

IMPLEMENTING PEER MEDIATED INTERVENTIONS IN HIGH SCHOOLS FOR STUDENTS WITH ASD: GUIDELINES AND CASE EXAMPLES

COI DISCLOSURE

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- ▣ No financial disclosures to report

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CSESA Sites



CSESA

The Center on Secondary Education for
Students with Autism Spectrum Disorders



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AGENDA

- Introduction & Background
- Peer-Mediated Interventions
- Case Examples
- Questions/Discussion

Introduction and Background

Areas of Need for Students with ASD

- Social-communication skills
 - ▣ Expressive communication, comprehension, pragmatics
- Relationships
 - ▣ Forming and maintaining friendships, differentiating between types of relationships
- Behavioral
 - ▣ Impact of circumscribed interests, repetitive behaviors, interfering behaviors, etc. on engagement and participation

APA 2013; Carter et al., 2014; Kanne & Mazurek, 2011; Paul et al., 2009

High School Setting

- Environmental complexities
 - ▣ Changing classes
 - ▣ Many communication partners across the day
- Social Complexities
 - ▣ Nuanced social situations
 - ▣ Complex relationships
- Importance of peers
 - ▣ Increased emphasis on peer culture
 - ▣ Many social situations occur outside of the purvey of adults

Brown & Klute, 2003; Carter et al., in press;
Lynch et al., 2013

Why is this important?

- ❑ Social skills & “soft skills” are critical for post-secondary success
- ❑ “High school is the last best chance.” (Peter Gerhardt)
- ❑ Decreasing services & supports in high school
- ❑ “Dropping off the cliff” after high school

...nearly 80% still live at home, almost half have no jobs or postsecondary training, 40% never have contact with friends, 17% never feel hopeful about the future, 21% never engage in outside activities, and many experience a decrease in insurance coverage and therapy services.
— Paul Shattuck

[After high school] they are completely without any supports at that point, and from then on their world seems to get smaller and smaller the child is almost always at home.”
-Teacher

Evidence-Base for Interventions

- Fewer evidence based practices in middle and high school settings (National Professional Development Center & National Autism Center)

Student interventions	Peer interventions	Educator interventions	School-wide interventions
<ul style="list-style-type: none"> • Social skills training • Social cognitive instruction • Communication systems • Behavioral interventions 	<ul style="list-style-type: none"> • Peer education • Peer interaction training • Peer-mediated support interventions 	<ul style="list-style-type: none"> • Fading adult proximity • Facilitative role (rather than direct) 	<ul style="list-style-type: none"> • Disability awareness • School-wide peer programs

Bellini et al., 2007; Carter et al., 2014; NPDC, 2011; Reichow & Volkmar, 2010

Benefits of Peer-Mediated Interventions

- Effective across a wide range of ages
 - ▣ Impact on social interactions
 - ▣ Impact on engagement
- Can implement across various settings within a school
- Availability and consistency of peers
- Positive benefits to peers
 - ▣ Academics (in some studies)
 - ▣ Experiences

Peer-Mediated Interventions

Process for Selecting and Implementing Peer-Mediated Interventions in High School Settings

Types of Peer Mediated Interventions

Peer Supports

- **Setting:** In class – academic or specials
- **Peers:** 2-3 peers per class
- **Goals:** Engagement, independence, social skills

Peer Networks

- **Setting:** Out of class – lunch, clubs, etc.
- **Peers:** 3-6 peers in the network
- **Goals:** Social skills, peer relationships, school participation

Steps for Implementation

Peer Supports

- ① Identify goals for 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 Networks

- ① Identify goals for student with ASD
- ② Identify and ask peers
- ③ Orient student & peers to the network
- ④ Meet weekly as a peer network
- ⑤ Encourage contact outside of the meetings

Goal Setting

□ Assess skills

- ▣ Formal assessments
- ▣ Informal assessments and observations
- ▣ Checking in with staff and parents

*Potential tools

- ▣ Secondary Skills Success Checklist
- ▣ Goal Attainment Scaling (on CSESA website)

□ Potential goals

- ▣ Initiations
- ▣ Conversations
- ▣ Participation in class
- ▣ Working in a group
- ▣ Social problem solving
- ▣ Greetings
- ▣ Non-verbal skills
- ▣ Use of AAC
- ▣ Asking for help

Planning

Peer Supports

- Peer Support Plan
 - ▣ Generate ideas with peers (and student)
 - For various in-class situations
 - ▣ Record ideas on PSP
 - ▣ Revise as needed

