SUPPORTING EFFECTIVE INCLUSION THROUGH THE USE OF EVIDENCE BASED PRACTICES FOR CHILDREN WITH AUTISM

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Objectives

- Describe how the characteristics of children with ASD impact and may be addressed by inclusive learning settings
- Identify 27 focused interventions as effective for children with ASD
- Describe 3 evidence based practices (EBPs) which support inclusive practices in classrooms with children with ASD
  - Peer Mediated Instruction & Intervention
  - Structured Play Groups
  - Visual Supports
- Know where to access internet supports for learning more about EBPs
Who We Are

THE NATIONAL PROFESSIONAL DEVELOPMENT CENTER ON AUTISM SPECTRUM DISORDERS

AFIRM Autism Focused Intervention Resources & Modules

ASD toddler initiative

Joint Attention Mediated Learning Study

CSESA The Center on Secondary Education for Students with Autism Spectrum Disorders
Characteristics of Young Children with ASD & Inclusive Settings
Autism Spectrum Disorder (DSM-5)

- **Developmental disability**
  - Not recognizable at birth
  - Typically lifelong

- **Complex disorder**
  - Many areas affected

- **Wide range of impairment**
  - Mild to severe across areas

Learn the Signs. Act Early. www.cdc.gov/actearly
Snapshot: ASD in the US

1 in 68 children overall (at age 8)
  1 in 42 boys
  1 in 189 girls
  1 in 63 white children
  1 in 81 black children
  1 in 81 Asian/Pacific Islander
  1 in 93 Hispanic children

1 in 3 with ASD also have Intellectual Disability
Remember –

Takes more than a Red Flag
How Characteristics of Child with ASD May Impact an Inclusive Classroom?
How an Inclusive Classroom might be particularly supportive to learning needs of child with ASD?
What interventions work for children with ASD?
What are EBPs?

Focused interventions that:

- Produce specific behavioral and developmental outcomes for a child
- Have been demonstrated as effective in applied research literature
- Can be successfully implemented in educational settings

(Odom, Colett-Klingenberg, Rogers, & Hatton, 2010)
Update on EBPs for Children with ASD and Families

- Wong et al. 2014 recently updated Odom et al. (2010) EBP review
- Began with pool of 29,105+ articles and reduced to 456
- 27 EBPs identified
Age of Participants in Studies

![Age Distribution Graph]

- **0 to 2**: 10 SCD, 2 group
- **3 to 5**: 50 SCD, 10 group
- **6 to 11**: 250 SCD, 50 group
- **12 to 14**: 150 SCD, 30 group
- **15 to 18**: 100 SCD, 20 group
- **19 to 22**: 50 SCD, 10 group
Evidence-Based Practices
(2014)

Antecedent-based interventions
Cognitive behavioral intervention
Differential reinforcement
Discrete trial training
Exercise
Extinction
Functional behavior assessment
Functional communication training
Modeling
Naturalistic interventions
Parent implemented interventions
Peer mediated interventions
Picture exchange communication
Pivotal response training
Prompting
Reinforcement
Response interruption/ redirection
Scripting
Self-management
Social narrative
Social skills training
Structured play groups
Task analysis
Technology aided inst/ intervention
Time delay
Video modeling
Visual supports
Evidence-Based Practices

Foundational

- Antecedent-based interventions
- Cognitive behavioral intervention
- Differential reinforcement
- Discrete trial training
- Exercise
- Extinction
- Functional behavior assessment
- Functional communication training
- Modeling
- Naturalistic interventions
- Parent implemented interventions
- Peer mediated interventions
- Picture exchange communication

- Pivotal response training
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- Response interruption/ redirection
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- Self-management
- Social narrative
- Social skills training
- Structured play groups
- Task analysis
- Technology aided inst/ intervention
- Time delay
- Video modeling
- Visual supports
When Selecting EBP Consider:

- Child & Family Characteristics
- Clues found in Outcome/Goal
- Teacher/Team Characteristics
- Other Resources Available
The EBP Process

Select EBP

Implement EBP

Assess Progress
Think About:
Child _______________________________

1 priority goal
______________________________
Let’s look at 3 EBPs especially supportive of learning in inclusive classrooms:

- Peer Mediated Interventions
- Structured Play Groups
- Visual Supports
Peer Mediated Interventions
What is it?

