



Autism and Social Skills:

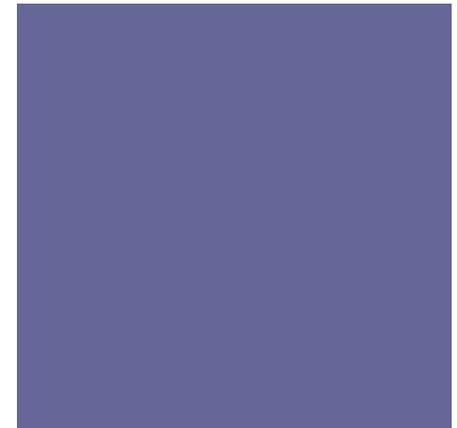
Building Social Relationships, Scott Bellini

The New Social Story Book, Carol Gray

Think Social! A Social Thinking®
Curriculum for School-Age Children,
Michelle Garcia Winner

Superflex® Comic Conversations series

Presented by Angelisa Smith Roper



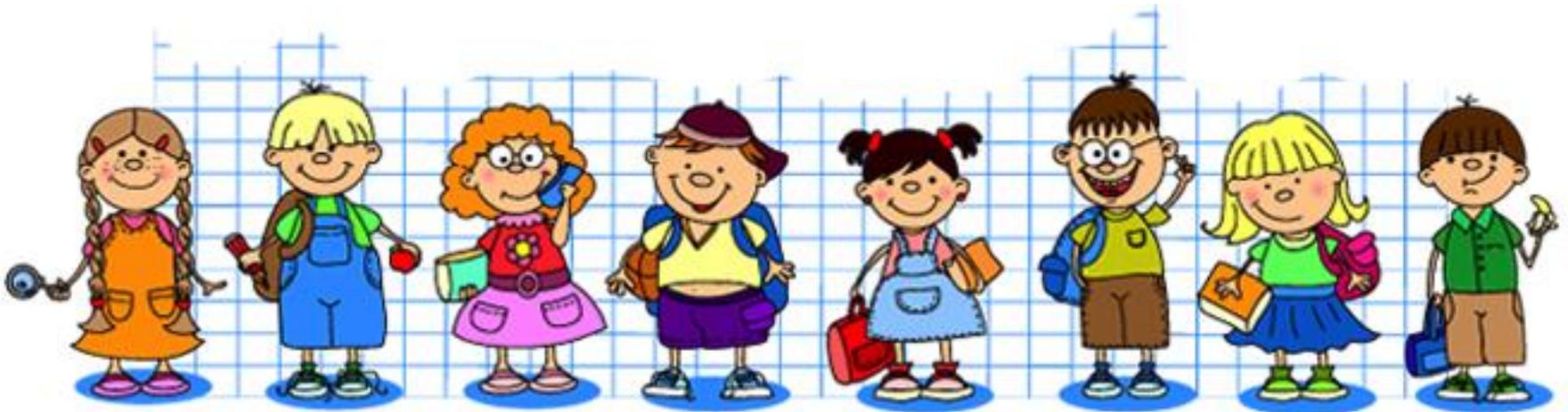
Superheroes social skills training, Rethink Autism internet interventions, parent training, EBP classroom training, functional behavior assessment: An autism spectrum disorder, evidence based practice (EBP) training track for school psychologists

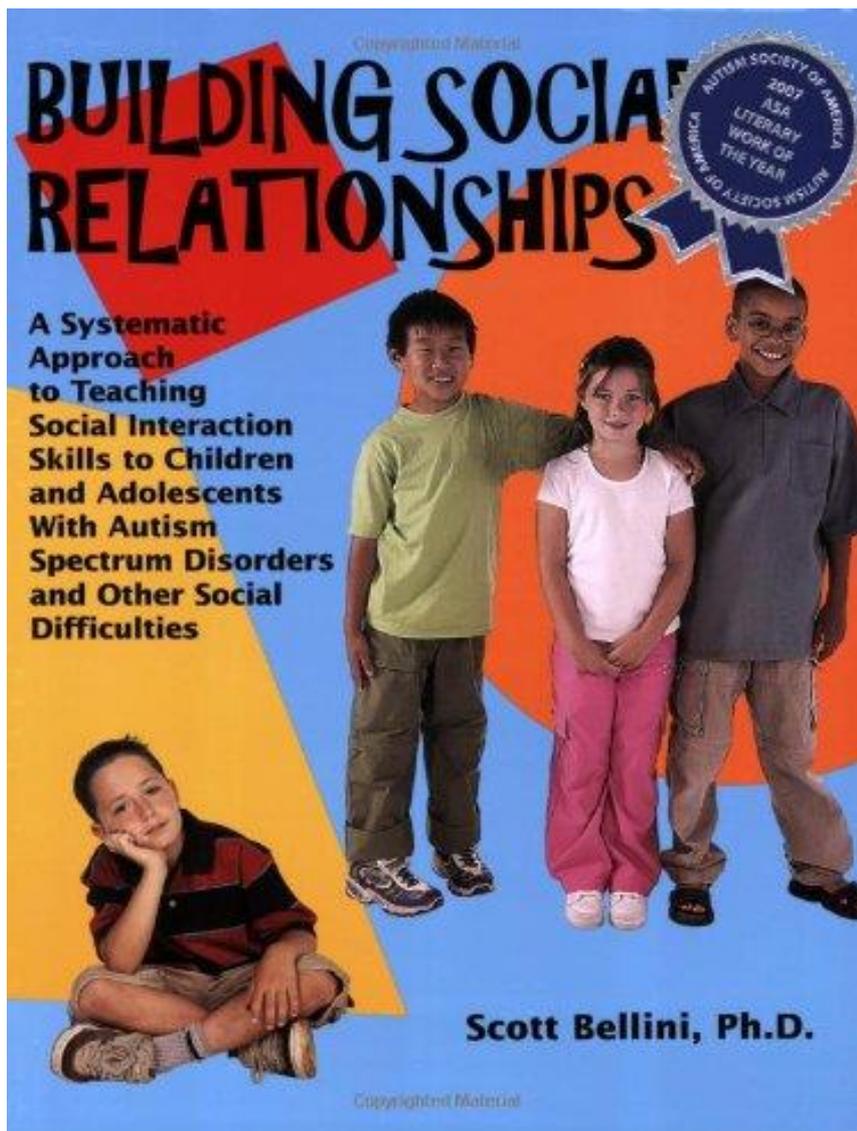
US Office of Education Personnel Preparation Grant H325K12306

