Implementing Social Competence Interventions for High Schools Students with ASD: Feasibility in 3 Pilot Studies

ASHA Convention – November 14th, 2013

Jessica Dykstra, Ph.D., CCC–SLP
Aimee Bord, M.A., CCC–SLP
COI Disclosure

- Jessica Dykstra
  - Employed through grant funding from the CSESA Project

- Aimee Bord
  - Employed through grant funding from the CSESA Project
The work reported here was supported by the Institute of Education Sciences, U.S. Department of Education through Grant R324C120006 awarded to UNC–Chapel Hill.

The opinions expressed represent those of the authors and do not represent views of the Institute or the U.S. Department of Education.
Acknowledgements

- Students, peers, parents, teachers, and schools in CA, NC, and TN
- MIND Institute team
  - Sally Rogers and Aaron Stabel
- UNC–Chapel Hill team
  - Sam Odom, Kara Hume, Melissa Sreckovic, and Eric Common
- Vanderbilt team
  - Erik Carter, Jenny Redding, and many graduate students
Overview

- Background
  - Social competence
  - Existing research

- Pilot Studies
  - Interventions & outcomes

- Experiences in High Schools
  - Challenges & potential solutions

- Implications and Recommendations
Background

Social Competence in Students with ASD
Social Competence

- Encompasses a broad set of skills
  - Social–communication skills
  - Social–cognitive skills
  - Maintenance of relationships

- Context of secondary settings
  - Many communication partners across the day
  - Increased importance of peer culture
  - Complexities and nuances of relationships

Brown & Klute, 2003; Carter et al., in press; Lynch et al., 2013
Areas of Need for Students with ASD

- **Social–communication skills**
  - Expressive communication, comprehension, pragmatics

- **Social–cognitive skills**
  - Theory of mind, problem-solving

- **Relationships**
  - Forming and maintaining friendships, differentiating between types of relationships

- **Behavioral**
  - Impact of circumscribed interests, repetitive behaviors, interfering behaviors, etc.

APA 2013; Carter et al., in press; Kanne & Mazurek, 2011; Paul et al., 2009
Evidence–Base for Interventions

**Student interventions**
- Social skills training
- Social cognitive instruction
- Communication systems
- Behavioral interventions

**Peer interventions**
- Peer education
- Peer interaction training
- Peer-mediated support interventions

**Educator interventions**
- Fading adult proximity
- Facilitative role (rather than direct)

**School-wide interventions**
- Disability awareness
- School-wide peer programs

Bellini et al., 2007; Carter et al., in press; NPDC, 2011; Reichow & Volkmar, 2010
Pilot Studies

Interventions and Outcomes
CSESA Project

- Center on Secondary Education for Students with Autism (CSESA)
  - 5-year project from IES
  - Develop and evaluate a comprehensive intervention program for students with ASD

Academic  Independence & Behavior  Social  Transition & Families

CSESA Foundations
Overview of Pilot Studies

- **Where?**
  - 3 sites (CA, NC, TN)
  - 4 high schools

- **Who?**
  - 12 students with ASD
  - 26 peers
  - Mix of school staff and research staff

- **What?**
  - Peer Supports
  - Peer Networks
  - Social Competence Intervention–High School (SCI–H)
Overview: Peer Supports

**Content**
- Communication and social skills
- Participation in class

**Strategies**
- Modeling
- Prompting

**Context**
- Classroom (academic or other)

**Evidence**
- Elementary, middle, and high school
- Most evidence with students with severe disabilities

Carter et al., 2011; Koegel et al., 2012
Steps for Peer Supports

① Identify student with ASD
② Identify and ask peers
③ Develop a peer support plan
④ Orient student & peers to their role
⑤ Implement peer supports in classroom
Peer Supports

Implementation
- Core academic class, art class – 2 peers for each student with ASD
- Staff facilitators in general education classroom
- Weekly training with peers and staff facilitator

Outcomes
- Immediate increase in social exchanges
- Increase in social initiations by target students out of class
- HS staff facilitators responded eagerly to strategies

Tips
- Target students with ASD invited to several peer support meetings and enthusiastic participation observed
- Have school staff recruit peers
## Overview: Peer Networks

<table>
<thead>
<tr>
<th>Content</th>
<th>Strategies</th>
<th>Context</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and social skills</td>
<td>Modeling and prompting</td>
<td>Lunch, clubs, sports teams, etc.</td>
<td>Elementary, middle, and high school</td>
</tr>
<tr>
<td>Social connections and engagement</td>
<td>Facilitating interactions</td>
<td></td>
<td>Students with severe disabilities</td>
</tr>
</tbody>
</table>

Carter et al., 2011; Koegel et al., 2012
Steps for Peer Networks

① Identify student with ASD
② Identify and ask peers
③ Orient student & peers to the network
④ Meet weekly as a peer network
⑤ Encourage interactions outside of the weekly meetings
Peer Networks

- **Implementation**
  - Lunch meetings
  - Examples of activities: Jenga, listening to music

- **Outcomes**
  - Increased interactions for some focal students
  - Peers reported positive outcomes

