CommunicationLab Model

Reading Comprehension

- The ultimate purpose of decoding written language
- A complex skill that requires readers to combine a variety of reading strategies to interact with the text such as:

Making connections	Drawing conclusions
Inferring	Determining main ideas
Predicting	Summarizing
Asking questions	Visualizing
Using context clues	
- Can be improved by instruction that helps readers learn to use specific strategies developmentally (K-12), in an integrated way, since they must be applied in coordination
- Readers need to use their knowledge of language and of the world, along with understanding of print, to understand text

Defining Literary Inferencing

- "Inference (interpretation)... the process of reaching a conclusion based on facts or premises" (Crawley & Merritt, 2000)
- "When we infer (verb), we come to conclusions based on prior experience or known evidence" (Moreau, 2005)
- "An inference is the ability to connect what is in the text with what is in the mind to create an educated guess" (Beers, 2003, p.61-62)
- "When we read, we stretch the limits of the literal text by folding our experience and belief into the literal meanings in the text, creating a new interpretation, an inference" (Keene & Zimmerman, 1997)
- "Inference is the heart of the comprehension process... Even the simplest of texts requires inferencing" (Dole et al., 1991, p.8)
- With NCLB, educators are under even greater pressure to have every child proficient in reading
- Fortunately, research and evidence based methodology to teach this vital skill is now available!

Literary Inferencing Skills #1

- Recognize the antecedent for pronouns
- Figure out the meaning of unknown words from context
- Figure out the grammatical function of an unknown word
- Understand intonation of characters' words
- Identify characters' beliefs, personalities, & motivations
- Identify characters' relationships to one another
- Provide details about the setting
- Provide explanations for events or ideas not presented
- Offer their own explanations of the events in the text
- Understand the author's view of the world
- Recognize the author's biases
- Relate what is happening to knowledge of the world
- Offer conclusions from facts presented in the text

When Kids Can't Read: What Teachers Can Do, Beers, 2003

Literary Inferencing Skills #2

- Detect and understand the significance of clues in pictures in books/TV shows/movies
- Show awareness of characters' feelings, mental states, and plans in stories in books/TV shows/movies
- Make appropriate interpretations of characters' motives & events that occur in stories in books/TV shows/movies
- Consider more than merely the action in the situations depicted in books/TV shows/movies, making it possible to answer *what* **and** *why* comprehension questions
- Realize that literary characters are not just like oneself
- Focus on *The Gestalt* or *Big Picture*, rather than on only a small part of the stories in books/TV shows/movies
- Consider multiple perspectives, instead of just that of the main character in stories in books/TV shows/movies

Westby, 2006

Primary Focus of Instruction

- LinguSystems' Social Language Development Tests (Elementary & Adolescent) are standardized and measure those language skills considered indicative of a ToM problem
- The four subtests require perspective taking:
 - Making Inferences
 - Multiple Interpretations
 - Interpersonal Negotiations
 - Supporting Peers
- Many students who lack effective reading strategies often page through a book just looking at the words, instead of thinking about what is happening in the book
- Adults who are responsible for helping students with Language Impairment learn how to read must make what is implicit, explicit
- Struggling readers need to be shown exactly how skilled readers comprehend what they are reading, which is to use internal thinking
- Educators should demonstrate a strategy, such as a think-aloud, to make the hidden process of comprehension visible

Three Steps for Teaching Inferencing

#1 Help students understand

what the strategy is,

when to use it in actual reading and

why it is important by asking & answering these critical questions:

- How do we infer? Use this formula:

Combine clues from the text/pictures + what we already know = an inference

- When do we need to infer?

When the author doesn't give us all the information to answer a question about what we've read, we need to think about what we know to fill in the gaps

- Why do we need to infer?