University of Utah School Psychology Program

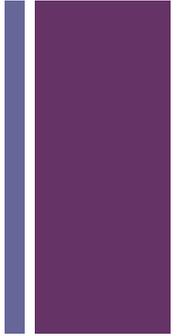
+ Overview

- Building Social Relationships, by Scott Bellini
- The New Social Story Book, by Carol Gray
- Think Social! A Social Thinking® Curriculum for School-Age Children, by Michelle Garcia Winner
- Superflex® Comic Conversations series





Social Interaction Skills are “socially acceptable **learned behaviors** that enable a person to interact with others in ways that **elicit positive responses and assist the person in avoiding negative responses**” (Elliott, Racine, & Busse, 1995). These skills are critical to successful social, emotional, and cognitive development (Bellini, 2006).



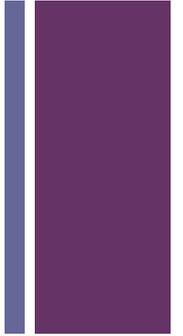
■ Five Basic Tenets of Social Skills

- ① Individuals with ASD Want to Establish Meaningful Social Relationships
- ② If We Want Children and Adolescents with ASD to Be Successful Socially, We Must Teach Them the Skills to Be Successful
- ③ Successful Social Behaviors Are Not Always “Appropriate” Social Behaviors
- ④ Social Success is Dependent Upon Our Ability to Adapt to Our Environment
- ⑤ Social Interaction Skills Are Not the Equivalent of Academic Skills



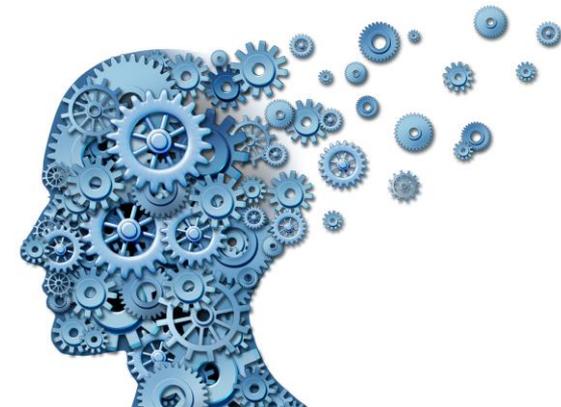
Essence of Social Interaction Skills:

Thinking, Feeling, Doing



Thinking

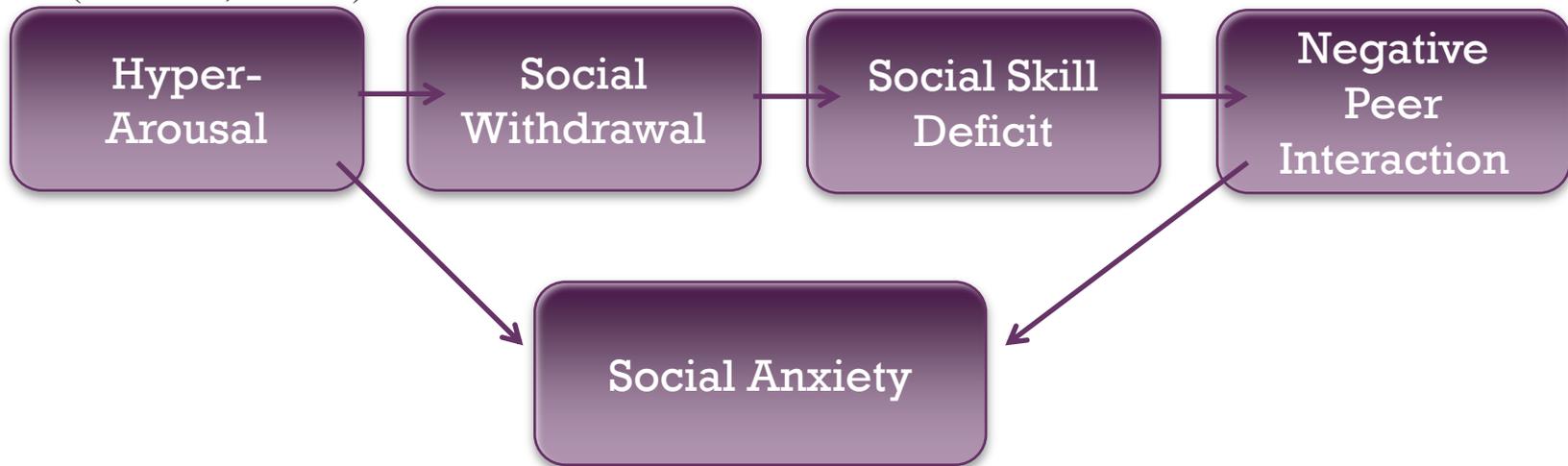
- Knowledge or Know-how
 - Declarative knowledge (saying “thank you” when complimented)
 - Procedural knowledge (memorizing steps or repetition)
- Perspective Taking or Theory of Mind
 - Helps us monitor our own behavior and predict the behavior of others
 - Existence, Need, Inference
- Self-Awareness





