Today’s Presentation

- What are Social Interaction Skills?

- An Overview of Social and Emotional Functioning in Children and Adolescents on the Autism Spectrum

- The Building Social Relationships Model

- Evidence Based Strategies for Youth on the Autism Spectrum

Early Intervention/Early Childhood Education Usage Practices in the State of Indiana (Hume, Bellini, & Pratt, 2005)

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Social Interaction Skills

- Definition of Social Skills (Gresham & Elliot, 1995):
  - Socially acceptable learned behaviors that enable a person to interact with others in ways that elicit positive responses and assist in avoiding negative responses

- Social skills are influenced by both contextual and cultural factors

Since you were going to ask…

- Where should social skills be taught?
- How frequently should social skills be taught?
- Who should teach social skills?
- Who will benefit from social skills programming?
- What do I do with a kid that…

Why Social Skills Training is Ineffective!*

- Insufficient “Dosage”
- Contrived and Decontextualized Intervention Settings
- Failure to Match Skill Deficit with Type of Intervention Strategy
- Failure to Assess Social Skills Prior to Intervention
- Use of Ambiguous Intervention Objectives
- Lack of Systematic Programming
- Poorly Implemented Interventions

*Sources: Bellini, Peters, Benner, & Hopf (2007); Gresham, Sugai, & Horner (2001); Quinn, Kavale, Mathur, Rutherford Jr., & Forness (1999)
Five Basic Tenets of Social Skills Programming

Tenet One:
- Individuals with ASD want to establish meaningful social relationships.

Tenet Two:
- If we want children and adolescents with ASD to be successful socially, then we have to teach them the skills to be successful.

Tenet Three:
- Successful social behaviors are not always “appropriate” social behaviors.

Tenet Four:
- Social success is dependent upon our ability to adapt to our environment.

Tenet Five:
- Social interaction skills are not the equivalent of academic skills.

The Essence of Social Interaction Skills

• Three **Integrated** Components:
  - Thinking
    - Knowledge
    - Social Problem Solving
    - Perspective Taking
    - Self-Awareness
    - Attention
  - Feeling
    - General Mood
    - Anxiety
    - Depression
  - **DOING!**
    - Execution
    - Body Position/Movement
    - Fluency
    - Timing

Social Skills Instruction: A Five Stage Approach

• Identify and assess areas of need
• Discern between skill acquisition deficits and performance deficits
• Select appropriate intervention strategies
• Implement intervention strategies
• Evaluate program and modify as needed
Purpose

- Discover a child’s:
  - Present level of performance
  - Strengths and limitations

- Identify skills to teach and leverage
  - Answer the Question: “What is precluding the child from establishing and maintaining social relationships?”

Gresham et al. (2002):
Three Categories of Social Skills Assessment

- **Type I** measures
  - Include rating scales and interviews designed to measure social competence.

- **Type II** measures
  - Involve the direct assessment of the child’s social skills

- **Type III** measures
  - Involve conducting role-play scenarios or asking questions of the child related to social cognition (e.g., social problem solving or perspective taking tasks)

Common Social Skill Difficulties in Children with ASD

- Difficulties with Social Initiation
- Difficulties with Reciprocity and Terminating Interactions
- Non-verbal Communication Difficulties
- Difficulties with Social Cognition
- Difficulties associated with Perspective Taking and Self-awareness
- Social Anxiety and Social Withdrawal.
Building Social Relationships

**Social Initiation Skills**
- Joins in activities with peers
- Invites peers to join in activities
- Asks questions to request information about a person
- Asks questions to request information about a topic
- Joins a conversation with two or more people without interrupting
- Requests assistance from others
- Initiates greetings with others
- Demonstrates proper timing with social initiations
- Introduces self to others

**Social Reciprocity & Terminating Interactions**
- Takes turns during games and activities
- Maintains the give-and-take of conversations
- Responds to the greetings of others
- Acknowledges the compliments directed at him/her by others
- Allows peers to join-in activities
- Responds to the invitations of peers to join in activities
- Allows others to assist with tasks
- Responds to questions directed at him/her by others
- Ends conversations abruptly
- Read cues to terminate conversations
- Politely asks others to move out of the way

**Non-verbal Communication Skills**
- Recognizes the facial expressions of others
- Recognizes the nonverbal cues, or body language, of others
- Maintains eye contact during conversations
- Uses gestures to communicate needs
- Has facial expressions that are congruent with emotion
- Correctly interprets the emotions of others
- Demonstrates a wide range of facial expressions
- Recognizes the "meaning" behind the tone of another person’s voice
- Modulates the tone of his/her voice
### Social Cognition