Peer Networks

- Decide peer network settings and activities
 - ▣ Consider student interests
 - ▣ Potential settings
 - Clubs
 - Athletics
 - Lunch

Selecting Peers

- ❑ Interested and excited
- ❑ Motivated to develop a social relationship with student
- ❑ Positive peer model
- ❑ Shared interests or experiences (especially for PN)
- ❑ Shared class (PS) or time (PN) with student
- ❑ Likely to stay involved for semester

***THINK CREATIVELY**

Training Peers

- Optional (especially for PN)
 - ▣ Ask the student
 - ▣ May be needed for students who:
 - Use less conventional means of communication
 - Have challenging behaviors
- Potential topics to cover
 - ▣ Strengths and interests
 - ▣ Communication strengths, modalities, & needs
 - ▣ Student goals
 - ▣ Unique behaviors

Implementation

Peer Supports

- Hold planning meeting
 - ▣ Brainstorm for PSP
- Facilitate peer supports in class
 - ▣ (Re)Arrange seating
 - ▣ Support and/or touch base with peers

Peer Networks

- Hold orientation meeting
 - ▣ Introduction to group
 - ▣ Setting the stage
- Facilitate weekly network meetings
 - ▣ Conversation/activities
 - ▣ Discuss/plan out of group interactions (last/next wk)
 - ▣ Remind of next meeting

Implementation: Facilitation Techniques

- Modeling
- Highlight similarities
- Focus on strengths
- Teach peers specific skills to encourage interaction (e.g., prompting, visual supports)
- Redirect interactions (to peers & students)
- Help to interpret communication and behaviors

*Ultimate goal is to fade support!

Progress Monitoring

- Check-in with student and peers
- Provide feedback
 - ▣ Point out what is going well
 - ▣ Offer suggestions (facilitation techniques)
 - *Can be verbally or in writing
- DATA!!!
 - ▣ Self-monitoring by student
 - ▣ Data from peers, TA, teachers, etc.

Case Examples

Meet Brian

- 9th grade
- Exclusively in self-contained classroom
- Challenges
 - ▣ Initiating communication
 - ▣ Responding to questions
 - ▣ Using adequate volume
- Strengths
 - ▣ Responds well to visual supports
 - ▣ Good attentional engagement

What did we do?

Goals & Plan

- Using a louder voice
- Responding to questions

Implementation

- Direct training for volume
- Peer Network - lunch

Outcomes

- Using louder voice (at times)
- Responding to peers' questions

Meet Charles

- 12th grade
- Primarily served in a separate classroom
- Attending a gym class 1 x per week
- Challenges
 - ▣ Rarely initiates conversation
 - ▣ Does not continue conversations
- Strengths
 - ▣ Follows/imitates peers in class
 - ▣ Responds to questions

What did we do?

Goals & Plan

- Asking questions
- Increase interactions with peers

Implementation

- Peer Networks - lunch
- Peer Supports - gym

Outcomes

- Asked questions
- Increased social interactions

Meet Quinton

- 10th grade
- Attends regular education classes
- Challenges
 - ▣ Rarely joins in conversations with peers
 - ▣ Does not initiate interactions in class
 - ▣ Works on his own during group time
- Strengths
 - ▣ Attends well during class
 - ▣ Interest in outdoors and welding

What did we do?

Goals & Plan

- Interact with peers
- Participate in group work

Implementation

- Peer supports (Earth Science)

Outcomes

- Increased social interactions
- Successfully worked with group

Meet Barry

- 10th grade
- Exclusively in self-contained classroom
- Challenges
 - ▣ Appropriate communication
 - ▣ Maintaining engagement
- Strengths
 - ▣ Initiates interactions on preferred topics
 - ▣ Enjoys joking around

What did we do?