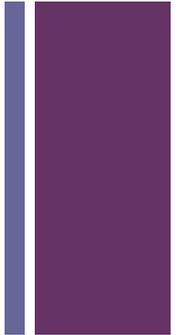
Feeling

- Affect mood and motivation
- Have a reciprocal relationship with physiological responses
 - Developmental Pathways Model of Anxiety in individuals with ASD (Bellini, 2006)



Doing

- Coordination



■ Common Social Skills Difficulties Associated with ASD

- ① Nonverbal Communication
- ② Social Initiation
- ③ Social Reciprocity and Terminating Interactions
- ④ Social Cognition
- ⑤ Perspective-Taking and Self-Awareness
- ⑥ Social Anxiety and Avoidance





Five Step Model of Social Skills Programming

① Assess Social Functioning

- Interviews, rating scales, problem identification, observations, setting goals and objectives

② Distinguish Between Skill Acquisition and Performance Deficits

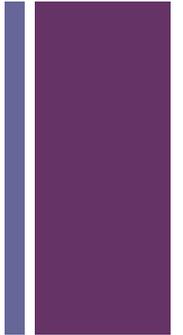
- The absence of a particular skill or behavior vs. a skill or behavior that is present but not performed

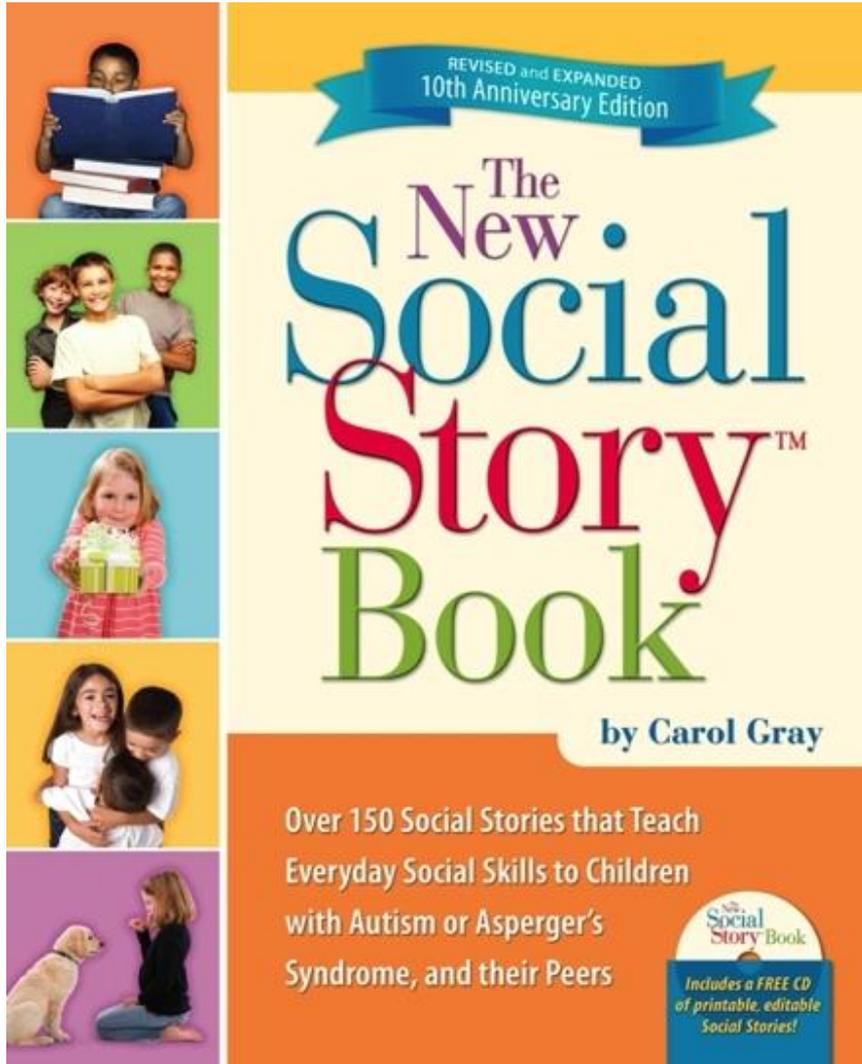
③ Select Intervention Strategies

- Strategies That Promote Skill Acquisition
- Strategies That Enhance Performance

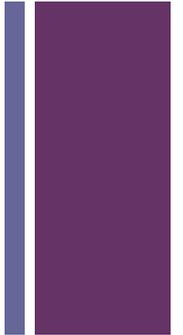
④ Implement Intervention

⑤ Evaluate and Monitor Progress



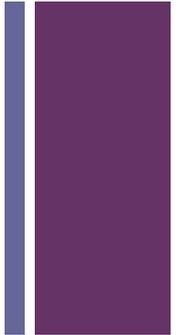


The main goal of a Social Story™ is to share accurate social information with ASD children in a way that is descriptive, meaningful, and feels safe for them. More specifically, a Social Story™ introduces specific activities or daily concepts along with the behavioral expectations associated with those activities and concepts (Gray & Garand, 1993; Agosta, Graetz, Mastropieri, & Scruggs, 2004).