So that we can understand what we read, even when the info. is not literal

- #2 Provide guided practice by using short nonfiction and fiction texts to introduce the strategy

- #3 Monitor student use of strategies during independent practice using simple texts

Exploring the Teaching of Inferencing Skills, Kopitski, 2007

What We Know about Inferences

- The author does not always tell us the answer
- The author gives us clues to help us find the answer
- We need to find clues to get some answers
- We need to add clues to what we already know
- We compare to things we have already seen
- There can be more than one correct answer
- We need to be able to support inferences
- We really need to think, because sometimes it is easy to make incorrect inferences

Inferencing Activities #1

- QAR (Question-Answer Relationships)
Think of some questions that could be answered from reading the text. Write questions under each heading:

In the book---Right There

In my Head---On My Own

In the Book---Think & Search

In my Head---Author & Me

- Marking Texts (Coding Techniques)

Indicate which strategies you used when reading by

coding the text as follows:

I for inference (quote from text, page #, *I infer...*)

BK for background knowledge

? for question

Inferencing Activities #2

- The KIS Strategy (Key Words, Inter, Support)
 - 1st: underline key words & facts from the text
 - 2nd: make inferences using the above to answer Q's
 - 3rd: list background knowledge which supports your answers

- It Says-I Say-And So Chart (Graphic Organizer)

Question:	Read the question
It Says:	Find the information from the text that will help you answer the question
I Say:	Think about what you know about that info.
And So:	Combine what the text says with what you know to come up with the answer

See Text Handout (pages 4-6) for details on Literary Inferencing Instruction

The Benefits of Narrative Instruction

EDUCATIONAL RESEARCH HAS SHOWN THAT:

- 90% of elementary curriculum is in narrative/story form
- The ability to independently tell and write stories is essential to social & academic success
- Competency on state testing depends on an awareness and demonstration of basic story structure for reading comprehension & writing
- Critical thinking and inferential skills draw on the concrete awareness of story elements and the relationships they have to each other
- The ability to identify and develop plans and goals is crucial to academic and social success because these skills enable students to connect the "character's" relationship to the beginning, middle and end of a story or personal experience
- Advancing curriculum and social competency require the development of perspective/point of view, allowing students to "see" and "feel" situations through the eyes of another. This level of critical thinking underlies the ability to empathize, an absolutely vital skill.

Moreau & Welch (1999) *Teacher's Guide to the SGM Activity*

Booklet

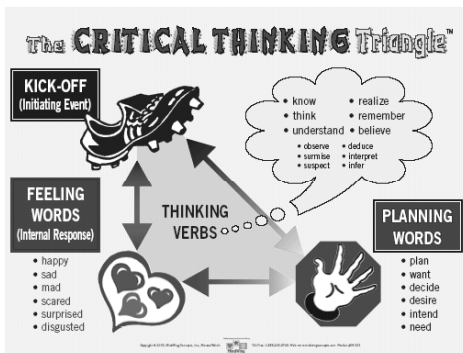
Story Grammar Marker™ Maryellen Rooney Moreau

- SGM™, a research-based methodology, boosts literacy/EQ, Pre K-12
- SGM provides complete lesson plans which use children's literature for instruction & ThemeMaker for expository/content reading/writing
 - A multisensory tool such as Braidy™ The Teaching Braid or the SquiGuM is paired with printed "maps"
 - Icons on both types of graphic organizers help school-age children to visualize the elements of stories & their sequence
 - This scaffolding reduces the load on working memory so students can concentrate on translating their ideas into words to convey the content & meaning of their story telling and retelling
 - SGM provides facilitating questions to assist children who are "at-risk" for problems with narration & social problem-solving
 - SGM is easily adapted to suit special needs students; those w/AS show superior abilities in tasks that require searching for detail, and analyzing & manipulating systems, so this methodology is a good match for this population

The Critical Thinking Triangle®: where Social Thinking® and Story Grammar Marker® Come Together

- Jerome Bruner (1986, 1996) referred to *narrative thinking* as a capacity to "read other minds"; to make accurate inferences about the motives and intentions of others based on their observable behavior and the social situations in which they act. Narrative thinking is the very process we use to understand the social life around us.
- Michelle Gracia Winner (2010) stated that, "Socially-based narrative development is simply expected to exist, but for our students with social emotional learning and/or language developmental issues, the emergence & fluidity of this type of related social reasoning and increasingly fine-tuned language development cannot be taken for granted."
- When trained in the use of the SGM methodology, especially the CTT, all students show improvements in clear expression of thought, complexity of sentence structure, cause/effect relationships, inclusion of a character's feelings and plans as motivators for action, and self-confidence when resolving conflict or expressing emotions/plans