- **Tips**
  - Embed in existing groups if possible (clubs, athletics, etc.)
  - Form around common interests
## Overview: Social Competence Intervention

| **Content**                  | • Social Cognition
<table>
<thead>
<tr>
<th></th>
<th>• 5 units (e.g. emotions, problem solving)</th>
</tr>
</thead>
</table>
| **Strategies**               | • Specific verbal feedback, video modeling, self-monitoring
|                             | • Scaffolding instruction                    |
| **Context**                  | • Social skills group (4–6 students)        |
|                             | • Clinic or school setting                  |
| **Evidence**                 | • Emerging for middle school students with ASD |
|                             | • Small pilot with 4 high school students   |

Stichter et al., 2010; 2013
Social Competence Intervention – High School (SCI–H)

- **Implementation**
  - 4 students meeting before school

- **Outcomes**
  - Qualitative changes in social skills – eye contact, discussion, self-advocacy
  - Improvement in ability to work in group
  - Student recognition of skill development

- **Tips**
  - Embed in class or offer credit if possible
  - Careful selection of group to improve group dynamics

Note: SCI–H is not widely available due to ongoing efficacy study
Experiences in High Schools

Challenges and Solutions
Teaming in High Schools

Perceived Barrier

- Teams are less prominent
- Limited time to work together

Experiences

- Face-to-face interaction is difficult, but some success with short conversations and emails

Potential Solution

- Find a couple champions in the school – people who are already advocating for these students
- Capitalizing on technology – email, data systems on Smartphones
Finding Peer Partners

Perceived Barrier
- Unmotivated to work with students

Experiences
- Nervous early on, but positive experiences
- Some peers were used out of convenience (peer mentors), others were recommended selected

Potential Solutions
- Highlighting positive outcomes
- Using existing groups (peer mentors, Random Acts of Kindness Club, etc.)
- Incentives (extra credit, fun activities in group, letters for college)
Finding Time and Resources

Perceived Barrier

- Credit driven nature of high school
- Busyness of teachers, SLPs and other staff

Experiences

- Teachers willing to commit time and resources once they see the positive changes
- Peers were excellent leaders once group was established
- Difficult to get student buy-in for SCI-H outside of class (e.g., before/after school)

Potential Solution

- Ties to the Common Core
- Embed in classes or extra-curricular activities
Implications and Recommendations

For SLPs working with high school students with ASD
Use a combination of approaches
  ◦ Social competence is multi-faceted and needs to be addressed in different ways

Capitalize on technology
  ◦ For data collection and team communication
  ◦ For intervention (e.g., self-monitoring)
  ◦ For establishing students’ social connections

Think creatively about integrating work on social competence
  ◦ Embed in classes, extra-curricular activities
Tools and Strategies

A few on the ground tools and strategies that may be helpful in high school settings:

- Peer support plans
- Cooperative learning groups
- Self–monitoring
- Specific verbal feedback
- Understanding Autism videos
Peer Support Plan

- **Purpose**
  - Identify strategies/supports for students, peers, and facilitator
  - Encourage interactions and increase class participation

- **Implementation**
  - Brainstorm ideas with facilitator (and potentially peers)
  - Record ideas on Peer Support Plan

Carter et al., 2013 – CSESA Training
Peer Support Plan

Example One of Peer Support Plan

The Biology class is a great place for Brad to work on goals related to developing social and conversational skills, as well as expanding his typing and writing skills. Below are some ideas for how Brad might become more involved in class activities during Biology, as well as some ideas for how the peers at Brad’s table could support him.

At the beginning of class....

<table>
<thead>
<tr>
<th>The student could...</th>
<th>Classmates could...</th>
<th>The facilitator could...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talk quietly with his peers (when it is okay with the teacher)</td>
<td>Help Brad pass out any worksheets</td>
<td>Try to draw some of the peers at the table into conversation with Brad—you may have to do some modeling or give them some ideas of things they could ask about or prompt Brad to ask questions of his peers</td>
</tr>
<tr>
<td>Pass out worksheets or other materials to the class (if there are any that day)</td>
<td>Make sure Brad has all of the same materials for class, such as a book, worksheets, lab materials, etc.</td>
<td>Make sure Brad has the same materials as his classmates, such as a book, any worksheets, paper, pencil, lab materials, etc.</td>
</tr>
<tr>
<td>Listen and respond to Ms. Hale as she does attendance</td>
<td>Help Brad get out his notebook, pen, paper, etc. for class</td>
<td>Look through the materials quickly to see if there are any things that could be adapted readily</td>
</tr>
</tbody>
</table>

When there are lectures or whole group instruction...