- Compromises during disagreements with others
- Understands the jokes or humor of others
- Responds promptly in conversations
- Considers multiple viewpoints
- Talks about topics that other people find interesting
- Correctly interprets the intentions of others
- Avoids being manipulated by peers
- Stays “on-topic” during conversations
- Correctly analyzes social situations
- Uses eye contact or other gestures to direct another person’s attention

### Skills and Behaviors Associated with Perspective Taking and Self-awareness

- Maintains personal hygiene
- Maintains an appropriate distance when interacting with peers
- Expresses sympathy for others
- Speaks with an appropriate volume in conversations
- Talks about or acknowledges the interests of others
- Refrains from making inappropriate comments
- Provides compliments to others
- Offers assistance to others
- Engages in socially inappropriate behaviors

### Social Anxiety and Avoidance

- Interacts with peers during unstructured activities positive peer interactions
- Interacts with peers during structured activities
- Engages in solitary interests and hobbies
- Engages in one-on-one social interactions with peers
- Exhibits or expresses fear or anxiety regarding social interactions
- Interacts with groups of peers negative peer interactions
- Engages in solitary activities in the presence of peers
- Actively avoids social situations
- Expresses fear that other children will laugh or make fun of him/her
- Exhibits or expresses fear of public performances
Building Social Relationships

The Autism Social Skills Profile

Relationship between Social Objectives and Component Skills

- Objectives represent what you will measure
- Component Skills represent what you will teach

Social Objectives are Made up of Multiple Component Skills

**Social Objective 1:**
Scotty will join-in activities with peers at recess at least 5 times per observational period

**Skills needed to successfully reach objective:**
- Reading non-verbal and contextual cues
- Knowledge of social rules (i.e., when to join a conversation with two people without interrupting)
- Perspective Taking
- Regulation of emotion
- Coordination of motor movements
- Timing
- Use of eye contact and other non-verbal expression
- Effective conversational planning
- …and many more!
Examples of Social Objectives

**Social Objective 1:**
Scotty will join-in activities with peers at recess at least 5 times per observational period

**Social Objective 2:**
Scotty will engage in positive social interactions with peers at recess during 40% of observed intervals

**Social Objective 3:**
Scotty will respond to 75% of initiations by peers during a structured play group

Selecting Component Skills

- Identify Critical Skills
- Social Importance
- Practical Importance
- Choose Commonly used Skills
- Select Pivotal Skills
- Ensure that Skills are within the Child’s Zone of Proximal Development (ZPD)
- Select Component Skills that are Necessary to Successfully Achieve Social Objective

Social Skills Instruction:
A Five Layer Approach
- Identify and assess areas of need
- Discern between skill acquisition deficits and performance deficits
- Select appropriate intervention strategies
- Implement intervention
- Evaluate program and modify as needed
Step Two: Discern between a Skill Acquisition and Performance Deficit

- Classification of Social Skill Deficits
  - Skill Acquisition Deficit:
    - Refers to the absence of a particular skill or behavior
    - Goal of Intervention: Teach new skills or develop recently acquired skills
  - Performance Deficit:
    - Refers to a skill or behavior that is present, but not demonstrated or performed
    - Goal of Intervention: Enhance performance of existing skills

Matching Intervention Strategy with Type of Skill Deficit

- Strategies that Promote Skill Acquisition
  - Thoughts, Feelings, and Interest Activities
  - Social Problem-Solving and Social Rules
  - Reciprocal Intervention Strategies
  - Social Stories
  - Role Playing/Behavioral Rehearsal
  - Self-Awareness Strategies
  - Prompting Strategies
  - Interaction/Conversation Planning
  - Video Modeling

- Strategies that Enhance Social Performance
  - Reinforcement/Contingency Strategies
  - Priming Social Behavior
  - Peer Mediated Interventions
  - Game Playing
  - Environmental Modifications
  - Increased Social Opportunities/In-vivo (Live) Practice
  - Disability Awareness/Peer Sensitivity Training
  - Self-Awareness*
  - Relaxation Strategies*
  - Prompting Strategies*
  - Video Modeling*
  - Social Stories*

Skill Acquisition: From Novice to Mastery

- Novice → Intermediate → Mastery
Factors Affecting Performance:
Moving Beyond “Can’t Do vs. Won’t Do”
- Motivation
- Sensory sensitivities
- Anxiety
- Attention and impulsivity
- Memory
- Self-efficacy
- Movement differences

How to Discern between a SAD and PD?
- Does the child perform the skill across multiple settings and persons?
- Does the child perform the skill when reinforcement is provided?
- Does the child perform the skill without support or assistance?
- Does the child perform the skill fluently and effortlessly?
- Does the child perform the skill when environmental modifications are made?

