School-based Social Programming
for Students with ASD:
Progress and Pitfalls

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Social competence is...

“...the interpersonal social performance of children with other children or adults as judged by significant social agents in the child’s environment” (Odom & McConnell, 1985)
Who are those significant social agents?

- CLASSMATES
- TEACHERS
- PARENTS
- NEIGHBORS
- FRIENDS
- RELATIVES
The child’s school social environment...

- CLASSROOM
- RECESS
- THERAPIES
- TRANSITIONS
- LUNCH
- PE/ART/MUSIC
- AFTER SCHOOL
Social competence also defined as …

“…the appropriateness of strategies he or she employs and whether he or she is successful in accomplishing specific social tasks” (Guralnick, 2002)
Peer-Mediated Interventions (PMI)

• Recruit 4 to 6 peers without disabilities
• Systematic adult-guided social skill instruction
• Natural social learning opportunities 3 to 4 times per week, across the school day
• Supportive social environment (e.g., child preferences, small groups, visual supports)
• More recently –written text and picture cues embedded within PMI
Rationale for Including Peers

• Exposure to peers alone is not enough

• Peers may reinforce inappropriate behaviors and ignore desirable behaviors

• Peers provide appropriate language models, natural social reinforcers, and give feedback

• Spill over effects to untrained peers (Sasso et al., 1998)

• Peers report enjoyment and learn new skills
Teacher Perceptions of Important Communication Skills (in order)

1. Make suggestions – share ideas for playing, talk about rules, game set-up
2. Talk about taking turns
3. Requests – to obtain objects, actions, or request information
4. Social Niceties – compliments, offer help, say please and thank-you
5. Comments – label, describe, acknowledge
6. Gain attention – say name, tap on shoulder
Let’s Talk about Progress First!

- Recommended EB communication intervention approach (National Research Council, 2001)
- Guidelines for SLP’s - Position statement (ASHA, 2006)
- Research demonstrates positive social outcomes for students with and without ASD (Kamps et al., 1997; Thiemann & Goldstein, 2001, 2004, in prep)
- Reviews – PMI reported as the most empirically supported type of social intervention (Bass & Mulick, 2007) with a SOLID research base (Chan et al., 2009)
Guidelines for SLP’s (ASHA, 2006)

• “…all individuals with ASD are challenged in the area of social communication”
• “SLP’s role is *critical* in supporting the individual, the environment, and the *communication partner*…”
• “Individuals with ASD should be eligible for SLP services due to the pervasive nature of the social communication impairment, regardless of… performance on standardized testing of formal language skills”
Teaching Social Skills and Scripted Interactions

- Peer-mediated interventions
- Teach child with ASD and/or peers to initiate and respond
- Model, prompt, and reinforce communication
- Teach in natural environments
- Combination of structured and unstructured social settings
- Teach ‘scripted’ play interactions – what to do, what to say, how to respond
Unfortunately…..

- Social competency gap widens as children progress through grades (Prizant et al., 1997)
- Poor social adjustment reported for 60-75% of children when reach adolescence (Nordin & Gillberg, 1998)
- Young adults lack understanding of how to be a friend; report feeling lonely (Carrington et al., 2003)
- Intervention research after elementary school is sorely lacking
Navigating Integration into Middle School: A Peer Network Intervention for Students with Autism

Thiemann-Bourque

Pilot Study Funded by:
What are Peer Networks?

- Group of peers create a support system to encourage social competencies and friendships
- Peers taught to ‘drive’ the design and implementation of the social network
- Peers trained to model, prompt, and reinforce appropriate social behaviors
- Peers meet weekly to discuss social goals and suggest strategies
- Peers monitor progress and evaluate program
Participants

- 2 students with severe autism
  - One boy and one girl both 13 years old
  - First semester of 7th grade (Middle School)
  - Life skills class with inclusive specials and electives

- 4 to 5 peers recruited for each peer network
  - 1-2 peers from same elementary school
  - Both males and females
  - Same peers participate for entire project
Peer Network Intervention – Special Ed Teacher

- Complete pre-treatment social perception questionnaire
- Complete Social Responsiveness Scale
- Recommend peers and correspond with parents
- Assist with scheduling of social groups and hall passes
- Read social story and practice social skill in classroom
- Review project goals and progress pre- mid- and post-intervention
Peer Network Intervention – Parents

- Complete pre-treatment social perception questionnaire
- Complete Social Communication Questionnaire
- Received copy of social story and written text scripts/pictures for home use
- Received social skill reports (both focus and peer parents)
Peer Network Intervention - Peers

- Perceptions of important social skills to target
- Trained on data collection (1-5 rating scales)
- Lead the structured sessions with focus child
- Assisted in deciding on their own social schedules
- Taught to use text and visual cues and prompts
- Discuss social issues and concerns with focus child
- Brainstorm suggestions for week ahead
Peer Network Intervention Components

