



Peer Mediated Instruction and Intervention (PMII)

Presented by Heidi Cooley-Cook
Kentucky Autism Training Center
University of Louisville



Peer Mediated Instruction and Intervention

What is it???

- Evidence Based Practice
- Used to teach typically developing peers ways to interact with and help learners with ASD acquire new social skills by increasing social opportunities within natural environments

<http://autismpdc.fpg.unc.edu/content/peer-mediated-instruction-and-intervention>



Peer Mediated Instruction and Intervention

Why is it important?

- Students with ASD
 - Social impairment and difficulty with social reciprocity
 - Respond less frequently to social initiations
 - Engage in shorter interactions
 - Struggle understanding social cues
 - Struggle to acquire key social skills by simply observing others

(American Psychiatric Association, 1994; National Research Council, 2001)

(Bass & Mullick, 2007; Lee, Odom, & Loftin, 2007; McConnell, 2002)



Peer Mediated Instruction and Intervention

Who is it for?

- Research supports use for ages 3 – 18
- Targets social skills
 - Responding to others
 - Understanding others
 - Interacting with others or in groups
 - Reciprocity



Peer Mediated Instruction and Intervention

How do you implement the strategy?

- Step 1: Select peers
- Step 2: Train and support peers
- Step 3: Implement structured teaching session
- Step 4: Implement in classroom and school settings
- Step 5: Extending Initiations Across the Day



PMII Step 1: Select Peers

- Peers should
 - Exhibit good social skills, language, and age-appropriate play skills
 - Be well-liked by peers
 - Have a positive social interaction history with focal student
 - Be generally compliant with adult directives
 - Attend to an interesting task or activity for 10 minutes
 - Be willing to participate
 - Attend school on a regular basis (Strain & Odom, 1986; Sasso et al., 1998)

(Sperry, Neitzel, Engelhardt-Wells, 2010)



PMII Step 1: Select Peers

- Select 4 -5 peers
- Peers valued for time and effort



PMII Step 2: Train and Support Peers

- 2A : Teach selected peers:
 - Recognize and appreciate individual differences
 - Overview of ASD
 - Include similarities and differences
 - Provide examples and observable behaviors

(Sperry, Neitzel, Engelhardt-Wells, 2010)



PMII Step 2: Train and Support Peers

- 2B : Introduce specific strategies to facilitate play and interaction:
 - Remember to keep appropriate for age and maturity level
 - Preschool and Lower Elementary– focus on teaching play behaviors

(Sperry, Neitzel, Engelhardt-Wells, 2010; Kamps, et al, 1992; Thiemann, 2007; Thieman & Goldstein, 2001; Carter & Kennedy, 2006)



PMII for Preschool and Early Elementary

PMII Step 2: Train and Support Peers -Example:

- Teacher: “Sometimes when you play with your friends, they do not want to play back. You have to keep on trying. What do you have to do?”
- Peer: “Keep on trying.”
- Teacher: “ Yes, you keep on trying.”
- Teacher demonstrates skill using another peer
- Provide both examples (persistent attempts) and non-examples (walking away after first attempt)



PMII Step 3: Implement Structured Teaching Session

1. Peers only – practice skills
2. Peer and focal student – 5-8 minute play sessions
 - Teacher introduces activity, provides prompts to peer, and reinforces behavior
 - Visual supports can be added for student with ASD
 - At end of time can move to new environment or continue playing

(Sperry, Neitzel, Engelhardt-Wells, 2010)



PMII Step 4: Implement in Classroom and School Settings

- For successful PMII – Remember:
 - ✓ Classroom arrangement
 - ✓ Material selection
 - ✓ Identification of responsible staff
 - ✓ Use of prompts and reinforcement

(Sperry, Neitzel, Engelhardt-Wells, 2010)



PMII Step 4: Implement in Classroom and School Settings

✓ Use of prompts and reinforcement

- Cue peer to use strategy

- Explicit instructions – suggest a game or verbal instructions “Try talking to Jacob about trains”

- Subtle verbal instructions – “Try again” “It’s your turn”

- Gestures – peer to move closer to focal child

**IF NO RESPONSE IN 10 SECONDS – REPEAT PROMPT AGAIN
AND PROVIDE PHYSICAL GUIDANCE**

(Sperry, Neitzel, Engelhardt-Wells, 2010; Goldstein, Schneider, & Thiemann, 2007; Ostrosky et al, 1990)