Social Skills Instruction:
A Five Layer Approach
- Identify and assess areas of need
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Strategy Options Covered Today

- Social Narratives/Stories + Behavior Rehearsal
- Prompting
- Peer Mediated Interventions
- Video Modeling

Video Modeling as an Evidence Based Practice

National Professional Development Center on Autism:
http://autismpdc.fpg.unc.edu/content/briefs

National Autism Center

Story Based Interventions

- An approach for teaching specific social skills or social concepts by presenting the social skill or concept in the form of a story

  - Example of a Social Narrative

  - Combine Social Narratives with Behavioral Rehearsal for maximum effectiveness (targets both “Thinking” and “Doing”)
Behavioral Rehearsal / Role-Playing

- Acting out situations or activities in a structured environment to practice newly acquired skills and strategies
  - Scripted or “Spontaneous”
  - Allows for positive practice of skills (Doing)
  - Allows interventionist to systematically add (fade-in) levels of complexity
  - Three errorless repetitions per behavior is recommended

Peer Mediated Instruction

- Components of PMI Programs:
  - Non-disabled peers are systematically taught to initiate and to respond to peers with ASD
  - Can be used to enhance performance of skills in the natural environment
  - Allows adults to serve as facilitators rather than as playmates for the child with ASD.

Guidelines for Selecting Peer Mentors for PMI Programs

- Select only socially competent peers!
- Select peers who are approximately the same age or grade
- Peer mentors should have a neutral or positive history with child with ASD
- Peers should exhibit age appropriate play
- Select socially responsive peers
- Select peers who are likely to follow adult instructions
- Ensure peers are willing to participate
### Steps in Training Peer Mentors

- **Prior to Beginning Program**
  - Provide description of a peer mentor
  - Provide a detailed description of their roles and responsibilities (to parents too)
  - Teach peer mentor about autism spectrum disorders (be child specific)
- **Every Week (on-going training)**
  - Re-affirm importance of peer buddies (provide verbal praise)
  - Introduce new skills and review previously learned skills or topics
  - (Provide verbal description and model demonstration of skill)
  - Practice skills with adult facilitator and other peers


### Prompts

- Support and assistance provided to help child or adolescent acquire skills/experience success
- Highly effective when used correctly
- Range of applicability
  - New skills or enhance “old” skills
  - Novice or advanced learners
  - Used in all settings
  - Verbal or nonverbal children
  - All ages
  - Used by adults or peers

### Types of Prompts

- **Most to least supportive**
  - Physical prompts
    - Physical guidance
    - Hand-over-hand to touch
  - Modeling prompts
    - Demonstrate desired skill or behavior
    - All of skill to part of skill
  - Verbal prompts
    - Verbal directives/instructions
    - Specific or General
Types of Prompts

• Gestural prompts
  • Nonverbal gesture
  • Hand signals, pictures, cards, and so forth
  • Elaborate (e.g. pantomime) to simple (e.g. pointing)

• Natural prompts
  • Naturally occur in an environment
  • Examples:
    • Social Initiation
    • Seeing other children playing a game

Using Prompts: Guidelines

• Primary strategy used in SSRC during “Structured Play Time”
• Prompt only if necessary…be patient!
• Prompt initiation, responding, and maintaining engagement
  • Prompt targeted skill (e.g., joining in play activity) up to 10 times during structured play activity
• For social responses, prompt Attention prior to prompting Behavior

Prompting Guidelines Cont.

• Prompt after 20 seconds of non-interaction
• Allow 10 seconds for child to respond to prompt.
• If child does not respond, provide a more supportive prompt
  • If child does not respond after 10 seconds, provide an even more supportive prompt
  • If child does not respond, wait another 10 seconds then repeat process
Using Prompts: Guidelines

- Use least supportive prompt necessary to ensure success
- If not successful, then move to next level of prompting

Using Prompts: Guidelines

- Fade prompts
  - Reduce the use of prompts as quickly as possible
  - Reduce Systematically (Have a prompt fading plan!)
  - Pair prompts prior to fading them
  - Most to Least Supportive
  - Time Delay
    - Constant
    - Progressive

VSM FOR YOUTH
ON THE AUTISM SPECTRUM
Modeling and Youth with ASD

- Changes in behavior, thinking, or emotions that occur through observing another person, or model.
- Historical Perspective on modeling and ASD
- Three necessary requisites of successful modeling (Bandura):
  - Attention
  - Memory
  - Imitation/Behavioral Production
- Live v. Video Modeling

Live vs. Video Modeling (Charlop-Christy et al., 2000)

- Taught social-communication and functional skills to children with ASD
- Video modeling more effective than live (in vivo) modeling
- Video modeling led to better generalization of skills.