Goals & Plan

- Responding to greetings
- Participating in activities with peers

Implementation

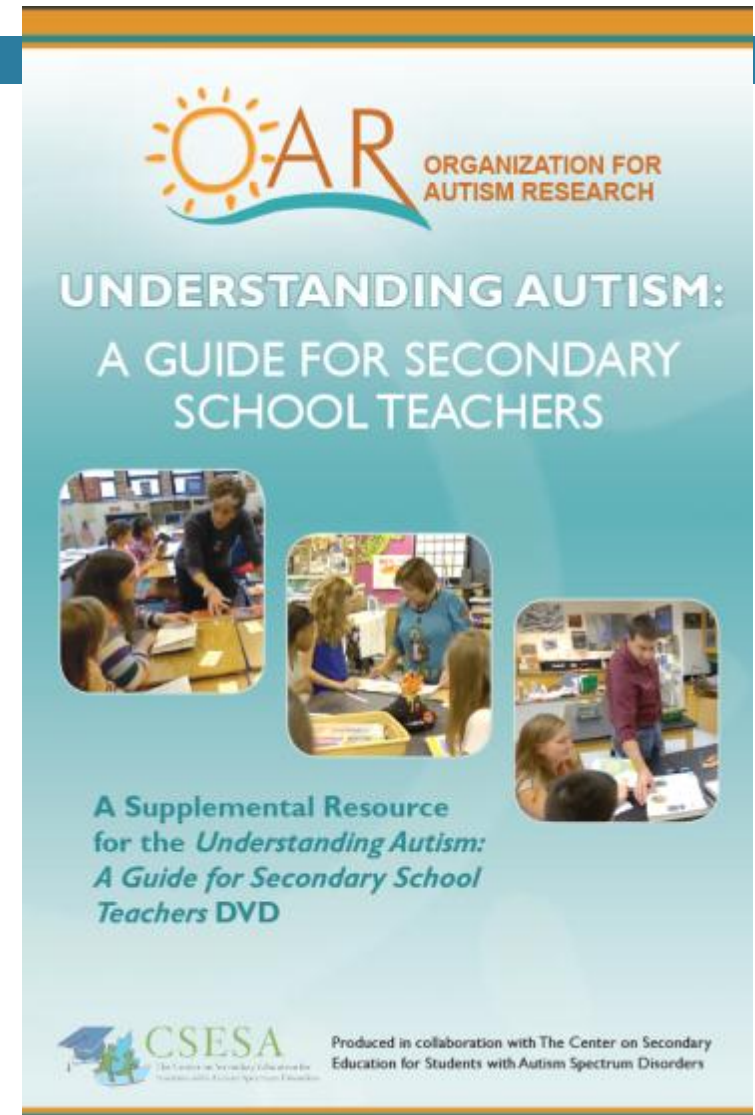
- Peer Networks

Outcomes

- Increased response to peers
- Participated in games & activities

Resources

- CSESA Website:
<http://csefa.fpg.unc.edu/>
- ▣ GAS
- ▣ SSS-C
- ▣ EBP_s
- ▣ Understanding Autism
 - Collection of resources for secondary school teachers
 - DVD series
 - Guide booklet
 - Professional development package



Resources

Resources on Peer-Mediated Interventions

- <http://www.pattan.net/category/Educational%20Initiatives/Inclusive%20Practices/page/Starting+Points+and+Possibilities+Promoting+Inclusion+Learning+and+Relationships+for+Students+with+Complex+Needs.html>
- <http://www.pattan.net/Videos/Browse/Training%20Series/Starting+Points+and+Possibilities+Promoting+Inclusion+Learning+and+Relationships+for+Students+with+Complex+Needs>

The screenshot displays the Pennsylvania Department of Education website. The header includes the state logo, 'pennsylvania DEPARTMENT OF EDUCATION', and links for 'Welcome Login or Register' and 'Need Help? Contact Us'. A search bar is present. The main navigation menu includes 'Training', 'Educational Initiatives', 'Projects', 'Videos', 'Resources', 'Legal', and 'About'. Below the menu, a breadcrumb trail reads: 'Home > Videos > Browse > Training Series > Starting Points and Possibilities Promoting Inclusion Learning and Relationships for Students with Complex Needs'. The 'Videos' section features a search bar and a 'Sort by:' dropdown menu. The main content area is titled 'Starting Points and Possibilities Promoting Inclusion Learning and Relationships for Students with Complex Needs'. A descriptive paragraph follows: 'The purpose of this video training series is to provide school leaders, teachers, paraprofessionals, families and students information around Natural Peer Supports with the expertise of Dr. Erik Carter. The five video sessions comprising this series address the essential information needed to develop the structures that promote inclusion, learning, and relationships between students with and without disabilities with special focus on students with complex instructional needs. Herein, Dr. Carter describes the evidence base and necessary components for developing an effective peer support program. The sessions are supported with video documentary of actual peer support programs occurring within Pennsylvania. Each session is designed to guide schools in identifying crucial elements to launch new or continue current efforts in implementing natural peer support programs.' Below this text, three video thumbnails are shown, each with a title, a star rating, a comment count, and a duration. The first video is 'Starting Points and Possibilities in Developing Natural Peer Support Programs - Rigor, Relevance and Relationships' (4.5 stars, 0 comments, 18:25). The second is 'Starting Points and Possibilities in Developing Natural Peer Support Programs - Important Elements' (4.3 stars, 0 comments, 23:53). The third is 'Starting Points and Possibilities in Developing Natural Peer Support Programs - School-Wide Peer Partner Programs' (3.5 stars, 0 comments, 22:04).