- Baseline observations
- Two 30 minute peer training sessions
  - Game preferences, potential goals, and schedules
  - Training on social data collection and monitoring
- Three weekly meetings with peers for 30 min
  1) Structured game – explanation, models, and feedback
  2) Structured game – explanation, models, and feedback
  3) Weekly Report – strategies used, issues, suggestions, collect data sheets
- Generalization social schedule – 5 to 15 minutes daily
  - PE, Chorus, Hallways, Lunch/cafeteria
Potential Social Skills Targets

• Greetings, goodbyes
• Chit-chat - comments and requests
• Material aid and assisting
• Provide emotional support, compliments
• Resolve conflicts, flexibility
Other Communication Measures

- Peer and Focus Child Initiations and Responses
- Peer or Focus Child No Responses
- Inappropriate verbal or body language
- Different conversational topics
- Number of verbal turns per topic
Example of Peer Data Sheet

1. Did your buddy talk first to start a conversation with you?  No  Yes

2. Did you talk first to start a conversation with your buddy?  No  Yes

3. How many times did your buddy talk first or start a conversation with you?  
   0 to 2 turns  3 to 4 turns  5 to 6 turns  7 or more turns

4. How many times did you talk first or start a conversation with your buddy?  
   0 to 2 turns  3 to 4 turns  5 to 6 turns  7 or more turns

5. How much did you like being with your buddy during this activity?  
   1  2  3  4  5  
   Not at all  A little bit  Somewhat  A lot  Very Much
## Weekly Meeting with CW

<table>
<thead>
<tr>
<th>Issues</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hard time starting a conversation</td>
<td>• Ask him to ask a question first</td>
</tr>
<tr>
<td>• Doesn’t pay attention</td>
<td>• Ask, “What do you want to talk about?”</td>
</tr>
<tr>
<td>• Talks about the same things</td>
<td>• Use words we were taught (e.g., “You already know that answer,” “Time to move on.”)</td>
</tr>
<tr>
<td>• Saying goodbye too early</td>
<td>• Stay positive</td>
</tr>
<tr>
<td>• Doesn’t want to talk to us or his friends</td>
<td></td>
</tr>
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## Weekly Meeting with CS

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<th>Issues</th>
<th>Strategies</th>
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</thead>
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<tr>
<td>• Keeps talking about the same thing</td>
<td>• Use cue cards (to help with other topics)</td>
</tr>
<tr>
<td>• Uses bad words</td>
<td>• Positive reinforcement; not give up</td>
</tr>
<tr>
<td>• Tells us goodbye too soon</td>
<td>• Remind to only say goodbye at end of time</td>
</tr>
<tr>
<td>• Not knowing what to talk about</td>
<td>• Talk to new people</td>
</tr>
<tr>
<td></td>
<td>• Write words in bubbles; use topic cards; magazines</td>
</tr>
</tbody>
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Written-text and Picture Cues

- Controlled, short phrases written at child’s level (reading and vocabulary)
- Functional, age-appropriate, and directly related to target skill for each activity
- Assume some decoding or word recognition skills; but not always
- General enough for many practice opportunities
- Available to student throughout activity and portable (e.g., laynards)
Written Text and Picture Cues
Intervention Tools

• Social Stories
• Comic Strips
• Booklets
• Lanyards
• Topic cards with picture cues
• Cartoons with text cues (student photos)
• Reinforcement cards
Table-top written text cue booklet for 3 target skills: 2nd – 5th Grade Students

CONVERSATION SKILLS:
WAYS TO TALK TO MY FRIENDS

Make Suggestions

Talk nice, offer help, and share

Ask Questions

Make suggestions

Maybe we could ___

Let’s say that if ___

How about we ___

Talk nice, help, and share.

Way to go!

Nice try

Do you need help?

Here, you can ___

Say a name first before talking

(name), I think ___

See this (name)? ___

Watch this, ___

Maybe we could ___

Do you need help?

Here, you can ___

Watch this, ___
Why are text cues and scripts effective?

- Help children organize social information
- Continuous access to ideas, comments, questions directly related to activity
- Help children learn conversational rules
- Decreases adult dependency
- Peers use the scripts – provide models
- Peers aware of what child is trying to communicate and respond appropriately
CS: Initiations and Responses Per Minute – After 12 weeks

Baseline
Average Per Tx Session

Fc Init: 0.3
Fc Resp: 2.0
Pr Init: 2.3
Pr Resp: 1.7

Averages Per Minute

Baseline: 0.8
Baseline: 3.7
Baseline: 2.5
Baseline: 3.2
CS: Initiations and Responses Per Minute –

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Baseline

Average per Tx Session
Preliminary Outcomes

• Improvements in initiations for one child with autism and group of peers in structured and generalization social settings

• Increased in communication responses for both children with autism and their peers pre- and post-intervention
Preventing Pitfalls to a Successful Transition to MS

- Meet with elementary and middle school staff in spring
- Start groups early – within first 3 weeks of school
- Gain support of principal – then group of staff (paras, special and regular education, SLP’s)
- Expect peer network schedule changes - rotation of specials, semester activity changes
- Reinforce use of social skills in 1:1 therapist settings using text and picture cueing system