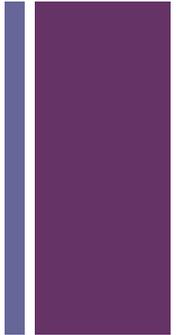




10 Criterion of a true Social Story™



1. One Goal
2. Two-Step Discovery
3. Three Parts and a Title
4. FOURmat
5. Five Factors Define Voice and Vocabulary
6. Six Questions Guide Story Development
7. Seven Types of Sentences
8. A Gr-eight Formula
9. Nine Makes it Mine
10. Ten Guides to Editing and Implementation



1. **One Goal**

- To share accurate information meaningfully and safely

2. **Two-Step Discovery**

- Authors gather information to improve their understanding of the Audience in relation to a situation, skill or concept
- Identify the specific topics and types of information to share in the Story

3. **Three Parts and a Title**

- Title, Introduction, Body, Conclusion

4. **FOURmat (organization and presentation of the Story)**

- Age and ability
- Repetition, Rhythm, Rhyme
- Illustration

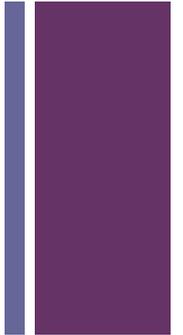


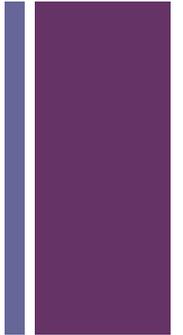
5. Five Factors Define Voice and Vocabulary

- ① First or Third Person Perspective
- ② Positive and Patient Tone
- ③ Past, Present, and/or Future Tense
- ④ Literal Accuracy
- ⑤ Accurate Vocabulary

6. Six Questions Guide Story Development

- Where, When, Who, What, How, Why





7. Seven Types of Social Story™ Sentences

- ① Descriptive (“Some vacations are long, others are short.”)
- ② Perspective (“Many people think that nice surprises are fun.”)
- ③ Coaching (3 types)
 - ① Coach the Audience (“I will try to keep the paint on the paper.”)
 - ② Coach the Team (“Mom or Dad will be with me at the doctor’s office.”)
 - ③ Self-Coaching (“To help me stay calm, I may try thinking about the next fun activity.”)
- ④ Affirmative (“Sometimes a student is absent. *This is okay.* The teacher will give them assignments so they can finish their homework.”)
- ⑤ Partial (“Wrapping hides a gift and helps keep it a _____.”)



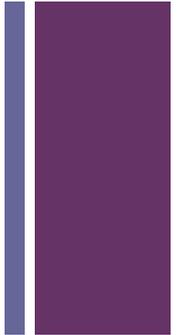
8. A Gr-eight Formula

- Descriptive, Perspective, and Affirmative sentences DESCRIBE
- Coaching sentences COACH

$$\frac{\text{\# of Sentences that DESCRIBE}}{\text{\# of Sentences that COACH}} \geq 2$$

9. Nine Makes It Mine

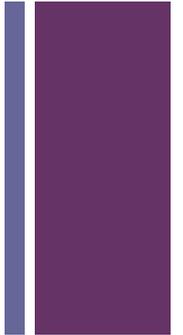
- Tailor the Story to the individual's preferences, talents, and interests
- Be creative!!!





10. Ten Guides to Editing and Implementation

- ① Edit
- ② Plan for Comprehension
- ③ Plan Story Support
- ④ Plan Story Review
- ⑤ Plan a Positive Introduction
- ⑥ Monitor
- ⑦ Organize Stories
- ⑧ Mix and Match Stories to Build Concepts
- ⑨ Story Re-runs and Sequels
- ⑩ Recycle Instruction into Applause



How to Greet Someone

There are many ways to greet someone.

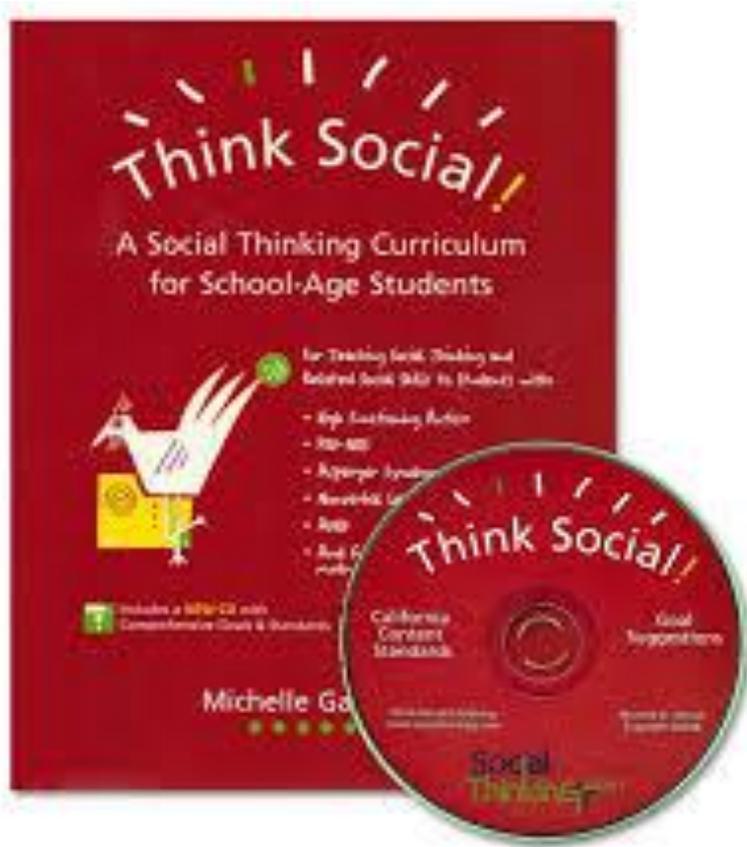
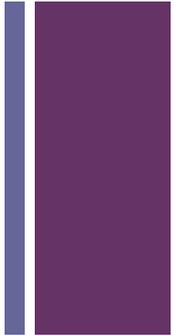
When I see someone I know, especially if I am seeing that person for the first time that day, it's friendly to say "hello." They may say "hello," too. They may stop to talk with me.