Starting Points and Possibilities Promoting Inclusion Learning and Relationships for Students with Complex Needs

The purpose of this video training series is to provide school leaders, teachers, paraprofessionals, families and students information around Natural Peer Supports with the expertise of Dr. Erik Carter. The five video sessions comprising this series address the essential information needed to develop the structures that promote inclusion, learning, and relationships between students with and without disabilities with special focus on students with complex instructional needs. Herein, Dr. Carter describes the evidence base and necessary components for developing an effective peer support program. The sessions are supported with video documentary of actual peer support programs occurring within Pennsylvania. Each session is designed to guide schools in identifying crucial elements to launch new or continue current efforts in implementing natural peer support programs.

Video Title	Rating	Comments	Duration
Starting Points and Possibilities in Developing Natural Peer Support Programs - Rigor, Relevance and Relationships	4.5	0 Comments	18:25
Starting Points and Possibilities in Developing Natural Peer Support Programs - Important Elements	4.3	0 Comments	23:53
Starting Points and Possibilities in Developing Natural Peer Support Programs - School-Wide Peer Partner Programs	3.5	0 Comments	22:04

Resources

- <http://vkc.mc.vanderbilt.edu/assets/files/tipsheets/peerinterventionasdtips.pdf>

Peer-Based Intervention and Autism Spectrum Disorders

TIPS AND RESOURCES FOR TEACHERS



Peer-based interventions are evidence-based practices that teach strategies to typically developing peers for facilitating social interactions with children on the autism spectrum. Peer-based interventions can be used to target communication skills, interpersonal skills, and play skills. The effects of these types of interventions often are beneficial for both the student with autism spectrum disorder (ASD) and the peer(s). For example, students with ASD often demonstrate improvements in social interaction skills including increased initiation and responding to peers. Peers often demonstrate increased levels of tolerance, awareness, and acceptance of differences. There are 4 primary steps to implementing a successful peer-based intervention.

Step 1: Select Peers

Peers selected to be part of the intervention should possess key characteristics.

- Peers should be of a similar age and, if possible, share similar interests to the student with ASD.
- Peers should be motivated to participate. Peers who volunteer will be more invested in the process and more responsive to the strategies than those who are unmotivated.
- Peers should possess strong social and communication skills. For example, an outgoing individual who is capable of participating in successful social interactions with a variety of people would be a better intervention partner than a peer who is shy and prefers to keep to him/herself.

- Peers should be dependable. Dependability is important for both the peer and the student with ASD. A student who is frequently absent will miss critical teaching and practice time. Furthermore, the student with ASD will be more comfortable with a student frequently seen around the school than a student who has sporadic attendance.

It is recommended to train more than one peer to avoid burnout and support generalization, but keep the number manageable for the student with ASD.

Step 2: Train and Support Peers

Begin by teaching the peers to recognize and appreciate similarities and differences. Teach the peers to use good disability etiquette (resources on back). Be sure they understand autism generally and address any myths or misconceptions they have about students with ASD. Next, share information about the student with ASD; likes, dislikes, strengths, and challenges and discuss the goals of the intervention. What do you want the student with ASD to gain from this intervention? What will the peer(s) gain?

Once the peers seem to have an understanding of ASD and the student with ASD, teach specific strategies for initiating and maintaining interactions with that student. Useful strategies to teach peers may include some or all of the following:

- How to gain the attention of the student with ASD.
- How to use developmentally appropriate language.
- How to enhance motivation by offering choices
- How to model appropriate and complex play/conversation skills.
- How to encourage conversation and turn-taking.
- How to reinforce appropriate social behaviors
- How to use visual supports.

These strategies can be taught through definition, discussion, modeling and role-play with the peers in a small group setting.