PMII Step 5: Extending Initiations Across the Day

- Embedded intervention
 - Pair focal student and trained peer during small group activity – provide limited materials to promote interaction
 - Pair students for transitions and/or classroom chores
 - Goal = 3 Peer Mediated interactions per day
- Classwide peer buddy system
 - All students are paired up by teacher
 - Teachers prompt interactions as needed

(Sperry, Neitzel, Engelhardt-Wells, 2010; Laushey & Heflin, 2000)

Activity	Target Skills			
	<i>Ask to play</i>	<i>Exchange materials</i>	<i>Greet peer</i>	<i>Request item</i>
Arrival			Say "hi" to peer	
Free play	Say "Play, please" to peer when entering an activity	Take toy from peer when offered a turn	Say "hi" to peer when entering an activity	Say "Turn, please" to peer
Snack		Take juice pitcher from peer when offered	Say "hi" to peer when sitting down for snack	Say "Juice/snack, please"
Small group activities		Painting with cars – take car from peer	Say "Hi" to peer when sitting down to paint with cars	Painting with cars – Say "Car/turn, please"
Outside	Say "Play, please" in sandbox	Take shovel from peer in sandbox	Say "hi" to peer when going to play in the sandbox	Say "Shovel/bucket, please" in sandbox
Large group time		Take instrument basket from peer during music time		Say "Turn, please" to peer at music time to request instrument basket
Departure			Say "Bye" to peer	

Adapted from Sandall, S. R., & Schwartz, I. S. (2002). *Building blocks for teaching preschoolers with special needs*. Baltimore: Brookes.



PMII Step 1: Select Peers

- Peers should
 - Exhibit good social skills and language
 - Be well-liked by peers
 - Have a similar schedules as focal student
 - Be willing to participate



PMII Step 1: Select Peers

- Select 6 peers
- 1 or 2 peers in peer social network for 3-4 months
- Additional peers added to promote generalization of skills

(AIM – Peer Mediated Intervention & Instruction; Carter& Kennedy, 2006; Thiemann, 2007; Utley, Mortweet, & Greenwood, 1997)



PMII Step 2: Train Peers

- Develop Peer Network Interventions
 - Peers will be provided with
 - Goals for intervention and rationale for their involvement
 - Overview of expectations
 - Information about how students with ASD communicate, interact with their environment, and learn
 - Descriptions of focal student's likes and dislikes



PMII Step 2: Train Peers

- Describe basic strategies
 - Providing frequent, positive feedback
 - Modeling relevant communication skills
 - Facilitating interactions with other peers (Carter & Kennedy, 2006)
 - Peers record anecdotal information about interactions to share with staff



PMII Step 3: Support Peers

- Provide ongoing support and feedback to peers
 - Elementary – model the specific strategies (feedback, modeling relevant communication skills, facilitating interactions with other peers)
 - Middle & High School – peers are actively involved in weekly problem-solving meetings – may need to include other teachers if peer support interventions occur during their class periods



PMII Step 4: Implement in Classroom and School Settings

- For successful PMII – Remember:
 - ✓ Create supportive social environment
 - ✓ Provide classroom learning opportunities
 - ✓ Monitoring social interactions
 - ✓ Using prompts and reinforcement



PMII Step 5: Extending Initiations Across the Day

- Natural settings
- At least 2 or 3 different routines each day
- Contain a choice of 2 activities during each session
- Use 5-8 games rotated every 3-4 months to promote generalization
- Retain same group of 4-6 trained peers to promote friendships and connections
- Social network activities should last at least 10 minutes

(AIM – Peer Mediated Instruction & Intervention; Thiemann, 2007)



From AIM – PMII– Sample Planning Form for Peer Social Network Activities



Child: Connor

Date: 12/07/07

Activity	Target skills	Script Cuing System: Words & Pictures	Peers to be included
Recess	Turn-taking	Social scripts	Tom, Michael
Lunch	Using names; responding to initiations	Word and picture cards with responses	Tom, Michael
Centers	Turn taking	Word cards with activity rules; picture cards with sequence of game	Tom



Additional information and videos:

- Autism Internet Modules – Peer Mediated Instruction & Intervention
 - Step – by – Step Instructions – by age/grade level
 - Implementation Checklists
 - Activities



AUTISM INTERNET MODULES
Linking research to real life.