Sometimes people shake hands to say "hello." People may try to shake my hand if they are meeting me for the first time. This will happen more and more as I get older.

Once in a while, I go to visit relatives or close friends. A short hug as I arrive means *hello*.

Sometimes, if I am just passing someone I know, I may smile, wave, or just nod my head. If I said hello to that person earlier in the day, smiling, waving, or nodding my head means, *Hello again*. This is a friendly thing to do. ■

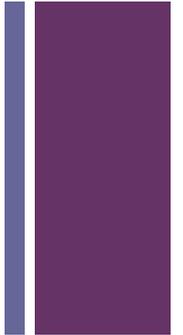




“Having good social skills simply means **people share their space with others effectively**... this curriculum explores sharing space with others, thinking about others in the shared environment, and learning to regulate one’s own behaviors to other people’s thoughts or expectations” (Garcia Winner, 2005).



The I LAUGH Model of Social Cognition



I : Initiation of Language

L : Listening With Eyes and Brain

A : Abstract and Inferential Language/Communication

U : Understanding Perspectives

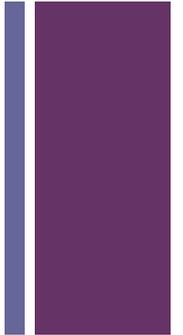
G : Gestalt Processing/Getting the Big Picture

H : Humor and Human Relatedness





The I LAUGH Model of Social Cognition cont.



■ I : Initiation of Language

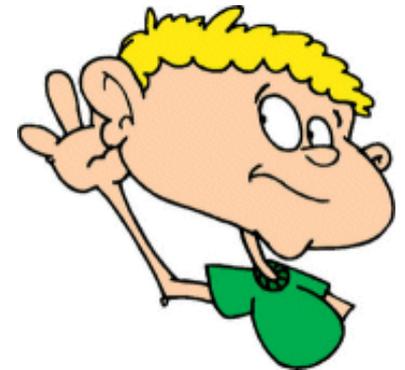
- The ability of a child with ASD to verbally ask for help
- Appropriate word use and the correct time to use them

■ L: Listening With Eyes and Brain

- Modified instruction and special procedures

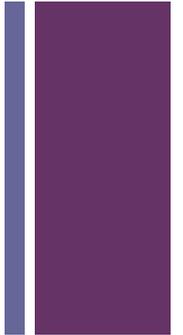
■ A: Abstract and Inferential Language/Communication

- Take a larger concept and break it down into smaller segments
- Explain what is happening in the present and sequence to predict what will most likely happen in the future





The I LAUGH Model of Social Cognition cont.



■ U: Understanding Perspectives

- Reflect on what behaviors others expect and what that means in social situations

■ G: Gestalt Processing/Getting the Big Picture

- Organize thoughts and actions
- Prioritize tasks or events

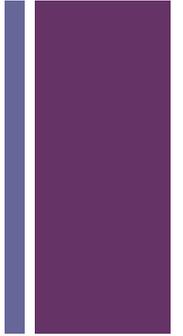
■ H: Humor and Human Relatedness

- Humor helps establish and maintain real relationships
- Bond over difficult situations





Curriculum Organization

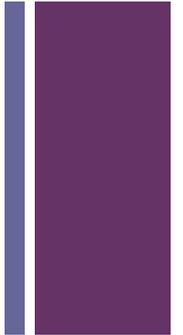


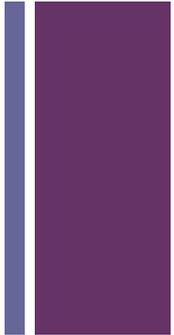
- ① Being Part of a Group and Recognizing Expectations
- ② Our Whole Body and Mind Help Us Be Part of the Group
- ③ Self-awareness and Self-monitoring Our Behavior in a Group
- ④ Starting the Detective Agency: Learning More About Observing Others
- ⑤ The Super Detective Agency: Figuring Out What People Mean by What They Say
- ⑥ Adjusting Our Participation and Language Based on What Other People Are Thinking, Imagining or Wondering
- ⑦ Our Language Makes Others Have Different Thoughts and Feelings
- ⑧ There is Still so Much More to Teach!



The Act of Social Communication

- ① Think about the person(s) with whom you will communicate or share physical space and their thoughts and emotions
- ② Establish a physical presence by using appropriate body language
- ③ Use your eyes to watch what others are doing, what their body language says about their feelings, as well as using your eyes to show others how you are feeling
- ④ Use language to show others you are interested in them (examples could include making small talk, or asking someone about one of their hobbies or interests).