Facilitating Relationships! Six-Second-Stories and Other Social Communication Strategies, An Interactive Guide for Educators & Parents (Moreau & McElhinney, 2011)



Final Thoughts

- Appropriate language use is best taught through activities that mimic the *natural* language-learning process. In other words, interactive routines that provide rich opportunities for *inferring* communicative intent and exercise the pragmatic functions of communication
- Speech-language pathologists, as members of educational teams (including parents), can contribute significantly to improved social and academic performance for students with Social Learning Challenges
- We are the professionals who can connect listening, speaking & relating problems in young children with reading & writing deficits later on, because we understand the nature of the oral language/literacy continuum
- The more research that's done on the link between language development and ToM, the better we will be able to document how language affects the development of empathy, and other aspects of Thinking Socially
- To this end, we will improve our treatment of children with social learning weaknesses so that they become healthy, happy, contributing citizens, more fully integrated into our society
- See Text Handout (pages 7-8) for recommended Resources for Intervention targeting Pragmatic, or Social Communication, Skills
- Best Wishes for success in your personal quest for improved professional effectiveness in this exciting, dynamic arena of Social Learning Challenges!

How to Teach Social Inferencing Using Role Play:
Gwynne's Tips for Implementing The CommunicationLab Model:
(created by Ellen Pritchard Dodge)

1. **Determine the communication behavior that is getting in the way of learning, language development and socializing.** Discuss this key question with the other adults (teacher/parent).
2. **Create a Springboard question and pose it to the students, for example:**
Have you ever wondered how to ask people to do something differently so that they'll actually change their behavior in the way that you'd like?
3. **Warm-Up with adult modeling.**
In the CommunicationLab approach, adults model the error behavior first, allowing the students to be "good observers," and to identify what they (the adults) did wrong. This action should pinpoint the behavioral target for the day---in other words, what you will be focusing on in the Lesson. Provide visual support by writing key ideas on the whiteboard.
4. **Create role plays to illustrate the communication problem you've chosen.**
Remember: kids "learn by doing." The more hands-on activities, the better! So, keep to the essentials here---minimize your verbiage & maximize the students' involvement. Encourage them to be "OK" with not knowing exactly what to do in the skits. Explain that making mistakes provides everyone with learning opportunities. In fact, tell them that "mistakes are really nothing more than information about what you will do differently the next time the challenging situation arises." The adults should model this risk-taking-to-learn behavior whenever possible. It helps a lot!

Signal the start of the error role play by saying the Key Phrase:
Signal the end of the error role play by saying the Key Word:

Ready, Set, Role play!
Freeze!

FYI: the power of this intervention approach actually stems from what you (the SLP) do, after you stop the role play with the **Key Word: FREEZE!** Because our clients can't interpret the situation (that you just role played) themselves, it's critical that you "step" them through each aspect of the "post-mortem" analysis or "social autopsy," so that they understand what they've just seen, making the inferences we're so eager to teach them. Use the following technique to do "social autopsies:"

Debrief by asking:

1. **Who wasn't a Good Communicator?! Why?**
2. **What did s/he (A) do that was so upsetting?**
3. **How did that make B feel?**

As the children answer these questions, congratulate them for spotting the error behavior(s)---write their answers to the preceding questions on the white board (if that's available). Then ask,

What would a Good Communicator Do in this situation instead of what we just watched A do? So, what should A do differently when we re-role play this scenario?

Write student recommendations for "corrections" on board and help them identify the alternative (preferred) behavior options, if necessary. Ask the role players if any more support from the audience is needed. If the answer is yes, don't hesitate to provide it (dialogue, actions, props, whatever), especially for younger children. Adults can model or whisper cues, as necessary. If the actors are "Good to Go," then proceed.

Re-role play, this time demonstrating the desired, target behavior.

Signal the start of the corrected role play by saying the Key Phrase: *Ready, Set, Role play!*

Signal the end of the corrected role play by saying the Key Word: *Freeze!*

Repeat the “social autopsy” after stopping the re-role play with the word: **FREEZE!**

Go through the same de-briefing/inquiry procedure for the correct, or preferred behaviors.