References

- Bellini, S., Peters, J. K., Briannner, L., & Hopf, A. (2007). A meta-analysis of school-based social skills interventions for children with autism spectrum disorders. *Remedial and Special Education*, 28, 153-162.
- Brown, B. B., & Klute, C. (2003). Friendships, cliques, and crowds. In G. R. Adams & M. D. Berzonsky (Eds.), *Blackwell handbook of adolescence* (pp. 330-348). Malden, MA: Blackwell.
- Carter, E. W., Asmus, J., Moss, C. K., Cooney, M., Weir, K., Vincent, L., Born, T., Hochman, J., Bottema-Beutel, K., & Fesperman, E. (2013). Peer network strategies to foster social connections among adolescents with and without severe disabilities. *TEACHING Exceptional Children*, 46(2), 51-59. Lynch et al., 2013
- Carter, E., Common, E., Srekovic, M., Huber, H., Bottema-Beutel, K., Redding Gustafson, J., Dykstra, J., & Hume, K. (2014). Promoting social competence and peer relationships for adolescents with autism spectrum disorders. *Remedial and Special Education*, 35, 91-101.
- Carter, E. W., Cushing, L. S., Clark, N. M., & Kennedy, C. H. (2005). Effects of peer support interventions on students' access to the general curriculum and social interactions. *Research and Practice for Persons with Severe Disabilities*, 30 (1), 15-25.
- Carter, E. W., Moss, C. K., Hoffman, A., Chung, Y. C., & Sisco, L. (2011). Efficacy and social validity of peer support arrangements for adolescents with disabilities. *Exceptional Children*, 78, 107-125.
- Gardner, K., Carter, E. W., Gustafson, J. R., Hochman, J. M., Harvey, M. N., Mullins, T. S., & Fan, H. (in review). *Effects of peer networks on the social interactions of high school students with autism spectrum disorders*. Manuscript submitted for publication to *Research and Practice for Persons with Severe Disabilities*.
- Kanne, S. M., & Mazurek, M. O. (2011). Aggression in children and adolescents with ASD: Prevalence and risk factors. *Journal of Autism and Developmental Disorders*, 41, 926-937.
- Koegel, R. L., Fredeen, R., Kim, S., Danial, J., Rubinstein, D., & Koegel, L. (2012). Using perseverative interests to improve interactions between adolescents with autism and their typical peers in school settings. *Journal of Positive Behavior Interventions*, 14, 133-141.

References

- Lounds Taylor, J., Dove, D., Veenstra-VanderWeele, J., Sathe, N. A., McPheeters, M. L., Jerome, R. N., & Warren, Z. (2012). Interventions for adolescents and young adults with autism spectrum disorders *AHRQ Publication No. 12-EHC063-EF*. Rockville, MD: Agency for Healthcare Research and Quality.
- Lynch, A. D., Lerner, R. M., & Leventhal, T. (2013). Adolescent academic achievement and school engagement: An examination of the role of school-wide peer culture. *Journal of Youth and Adolescence*, 42, 6-19.
- Paul, R., Orlovski, S. M., Marcinko, H. C., & Volkmar, F. (2009). Conversational behaviors in youth with high-functioning ASD and Asperger syndrome. *Journal of Autism and Developmental Disorders*, 39, 115- 125.
- 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.
- Shattuck, P. (2010, July). "Transition to what? Outcomes and service use among youth with autism after high school." Presentation at Thompson Center, University of Missouri, Columbia, MO. Retrieved September 4, 2010 from <http://www.examiner.com/x-34350-Columbia-Autism-Examiner~y2010m3d18-Shattuck-shares-research-on-posthigh-school-students-with-ASD?cid=exrss-Columbia-Autism-Examiner>.
- Shattuck, P., Seltzer, M. M., Greeberg, J. S., Orsmond, G. I., Bolt, D., Kring, S., Lounds, J., & Lord, C. (2007). Changes in autism symptoms and maladaptive behaviors in adolescents and adults with an Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 37, 1735-1747.
- Taylor J. L., & Seltzer, M. M. (2010). Changes in the autism behavioral phenotype during the transition to adulthood. *Journal of Autism and Developmental Disorders*, 40, 1431-1446.
- Wong, C., Odom, S. L., Hume, K. Cox, A. W., Fettig, A., Kucharczyk, S., ... Schultz, T. R. (2013). Evidence-based practices for children, youth, and young adults with Autism Spectrum Disorder. Chapel Hill: The University of North Carolina, Frank Porter Graham Child Development Institute, Autism Evidence-Based Practice Review Group.