Goal # **Goal Suggestions**

1-5 When getting frustrated, the student will determine the size of the problem (big problem, little problem), describe their own and others emotional reactions to problems based on the size and then minimize their own emotional response to problems they acknowledge to be relatively small, ____% of intervention session, and then using these concepts beyond the intervention room ____% of the time.



1-5a Given a situation that involves a “glitch” or problem that is frustrating to the student, _____ will accurately determine the size of the problem (big problem, little problem), ____% within the intervention setting.

Take this skill beyond the intervention setting: There the student is expected to determine the “appropriate” size of a frustrating situation ((big problem/little problem) when asked to evaluate the situation by his teachers or parents, ____ % of the time.

1-5b When in a frustrating situation, _____ will describe his/her own emotional reactions to their own problems based on the perceived size of the problem, ____% of the time within the intervention setting.

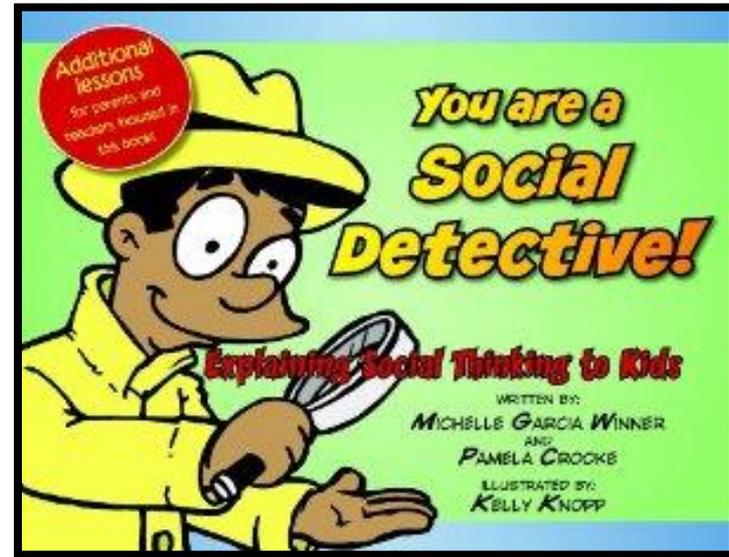
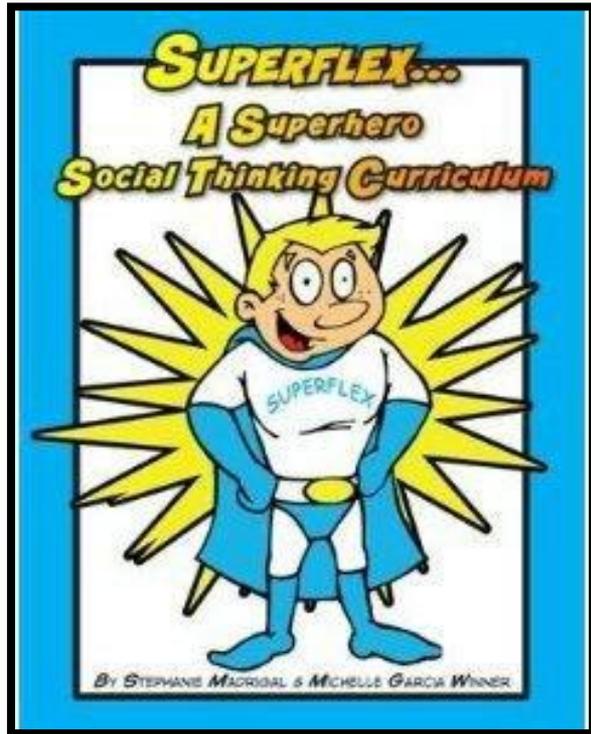
1-5c When in a frustrating situation, _____ will describe other people’s emotional reactions to their own problems based on the perceived size of the problem, ____% of the time within the intervention setting.

Take this skill beyond the intervention setting: There the student is expected to describe the emotional reactions of himself or others based upon the size of the problem encountered, when asked by teachers or parents, ____ % of the time.

1-5d When faced with a “small” problem or glitch, _____ will display a minimized emotional response to problems they acknowledge to be relatively small, ____% within an intervention session.

Take this skill beyond the intervention setting: There the student is expected to display a minimized emotional response to a “small” problem, ____ % of the time.

Superflex® Comic Book Series Michelle Garica Winner



You are a Social Detective

By Michelle Garcia Winner & Pamela Crooke
Illustrated by Kelly Knopp



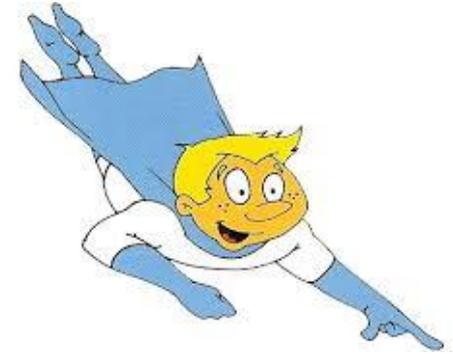
- Broken into three sections
 - ① School Smarts/Social Smarts & Expected Behavior
 - ② Unexpected Behavior
 - ③ Being a Social Detective
- Only one social skills concept and corresponding illustrations per page
- Includes three Social Thinking Lessons in the back for extra help
- Words highlighted in **bold** are key Social Thinking Vocabulary words
 - Example: “Social Detective: Every one of us is a Social Detective. We are good Social Detectives when we use out eyes, ears, and brains to figure out what others are planning to do next or are presently doing and what they mean by what they say and do.”