- Debrief by asking:**
- 1. Who was a Good Communicator?! Why?**
 - 2. What did s/he do differently this time?**
 - 3. How did that make X feel?**
 - 4. Did these changes make the situation better? Why?**

Once again, fill in the “blanks” for your clients, if necessary (i.e., if they can’t figure out what was done incorrectly/correctly, explain it to them, as you write it on the board). You need to make “explicit,” or overt, what is “implicit,” or covert, in these social interactions, because students with social cognitive deficits can’t “read between the lines” without this type of training.

What I’ve just described (the “social autopsy” combined with intentional repair of the communication breakdown) is the component that makes these role play activities instructional in nature. By adopting this unique, dynamic teaching approach, you’ll help your students cope better when involved in *real world* situations because they’ve had structured rehearsal beforehand! Actually “going through the motions” (combining verbal & nonverbal language) when coached appropriately, makes a huge difference in terms of the overall learning rate and performance levels of students with social-cognitive learning disabilities. You’ll be surprised at the effectiveness of this strategy!

- 5. Wrap-up the session by creating a “specific” plan for carryover.**
- 6. Challenge students to use a “specific” communication skill in the classroom, on the playground, at home or in the neighborhood before the next CommunicationLab lesson.** Encourage them to describe their experiences to the classroom teacher. Once they’ve done so, she can give them permission them to record their names on the Challenge Poster. Begin the ‘Lab lesson the following week with a recap of previous instruction, and by inviting students to share their stories with the whole class. Then introduce the next topic re: **What Good Communicators Do!**

Exemplar Role Play:

Describe the scenario: Reacting Negatively to a Parent’s Request

Third Graders, do you like to help your parents at home? Which jobs are your least favorite? Let’s role play so that we can become aware of the **body language** we sometimes send our parents. **Colin**, you are **Anne’s** Dad. Ask her to take the garbage out. Everybody else, watch what happens. (*whisper to Anne: say “OK” in a mean tone of voice and snatch the trash can out of Colin’s hands before stomping out of the room*).

Ready, Set, Role play! Signal the end of the role play by saying: ***Freeze!***

- Debrief by asking:**
- 1. Who wasn’t a Good Communicator? That’s right, she said “OK” with her words, but not with her body language & tone of voice.**
 - 2. A, what did your body language communicate to your Dad?**
 - 3. How did that make you feel, Dad?**
 - 4. A, what will your Dad do because of your negative body language?**

Boys & girls, let's do some problem-solving now. Let's think of some other ways that are more helpful when communicating to a parent that you really don't want to do something. I'll write your ideas on the white board. Great brainstorming! I like your suggestions/ideas for alternatives such as negotiating the timing!

Well, now that we know what a Good Communicator would do, let's Re-Role Play. **Anne**, this time use body language that will encourage your parent and say "OK" in a polite tone of voice.

Ready, Set, Role play! Signal the end of the role play by saying: **Freeze!**

- Debrief by asking:**
1. *What was done differently this time?*
 2. *Did that make the situation better?*
 3. *How did that make you feel, Colin?*

Remember: choosing **the right words and tone of voice**, along with matching, positive **body language** to communicate your feelings, will make people more likely to cooperate with you.

However, just because you're positive, it doesn't always mean that others will do what you want them to do. We can't control anyone else's behavior but our own. The Good News is that we can control our own behavior, and can choose to communicate in the most positive, helpful manner possible. When we do this, we are often more successful in getting along with others!

Wrap-Up

Students, today in **CommunicationLab** we learned that we can communicate without even saying a word. We can communicate with our (pause for them to fill-in) **body language**. We also learned that our **body language** can either discourage or encourage other people at school, at home, and in our friendships.

What are some discouraging messages you've seen others send at school with their body language?
What are some encouraging messages?

What are some discouraging messages we sometimes send to our families and to our friends? What are some encouraging messages?

Communication Challenge

Children, thank you for paying such close attention to what we grown-ups have taught you about **non-verbal communication** today. Our next **CommunicationLab** Lesson will be on Tuesday afternoon, September 22nd. Before we get together then, I want you to send encouraging **body language** that communicates caring, and a willingness to cooperate. Be sure to tell Mrs. Wentz about your experience, so that you can write your name on the Challenge Poster for this topic.