Video Self-Modeling (VSM)

- Intervention where observers are shown videotapes of themselves successfully engaging in an activity
- Ensures that model has similar attributes and ability
- Independent and efficacious performance is facilitated via positive self-review and use of hidden-supports
- Example (Bellini, Akullian, & Hopf, 2007)
A Meta-Analysis of Video Modeling and VSM Interventions (Bellini & Akullian, 2007)

- Moderate to highly effective in 19 out of 23 studies published in peer reviewed journals
- Outcomes included social-communication, functional skills, and behavioral functioning
- Interventions effective across the age span (ages 3 to 20) and across the autism spectrum (varying levels of language and cognitive functioning)
- Study Determined that Video Modeling met criteria for an Evidence Based Practice as defined by Horner et al. (2005)

Why is Video Modeling is Effective for Children with Autism?

- Strength of visually cued instruction
- Provides a visual representation of success
- Directs attention to instructional cues and salient contextual cues
- Decreased anxiety
- Improved self awareness (VSM)
- Improved self-efficacy (VSM)

VSM has been used Successfully with the Following Populations/Disorders/Issues

- Problem Behaviors
- Academic Engagement
- Impulsivity
- Adaptive Behavior/Daily Living Skills
- Athletic Performance
- Reading Fluency and Comprehension
- Math Achievement
- Articulation Disorders
- Selective Mutism
- Autism (behavior, social skills, communication)
- Phobias/Anxiety (Speaking, Social, Specific, etc.)
Three Categories of VSM

- Video Feedback
  - Individuals view themselves engaging in various behaviors
  - Used with individuals who have a lack of awareness or self-reflection regarding their behavior
- Positive Self Review
  - Individuals view themselves successfully engaging in a behavior or activity
  - Used with low frequency behaviors
- Video Feedforward
  - Used when the individual already possesses the necessary skills in her behavioral repertoire, but is not able to put these skills together to complete a task
  - Used with behaviors that require a high level of support-Hidden Supports

VSM - Settings

- Role Playing
  - Less Time Consuming
  - More Control
  - More Specific Instruction
- Natural Setting
  - More Time Consuming
  - Less Control
  - Increased Ecological Validity!
  - Better Generalization

Lessons Learned in Research & Practice

- Keep it short
- Keep it simple
- Keep it positive

*Examples of Making Videos
Social Skills Instruction: A Five Layer Approach

• Identify and assess areas of need
• Discern between skill acquisition deficits and performance deficits
• Select appropriate intervention strategies

Implement intervention
• Evaluate program and modify as needed

SSRC Structure of Sessions (2011)

• Part 1: (20 minutes)
  • Social cognitive instruction that targets at least two of the following areas each session:
    • Social Problem Solving
    • Perspective Taking (and pre-perspective taking skills)
    • Self-Awareness
    • Observational Learning
    • Joint Attention
    • Selective/Divided Attention
    • Declarative Knowledge (social rules, norms, etc.)

• Part 2: (20 minutes)
  • Behavioral strategies that target one or more of the component skills (i.e., “Featured Skills”) identified in the child’s intervention plan
    • Strategies include:
      • Behavioral rehearsal (with or without social stories)
      • VSM
      • Prompting during Structured Play Activity

• Part 3: (5 minutes)
  • Data collection/Free play

Social Skills Instruction: A Five Layer Approach

• Identify and assess areas of need
• Discern between skill acquisition deficits and performance deficits
• Select appropriate intervention strategies

Implement intervention
• Evaluate program and modify as needed
SSRC Outcome Evaluations

- Every week in Clinic for Social Objectives (Initiating, Responding, and Total Social Engagement)
- Pre-post (every 9 weeks) for Social Competence (ASSP and SSRS)
- Pre-post for Social Objectives at School

SSRC Forms and Data

- Sample Session Plan
- SSRC Progress Monitoring Form
- SSRC Outcomes

In Closing

- Start with Assessment…End with Assessment
  - Don’t start with what you want teach, start with what the child needs to learn
- Teaching social skills is difficult!
  - Be prepared to make mistakes!
    (3 x 365 = 1095)
- Programming with a purpose…be systematic.
  - Use model to guide programming
- Develop a LARGE intervention tool chest
  - Keep learning and never stop challenging your personal and theoretical assumptions