Superflex®... A Superhero Social Thinking Curriculum
by Stephanie Madrigal & Michelle Garcia Winner
Illustrated by Kelly Knopp

Superflex® Takes on Rock Brain and the Team of Unthinkables
by Stephanie Madrigal & Michelle Garcia Winner
Illustrated by Kelly Knopp



- Introduces Social Town
 - Superflex®: Social Thinking Superhero
 - Team of Unthinkables: distract Social Town residents from using their social skills
- Fun Facts, tips and quizzes are included within each short chapter to reinforce the concepts being taught
- CD includes printable handouts for teachers and parents to use with students to work on social thinking



Rock Brain - I make people get stuck on their ideas.



Glassman - I make people have huge upset reactions.



D.O.F. - I make people overly competitive.



Mean Jean - I get people to act mean and bossy.



Space Invader - I get people to invade other's personal space.



SUPERFLEX *takes on the Unthinkables!*

Superflex helps a citizen be a more flexible thinker, which allows the person to better control his or her brain and change how he or she thinks. He helps a citizen think about how to act and behave to keep others (and himself/herself) feeling good. He helps a citizen be a better problem-solver by thinking of many different solutions to one problem. He helps a citizen notice when an Unthinkable is becoming more active in his brain and then quickly comes up with a strategy to defeat the Unthinkable.



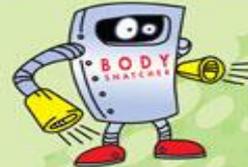
One-Sided Sid - I get people to only talk about themselves.



Wasfornogence - I get people to use humor at the wrong time, the wrong place or with the wrong person.



Brain Eater - I distract people.



Body Snatcher - I move people's bodies from the group.



Energy Hare-y - I give people too much energy.



Topic Twistermeister - I make people jump off topic.



Worry Wall - I make people worry too much.



Un-Wonderer - I don't like people to socially wonder about others.



Grump Grompaning - I put people in grumpy moods.

You Affect How Others Feel in Social Town

In Handout #4, you learned that chores can get done pretty quickly. This is important because if you're not quick about getting chores done, it not only affects you but also those around you. For example, in the story book, Superflex Takes on Brain Eater and the Team of Unthinkables, Matt's mom and his friend Aiden were frustrated with Matt because he was not staying focused and getting his morning chores done so he could get to school on time. Aiden and Matt's mom were also worried because it looked like Aiden and Matt would have to rush to get to school on time. When everyone tries to do their best with their chores, this makes others in Social Town feel great! Take a look below and add in some of the missing pieces to the form. We call it a Social Behavior Map because it helps us chart how what we do affects others. In this case it shows how doing your chores or not doing your chores makes others feel. Your teacher or parents can help you fill this in if you have trouble. @



Social Behavior Map: Expected Behaviors for Doing a Chore

Expected Behavior	How do others feel? (Can you add more?)	Consequences (Can you add more?)	How do you feel? (Can you add more?)
<ul style="list-style-type: none"> Your brain stays focused on each step of the chore. After one chore is done, you move onto the next one. Your body is calm while doing the chore. 	<ul style="list-style-type: none"> Proud Happy Comfortable Calm 	<ul style="list-style-type: none"> People may compliment you on the great job you're doing. 	<ul style="list-style-type: none"> Great! Proud Calm

Look on the next page for unexpected behaviors



Social Behavior Map: Unexpected Behaviors for Doing a Chore

Unexpected Behavior	How do others feel? (Can you add more?)	Consequences (Can you add more?)	How do you feel? (Can you add more?)
<ul style="list-style-type: none"> You quickly finish a chore and skip steps. Your brain gets distracted with items around the house (for example, a computer or books). Your body wanders away from the chore. Your body has too much energy when doing your chore. You complain a lot about doing the chore. 	<ul style="list-style-type: none"> Worried Stressed 	<ul style="list-style-type: none"> People may have to use a "nagging" voice. You may lose privileges. 	<ul style="list-style-type: none"> Frustrated Sad

☆☆☆ Extra Credit: What do you think your Superflex Academy teacher thought about you staying focused to finish your Superflex Handout chore?

(Your teacher will let you know.)

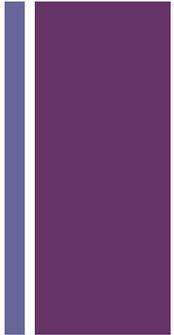
Superflex Points

Teacher circles: 1 Superflex Point Try again ~ 1 Superflex Point 1 Extra Superflex Point



National Standards Report

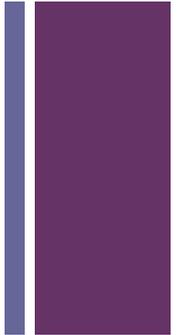
Social Skills Package



Social Skills Package {16 studies}										Evidence Level) Emerging	
These interventions seek to build social interaction skills in children with ASD by targeting basic responses (e.g., eye contact, name response) to complex social skills (e.g., how to initiate or maintain a conversation).											
Skills Increased											
Academic	Communication	Higher Cognitive Functions	Interpersonal	Learning Readiness	Motor	Personal Responsibility	Placement	Play	Self-Regulation		
			X								
Behaviors Decreased											
Problem Behaviors		RRN			SER			General Symptoms			
Ages											
0-2	3-5	6-9		10-14		15-18		19-21			
	X	X		X		X					
Diagnostic Classification											
Autistic Disorder			Asperger's Syndrome				PDD-NOS				
X			X				X				