At the start of our next session, I'll ask you to share how using positive body language helped you to communicate with other children or grown-ups, and how that made you & the other person feel. Who can tell me what your **Communication Challenge** is for next time? Excellent recall---Good listening!

Mrs. Wentz, here's a list of Carryover Activities that you might find helpful when reinforcing this concept in your classroom. I also have the weekly Parent Letter, complete with specific CommunicationLab suggestions, ready to send home with your students, so that they can teach their families what we learned at school today about **non-verbal communication skills**. Well, it's time for me to go now. **'Bye-bye**

Collaboration Information for SLPs Engaged in Educational Teaming Activities: Literary Inferencing Instruction---Recommendations for Educators

1. Concentrate on Inferencing and Ask Facilitating Questions:

Provide concentrated work on inferences. Rather than asking different types and/or levels of comprehension questions, have students spend two or three weeks answering only inferential types of questions. These questions will direct your students' attention to inferences:

What evidence can you find that makes you think that (character) was a _____ person?

List the evidence.

Which character was _____ (happy, depressed, mysterious, greedy)?

Explain why you can conclude this.

What do you feel when you read (or listen to) the following passage (read it aloud)?

What time of year do you think it was?

Where could this story have taken place? Where else could this story have taken place?

Why do you feel this story could have taken place there?

Why do you think the author wrote this story? What was the author's purpose in writing the story?

Find a part that makes us feel (specify a mood).

Discuss how you think the author felt about (specify a character, place, event).

Compare and contrast how (character, place, period of time) and _____ are alike (or different).

How did (character) react when _____? Why do you think the character acted this way?

2. Show your students:

- a) **Pictures** of the story they are going to read (or photos taken in a country they are going to study), and have them predict the topic of the story, how the people feel, the character of the people, or causes for the situation pictured.
- b) **Newspaper photos**, and urge them to identify possible feelings of the people pictured, what may have caused the situation, or why the photographer chose to use this particular photo.
- c) **Sequences of pictures** with one of the middle pictures missing, and ask them to infer what happened in the missing photo, given the other pictures in the sequence.
- d) **Videotapes or films**, and stop at the climax or an interesting point in the story, and have them predict the next event or final outcome.
- e) **Comic strips**, with the words from the ending speech or thought bubble clipped out, and have them predict what will happen in the last box of the cartoon panel.
- f) **Newspaper headlines**, or the first sentence of an article, and ask them to read, then predict the subject of the article, or make as many predictions as they can before comparing them.
- g) **Files** of sequential articles on one topic (published over a 3-4 day period), and then have them predict what will happen later, after reading the articles in sequence.

3. Read aloud to your students:

- a) **Short selections** (initially one paragraph in length, then increase the length), making up several literal statements and several inferential statements for the selection. Ask them to read the statements appearing in a random order, then determine whether they actually heard the statement or had to hypothesize or figure out the statement. If the statement is inferential, they must tell you what helped them figure it out.
- b) **Articles**, then have them predict what will happen next. Compare students' predictions.

- c) **Stories**, and stop at the climax or an interesting point in the story, and have them predict the next event or final outcome. While reading aloud, stop and ask them to identify why the author may have chosen the words s/he used and how they felt as they listened to the selection.
- 4. Have students read on their own:**
- a) **Selected material**, and determine whether the information is directly stated (i.e., found on the page) or if they have to figure it out themselves by inferencing.
 - b) **Articles** (e.g., sports story, news story) and underline the mood or tone words. Next, have them write a sentence that tells the mood or tone of the story. Another variation: have them substitute words to change the mood or tone.
- 5. Focus on facts with your students in:**
- a) **Pictures**, directing them first to select a picture from a newspaper or magazine, then examine it before making a list of facts about it and finally, creating a list of inferences it's possible to make from these facts.
 - b) **Articles**, directing them first to select an article, before making a list of facts found in it, and finally, create a list of inferences that can be drawn from these facts.
- 6. Encourage students to use their imaginations:**
- a) **By pretending they have friends from another planet**, before asking them to identify the conclusions this friend would probably draw about life in the U.S.A., based on sports coverage, ads, comics, movies, or the news section of the newspaper.
 - b) **By pretending they are reporters**, who must interview a government official, sports hero, movie star, musician, etc. After composing a list of 5-10 questions they might ask this individual, have them add the answers they think this person would give.
 - c) **By developing a game** in which they must identify the social classes, age or gender toward which ads are directed.