MODULE NAVIGATOR > PEER-MEDIATED INSTRUCTION AND INTERVENTION (PMII)

Overview

PMII is designed to increase the social engagement of children and youth with **autism spectrum disorders (ASD)**.

This module was designed to provide:

1. An overview of **peer-mediated instruction and intervention (PMII)**,
2. Descriptions of the various instructional approaches that make up (PMII),
3. Guidelines for implementing this approach with children and youth with ASD, and
4. Answers to frequently asked questions regarding peer-mediated intervention strategies.

These materials provided in this module are designed to help you assess the characteristics of children and youth with ASD, and make more informed decisions about particular strategies that might be useful with individual students, and evaluate student progress.

Throughout the module, we provide information across the age range so that you can find relevant information for the students you work with (i.e., preschool, elementary, secondary).



Resources:

Autism Internet Module – Peer Mediated Intervention and Instruction

NPDC – EBP Brief: <http://autismpdc.fpg.unc.edu/content/peer-mediated-instruction-and-intervention>

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author. National Research Council, 2001

Bass, J. D., & Mulick, J. A. (2007). Social play skill enhancement of children with autism using peers and siblings as therapists. *Psychology in the Schools, 44*(7), 727-735.

Carter, E. W., & Kennedy, C. H. (2006). Promoting access to the general curriculum using peer support strategies. *Research and Practice for Persons with Severe Disabilities, 31*(4), 284-292.



Resources:

Goldstein, H., Schneider, N., & Thiemann, K. (2007). Peer-mediated social communication intervention: When clinical expertise informs treatment development and evaluation. *Topics in Language Disorders, 27*(2), 182-199.

Kamps, D. M., Leonard, B. R., Vernon, S., Dugan, E. P., Delquadri, J. C., Gershon, B., Wade, L., & Folk, L. (1992). Teaching social skills to students with autism to increase peer interactions in an integrated first-grade classroom. *Journal of Applied Behavior Analysis, 25*, 281-288.

Laushey, K. M., Heflin, L. J. (2000). Enhancing social skills of kindergarten children with autism through the training of multiple peers as tutors. *Journal of Autism and Developmental Disabilities, 30*, 183-193.

Lee, S., Odom, S. L., & Loftin, R. (2007). Social engagement with peers and stereotypic behavior of children with autism. *Journal of Positive Behavior Intervention, 9*, 67-79.



Resources:

McConnell, S. R. (2002). Interventions to facilitate social interaction for young children with autism: Review of available research and recommendations for educational intervention and research. *Journal of Autism and Developmental Disorders, 32*(5), 351-372.

National Research Council. (2001). *Educating children with autism*. Washington, DC: National Academy Press.

Ostrosky, M., Chandler, L., Odom, S. L., McConnell, S. R., & Peterson, C. A. (1990). *Comprehensive intervention manual*. Vanderbilt-Minnesota Social Interaction Project, Minneapolis, MN: University of Minnesota.

Sasso, G. M., Mundschenk, N. A., Melloy, K. J., & Casey, S. D. (1998). A comparison of the effects of organismic and setting variables on the social interaction behavior of children with developmental disabilities and autism. *Focus on Autism and Other Developmental Disabilities, 13*(1), 2-16.



Resources:

Sperry, L., Neitzel, J., & Engelhardt-Wells, K. (2010). Peer-Mediated Instruction and Intervention Strategies for Students with Autism Spectrum Disorders. *Preventing School Failure*, 54(4), 256-264

Strain, P.S., & Odom, S. L. (1986). Peer social initiations: effective intervention for social skills development of exceptional children. *Exceptional Children*, 52, 543-551.

Thiemann, K. (2007). *Effective instructional practices for teaching students with ASD in the classroom*. Autism Spectrum Disorders-School Support Program, McMaster Children's Hospital, Ottawa, Ontario, Canada, July 9, 2007.



Resources:

- Theimann, K. S., & Goldstein, H. (2001). Social stories, written text cues, and video feedback: Effects on social communication of children with autism. *Journal of Applied Behavior Analysis, 34*, 425-446.
- Utley, C. A., Mortweet, S. L., & Greenwood, C. R. (1997). Peer-mediated instruction and interventions. *Focus on Exceptional Children, 29*, 1-23.



For additional information:

Heidi Cooley-Cook

Field Training Coordinator

Kentucky Autism Training Center

University of Louisville

502-852-6401

hacool01@louisville.edu