<table>
<thead>
<tr>
<th>The student could...</th>
<th>Classmates could...</th>
<th>The facilitator could...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listen to Ms. Hale as she presents information to the class</td>
<td>Make sure Brad has all of the same materials for the activity as they do</td>
<td>Make sure Brad has the same materials as his classmates</td>
</tr>
<tr>
<td>Quietly ask his peers questions about the material Ms. Hale is presenting</td>
<td>As you are taking your own notes, copy down on a separate piece of paper some of the important words or ideas from the class discussion; Brad can then type these as his own notes or copy them down with the facilitator’s help. Write fairly large so Brad can see clearly.</td>
<td>Always brainstorm ways Brad can be engaged in the discussion: Can he answer a question? Can he share an idea?</td>
</tr>
<tr>
<td>Take notes by typing important specific key words or phrases that are being written down by a peer (preferably) or the facilitator</td>
<td>Periodically check to make sure Brad is doing okay with typing or writing his notes</td>
<td>Help Brad to take modified notes by typing key words/phrases on the laptop (preferred) or writing them out by hand</td>
</tr>
<tr>
<td>Copy by hand those same key words or phrases with the facilitator’s help or highlight notes</td>
<td>Occasionally lean over and quietly summarize a key point or interesting fact for Brad, or ask him simple questions that help him follow along</td>
<td>Encourage Brad to look at Ms. Hale or the whiteboard as instruction is taking place</td>
</tr>
<tr>
<td>Turn off/on the lights when Ms. Hale is using the overhead projector</td>
<td>Encourage Brad with lots of positive feedback such as “Wow, you take really good notes!”</td>
<td>Let the peers know when they are doing a great job interacting with or supporting Brad</td>
</tr>
<tr>
<td>Prompt Brad to ask his peers to double check his notes</td>
<td></td>
<td>Prompt Brad to ask his peers to double check his notes</td>
</tr>
</tbody>
</table>

Carter et al., 2013 – CSESA Training
Cooperative Learning Groups

- **Purpose**
  - Work together to achieve a common goal or outcome

- **Implementation Tips**
  - Give defined roles
  - Provide materials and visual supports as needed
  - Move from structured to naturalistic practice
  - Use fun, practical activities
    - Examples: planning a class trip or social event

Stichter et al., 2013
Self-Monitoring

Purpose
- Encourages independence and self-awareness

Implementation
- Keeping track of skills on post-it or simple data sheets
- Smartphones apps for data collection
- Complete goal sheets at the end of class periods

NPDC, 2011; Stichter et al., 2013
Self-Monitoring

Respectful: Being respectful means you act in a way that shows you care about others’ feelings and well-being. This includes using good manners and treating people with courtesy. When you are respectful, you use a positive tone of voice.

Examples:
- Politely disagree: “I would rather not travel to Florida by car, because it would take too long to get there.”
- Politely choosing not to participate: “I would rather not answer that question.”
- Providing constructive feedback to others: “Jessica, using facial features is a good way to tell someone’s emotion, but I think in the picture it is easier to read his emotion by looking at his body gestures.”
- Answering a question or providing a comment using a positive tone of voice.
- Keeping negative comments to yourself: “When you are upset or frustrated and you want to say something rude, but you keep it to yourself and don’t share it.”

Disrespectful: Being disrespectful means you act in a way that shows people you don’t care about them or their feelings. You say hurtful things.

Examples:
- Criticizing: “How do you not understand that? Even a 1st grader would know that!”
- Arguing: “No, Jessica, that is NOT a negative comment!”
- Saying negative statements: “This is stupid.”
- Moaning, huffing, and groaning.

Data Collection Procedures:
- Each time you answer a question, ask a question, or make any statement out loud, put a tally mark if the comment was respectful or disrespectful.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Respectful: Politely disagree, politely choosing not to participate, providing constructive feedback, using a positive tone of voice.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disrespectful: Criticizing, arguing, saying negative comments, moaning, huffing, groaning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Specific Verbal Feedback

- **Purpose**
  - To reinforce desired skills

- **Implementation**
  - Feedback must be immediate, specific, and consistent
  - Can be paired with additional reward/token system

Stichter et al., 2013 – SCI–H Training
Understanding Autism

- Collection of resources for secondary school teachers
  - DVD series
    - Developed by OAR
    - [http://www.researchautism.org/resources/teachersdv.asp](http://www.researchautism.org/resources/teachersdv.asp)
  - Guide booklet
    - Developed as collaboration between OAR and CSESA
  - Professional development package (coming soon)

- [CSESA - The Center on Secondary Education for Students with Autism Spectrum Disorders](http://cesda.fpg.unc.edu)
Potential Roles of SLP in HS related to Social Competence

- **Advocate**
  - School-wide peer programs and disability awareness
  - Emphasizes social aspects of Common Core
  - School culture

- **Consultant**
  - Working with teachers and paraprofessionals – fading proximity and increasing social opportunities
  - Working with peers – peer supports and peer networks

- **Interventionist**
  - Existing programs – PEERS, SCI–H (in development)
  - Evidence–based practices – NPDC
If you are interested...

- Find us online
  - Website: [http://csesa.fpg.unc.edu/](http://csesa.fpg.unc.edu/)
  - Facebook: [https://www.facebook.com/csesa.asd](https://www.facebook.com/csesa.asd)

- Currently recruiting high schools for 2–year studies at 3 sites
  - California (near San Diego)
  - North Carolina
  - Wisconsin
Questions?
Resources

- Center on Secondary Education for Students with ASD
  - http://csesa.fpg.unc.edu/

- National Professional Development Center on ASD
  - http://autismmpdc.fpg.unc.edu/
References

- NPDC, 2011