(Adapted from Chapter 7 in *Remediating Reading Difficulties* by Crawley & Merritt, McGraw Hill, 2000)

PRINCIPLES OF INTERVENTION for STUDENTS with ASD by Diane Twachtman-Cullen

(Chapter 4: "Symbolic Communication: Common Pathways and Points of Departure") from *Learners on the Autism Spectrum: Preparing Highly Qualified Educators*, edited by Buron & Wolfberg (2008)

Intervention must begin where the learner is. This may mean starting with joint attention, as it's necessary precursor to all other language development. Intervention should be carried out in a context that supports meaning, in order to make it easier to *infer* intent. Appropriate language use is best taught through activities that mimic the *natural* language-learning process. In other words, interactive routines that provide rich opportunities for *inferring* communicative intent and exercise the pragmatic functions of communication. Embed language-learning activities related to the student's special interests to promote motivation and foster engagement. Emphasize comprehension, as it's the basis for meaningful expression (for students on the higher end, focus on pragmatic comprehension). Joint attention and intention reading are the underpinnings of language development for all children. Failing to address these vital social-cognitive elements results in language intervention that is ineffective and/or inappropriate. In order to provide the best language intervention for children with ASD, the interventionist needs to keep current on research (both autism research and research on typical language development) and apply it to his/her professional practice.

Michelle Winner writes: "Social cognitive deficits result from a syndrome of weaknesses that prevent the development of the social cognitive knowledge needed to support the presentation of 'appropriate' social skills." These deficits impact the student's perspective-taking skills, his abilities to pick up on subtle nonverbal cues, and to interpret messages fast enough to respond appropriately. Impulsivity can result in interrupting without considering the social consequences. Memory problems can impede recalling past experiences in order to decide how to deal with current situations. Misreading others' intentions can escalate minor confusions into

tragic misunderstandings. Students with SLC fail to notice, and thus, fail to accurately interpret, the nonverbal communication (facial expression, body language, tone of voice, et alia) of others in *Real World* social situations. Given this *mindblindness* when interacting with living human beings, they also struggle when making inferences about literary characters.

Literary Inferencing Instruction: Recommendations for SLPs

- 1) **When students fail to notice, and thus, fail to accurately interpret your own non-verbal communication when interacting with them:**
 - Draw their attention to the communicative behaviors that they are “missing.”
 - Help them to interpret your non-verbal message correctly so that a communication breakdown between the two of you can be avoided.
 - Increase their awareness of the need to accurately infer others’ feelings/perspectives.
- 2) **When students lack awareness of characters’ feelings, mental states, and plans:**
 - Help them “deal” with the Landscape of Consciousness so they can learn to infer.
 - Connect the feelings, thoughts and plans of the character(s) to the problem/conflict faced by him/her by asking:
 - Why* did A act this way?
 - What* was B thinking when this occurred?
 - What* did B want at this point?
 - How* is A feeling now?
- 3) **When students misinterpret character’s feelings and thoughts because they see the situation only from their own individual perspectives, ask:**
 - Is that the way you would have felt?
 - In what way is the character different from you?
 - Since the character is different from you, *how* do you think the character felt?
 - You can also say: “Let me reread some of the parts of the story that may help us understand *why* the character might respond differently than you would.”
- 4) **When students consider only one character’s perspective, say/ask:**
 - We mentioned A. What about B? How is B feeling?
 - What did A believe that B was thinking/feeling/wanting?
 - What did B believe that A was thinking/feeling/wanting?
 - When A did that, how did A think B would react?
 - What was A believing about B when A did that?
- 5) **When students don’t consider more than the action in the social situation/story/TV show:**
 - Help them move beyond the Landscape of Action so they can learn to infer by showing them how to make the cause/effect and problem/solution links
- 6) **When students’ replies are inadequate because they are focusing on only one small part of the story instead of the Big Picture (“can’t see the forest for the trees”), ask:**
 - What else might the character want? ...be thinking? ...be feeling?