Reichow, B. & Volkmar, F.R. (2010). Social Skills Interventions for Individuals with Autism: Evaluation for Evidence-Based Practices within a Best Evidence Synthesis Framework, *Journal of Autism and Developmental Disorders* (40): 149-166

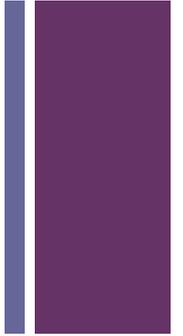


■ Participants

- 513 participants across 66 studies published in peer-reviewed journals between 2001-2008

■ Method

- Best Evidence Synthesis included six criteria:
 - ① Majority of participants identified with ASD
 - ② Studies had to evaluate interventions designed to improve one or more social skill(s) of the participant with ASD
 - ③ Study had to evaluate at least one social outcome of the participant with ASD
 - ④ Evaluation had to include a true experimental design, quasi-experimental multiple-group comparison, or single subject design
 - ⑤ Published in a peer-referenced journal
 - ⑥ Reports had to receive acceptable or strong methodological rigor ratings outlined in the Evaluative Method for Determining Evidence-Based Practices in Autism

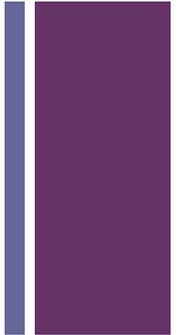


- **Study Analysis (Inclusion criteria)**
 - Age
 - Two groups: Preschool and school-age
 - Delivery agent of the intervention
 - technological delivery, parental delivery, non-parental adult delivery, peer delivery, combined
 - Method
 - rigor, study design, generalization and/or maintenance, procedural fidelity, dependent measure
 - Participant characteristics
 - total # of participants, age range, gender, gross estimated IQ
 - Intervention characteristics
 - intervention type, intervention density, setting, target skills and behaviors



■ Intervention Specific Findings

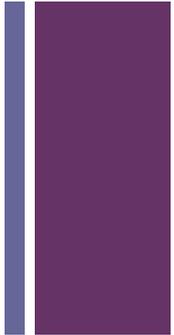
- Interventions based on Applied Behavior Analysis (ABA) were used most often and were most effective in changing behavior
- Naturalistic techniques worked best for preschool-age, no conclusion on older kids
- Parent Training and family involvement is essential for an intervention to work
- Peer Training provides support for social skills interventions used with ASD kids
- **Using Social skills groups generally positive, but did not show strong effects, had inconsistent results, and reported poor maintenance of skills compared to other intervention types**
- Visual supports (e.g Social Stories™) enhance social understanding and communication
- Video modeling appears to be effective for teaching social skills to those with ASD





National Standards Report

Story-based Intervention Package (Social Stories™)



Story-based Intervention Package {21 studies}

Evidence Level) Established

These treatments involve a written description of the situations under which specific behaviors are expected to occur. Stories may be supplemented with additional components (e.g., prompting, reinforcement, discussion, etc.). Social Stories™ are the most well-known story-based interventions and they seek to answer the "who," "what," "when," "where," and "why" in order to improve perspective-taking.

Skills Increased

Academic	Communication	Higher Cognitive Functions	Interpersonal	Learning Readiness	Motor	Personal Responsibility	Placement	Play	Self-Regulation
			X						X

Behaviors Decreased

Problem Behaviors	RRN	SER	General Symptoms

Ages

0-2	3-5	6-9	10-14	15-18	19-21
		X	X		

Diagnostic Classification

Autistic Disorder	Asperger's Syndrome	PDD-NOS
X	X	



Ali, S. & Frederickson, N. (2006). Investigating the Evidence Base of Social Stories, *Educational Psychology in Practice*, 22(4): 355-377

- Review of 16 research articles on social stories between 1994-2004

- Three types of published studies:

- ① Single participant (8)

- ② Multiple participant (7)

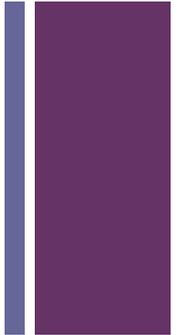
- ③ Group Evaluation (1)

- **Results**

- ① Single and multiple participant studies = positive outcomes in behavior when using Social Stories™ as an intervention, but cited the use of other interventions in conjunction with Social Stories™

- ② Group evaluation studies = 10 point Likert rating scale effects of changing behavior were rated above the midpoint of the scale, with 13-19 stories achieving a rating between 7 and 10. Overall positive results in improving behavior in individuals with ASD

- Group evaluation studies cited weakness in the design and data provided. There was room for rater bias...





Kokina, A. & Kern, L. (2010). Social Story™ Interventions for Students with Autism Spectrum Disorders: A Meta-Analysis, *Journal of Autism and Developmental Disorders*, 40, 812-826

- Meta-analysis included 18 research articles on Social Stories™ published between 2002 and 2009
 - Reviewed each study's total number of participants, age diagnosis, target skill, setting, agent, # of sessions, FBA, comprehension, fidelity and social validity scales
 - Social Stories™ were presented as an intervention in written form both with and without illustrations and in musical (song) format

- Results
 - Overall effectiveness of Social Stories™ was mixed; there was extreme variability of individual outcomes where participants fell in either the “Highly effective/effective” or “Ineffective” ranges
 - **Social Stories™ were most effective when addressing inappropriate behaviors than when teaching social skills**