Think about the part where the character did X and Y at the beginning of the story;
What does that tell you about what the character might be thinking now?

Sources:

Dr. Carol Westby, from her 2006 Workshop in Seattle, Washington: “Language & Literacy for Students with Disabilities: Building Bridges for Classroom Success” and Jerome Bruner, *Actual Minds, Possible Worlds* (1986).

Recommended Resources for Intervention Targeting Pragmatic Skills

Preschool

1. Playtime with Zeebu: Think, Communicate, Connect (Gallo) @ www.playtimewithzeebu.com
2. Meet Thotso, Your Thought Maker: How Are Your Thoughts Today? (Avery) @ www.socialthinking.com
3. Braidy, the Story Braid (Moreau) @ www.mindwingconcepts.com
4. TalkAbility: People Skills for Verbal Children on the Autism Spectrum — A Guide for Parents (Sussman) @ www.hanen.org
5. Autism Aspergers: Solving the Relationship Puzzle: A New Developmental Program that Opens the Door to Lifelong Social & Emotional Growth (Gutstein) @ www.Future Horizons-autism.com
6. On the Same Page (Higgin and Shea) @ www.samepagepubs.com
7. Peer Play and the Autism Spectrum: The Art of Guiding Children’s Socialization and Imagination (Wolfberg) @ www.aapcpublishing.net

Elementary (K-6)

1. You Are a Social Detective! Explaining Social Thinking to Kids (Winner & Crooke) and
2. Superflex: A Superhero Social Thinking Curriculum (Madrigal & Winner), and
3. Superflex Takes on Glassman and the Team of Unthinkables (Madrigal & Winner) @ www.socialthinking.com
4. CommunicationLab I (Dodge) @ www.amazon.com
5. It’s All About the Story! A Guide for Parents & Educators of Children with AS and HFA, and
6. Making Connections! Perspective Taking, Theory of Mind and Pragmatics Using the Critical Thinking Triangle of the Story Grammar Marker® (Moreau) and
7. Facilitating Relationship! Six-Second-Stories and Other Social Communication Strategies (Moreau & McElhinney) @ www.mindwingconcepts.com
8. Social Language Training Elementary (Bowers & LoGiudice) @ www.linguisystems.com
9. Let’s Be Friends A Workbook to Help Kids Learn Social Skills and Make Great Friends Book and CD (Shapiro) @ www.therapeuticresources.com
10. Magnetic Poetry Kids Story Maker (Kapell) @ www.magneticpoetry.com
11. Teaching Children Empathy, The Social Emotion (Caselman) @ www.youthlightbooks.com
12. Ho do I Stand In Your Shoes? (DeBell) @ www.youthlightbooks.com

Junior High (7-9)

1. Jarvis Clutch — Social Spy (Levine) @ www.amazon.com
2. ThemeMaker (Moreau) @ www.mindwingconcepts.com
3. Think Social! A Social Thinking Curriculum for School-Age Students (Winner) and
4. Worksheets! For Teaching Social Thinking & Related Skills (Winner), and
5. Social Behavior Mapping DVD, plus wall posters (Winner) @ www.socialthinking.com
6. Spotlight on Social Skills, Adolescent (LoGiudice & Johnson) @ www.linguisystems.com
7. Building Social Relationships: A Systematic Approach to Teaching Social Interaction Skills to Children & Adolescents with ASD (Bellini) @ www.aapctextbooks.net
8. The Comprehensive Autism Planning Systems (CAPS) for Individuals with AS, Autism, & Related Disabilities (Henry & Myles) @ www.aapctextbooks.net

High School (10–12)

1. Inside Out: What Makes a Person with Social Cognitive Deficits Tick? (Winner) @ www.socialthinking.com
2. Thinking About You Thinking About Me (Winner) @ www.socialthinking.com
3. The Social Success Workbook for Teens (Cooper & Widdows) @ www.socialthinking.com
4. Coping with Cliques (Sprague) @ www.socialthinking.com
5. Perfectionism: What's Bad about Being Too Good? (Adderholdt & Goldberg) @ www.socialthinking.com
6. How to Win Friends & Influence People for Teen Girls (Carnegie) @ www.simonsays.com
7. TalkAbout: A Social Communication Skills Package (Kelly) @ www.therapeuticresources.com
8. How to Be a Para Pro: A Comprehensive Training Manual for Paraprofessionals (Twachtman-Cullen) @ www.asquarterly.com

Older Teens and Young Adults

1. Socially Curious and Curiously Social: A Social Thinking Guidebook for Teens & Young Adults with AS, ADHD, PDD-NOS, NVLD, or other Murky Undiagnosed Social Learning Issues (Winner) @ www.socialthinking.com
2. Asperger Syndrome: An Owner's Manual — What You, Your Parents and Your Teachers Need to Know — An Interactive Guide and Workbook, and
3. Asperger Syndrome: An Owner's Manual 2 for Older Adolescents and Adults —What You, Your Parents and Friends, and Your Employer Need to Know (Korin) @ www.asperger.net
4. Guide to Self: The Beginner's Guide to Managing Emotion & Thought (Schinnerer) @ www.amazon.com
5. The Social Animal (Brooks) @ www.amazon.com

Specifically for Parents:

1. Mind in the Making: The Seven Essential Life Skills Every Child Needs (Galinsky) @ www.theharperstudio.com
2. TalkAbility: People Skills for Verbal Children on the Autism Spectrum — A Guide for Parents (Sussman) @ www.hanen.org
3. How to Raise a Child with High EQ: A Parents' Guide (Shapiro) @ www.amazon.com
4. Becoming a Love and Logic Parent (J. Fay, Cline & C. Fay) @ www.loveandlogic.com
5. Parenting Teens with Love & Logic (Cline & J. Fay) @ www.pinon.org
6. Autism Aspergers: Solving the Relationship Puzzle: A New Developmental Program that Opens the Door to Lifelong Social & Emotional Growth (Gutstein) @ www.Future Horizons-autism.com
7. Teaching Your Child the Language of Social Success (Duke, Nowicki & Martin) @ www.amazon.com
8. Helping Your Anxious Child (Rapee & Spence) @ www.socialthinking.com
9. The Childhood Roots of Adult Happiness (Hallowell) @ www.ballantinebooks.com
10. Boys Adrift: The Five Factors Driving the Growing Epidemic of Unmotivated Boys & Underachieving Young Men (Sax) @ www.basicbooks.com
11. Girls Under the Umbrella of Autism Spectrum Disorders: Practical Solutions for Addressing Everyday Challenges (Ernsperger & Wendel) @ www.asperger.net
12. Odd Girl Out: The Hidden Culture of Aggression in Girls (Simmons) @ www.HarcourtBooks.com
13. Misdiagnosis and Dual Diagnoses of Gifted Children and Adults: ADHD, Bipolar, OCD, Asperger's, Depression, and Other Disorders (J. Webb, Amend, et al) @ www.giftedbooks.com
14. The Mislabeled Child: How Understanding Your Child's Unique Learning Style Can Open the Door to Success (B. Eide & F. Eide) @ www.HyperionBooks.com
15. Empathy in Mental Illness (edited by Farrow & Woodruff) @ www.cambridge.org
16. Social Intelligence: the New Science of Human Relationships (Goleman) @ www.amazon.com
17. Autism/Asperger's Digest Magazine (Future Horizons) @ www.autismdigest.com
18. Free Downloads of Articles from LinguSystems @ www.linguisystems.com

Websites:

ASHA (www.asha.org, enter “literacy” or “autism” in the search box)

Maryellen Rooney Moreau (www.mindwingconcepts.com)

Michelle Garcia Winner (www.socialthinking.com)

Carol Gray (www.thegraycenter.org)

Tony Attwood (www.tonyattwood.com.au)

Coping.Org on Autism (www.coping.org/copingbook/autism.htm)

Parent Resources (www.autismmed.com/parentresources.htm)

Love and Logic (www.loveandlogic.com)

Future Horizons (www.futurehorizons-autism.com)

Rocky Mountain Autism Center (www.rockymountainautismcenter.com)

SCERTS (www.scerts.com)

The P.L.A.Y. Project (www.playproject.org)

The Hanen Centre (www.hanen.org)

The Fred Rogers Company: The Legacy Lives On (www.fci.org/new-site/about-us.html)