- PMII involves systematically teaching peers without disabilities ways of engaging learners with ASD in positive and meaningful social interactions in natural environments.
- It is an effective intervention to use with learners with ASD of all ages.
- Research supports it’s use with preschoolers to achieve the following outcomes:
  - Joint attention
  - Play
  - Communication
  - Social
  - School Readiness
# Types of PMII

<table>
<thead>
<tr>
<th>TYPE OF PMII</th>
<th>DESCRIPTION</th>
<th>SKILLS</th>
<th>AGES</th>
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</table>
| Peer Modeling                      | Train peers to demonstrate use of target skills to learner with ASD | • Requesting assistance  
• Joining activity  
• Following directions  
• Greetings | Young children & Elementary |
| Peer Initiation Training           | Train peers in use of strategies to encourage peers to interact with learner with ASD in natural settings | • Responding to invitations  
• Maintaining conversations  
• Turn-taking | Young children & Elementary |
| Direct Training for Target Student and Peer | Teach peers and learner with ASD specific target skills | • Initiating conversations  
• Perspective taking  
• Accepting ‘no’ | Young children & Elementary |
| Peer Networks                      | Peers interact with learner with ASD in a facilitated, regular meeting held outside of instructional time | • Join peer groups  
• Promotes social networks | Young children & Elementary |
| Peer Supports (E.g. Best Buddies, Peer Tutoring) | Peers provide social and academic support to learner with ASD within an inclusive environment | • Academic skills  
• Social skills | Young children & Elementary |
Outcomes Associated with PMII

- Teach peers without disabilities ways to talk and interact with learners with ASD
- Increase the frequency with which learners with ASD interact with peers without disabilities
- Extend peers’ social initiations with learners with ASD across classroom activities
- Enhance the quality of the social interactions
- Minimize teacher and adult support (e.g. prompts and reinforcement)
- Facilitate the participation in classroom activities of the learner with ASD
Steps to Implementing

**Plan**
- Identify times when social interactions naturally occur
- Identify and recruit 1 to 6 peers
- Prepare for session
- Introduce target skill or strategy to peers
- Develop scripts for peers
- Use role plays with peers
- Review peer schedules and how peers record data and notes using notebooks if appropriate

**Use**
- Assign 1 to 6 peers to the learner with ASD
- Conduct at a minimum regular 15 minute sessions daily
- Provide materials for learner to participate in sessions
- Provide support and periodic feedback to peers

**Monitor**
- Observe and document behavior of learner with ASD
- Determine if peers need additional support/training
- Next Steps Based on Progress of Learner with ASD
Plan:

- Identify times when social interactions naturally occur
- Identify 1-6 peers to participate
- Clearly identify the target skill or behavior for peers
- Develop scripts for peers, if appropriate
- Use role play with peers
Use PMII:

- Assign learner to group of peers
- Conduct instruction a minimum of 15 minutes daily
- Provides materials for the learner and the peers to participate
- Provides support and feedback to peers
Video 3: PMII in Elementary School

- 1\textsuperscript{st} video – teacher and peers discussing plan for supporting student
- 2\textsuperscript{nd} video – peers and student practicing
- 3\textsuperscript{rd} video – non-teacher prompted support from peers in classroom
Monitor:

- Observe and document behavior of the learner with ASD
- Determine if peer need additional support or training
- Next steps are based on progress of the learner
  - Continue with the intervention; expand intervention
  - Retrain peers
  - After length of time, if not achieving intended outcome, reassess use of practice
Keys to Successful Implementation

- Consider times of the day (lunch, small groups, and transitions) that would work best for using PMII.
- Select peers who are likely to have many opportunities to interact/play with learner with ASD. The peers should exhibit good social skills and positive social interactions with learner with ASD.
- Prepare peers for role and reinforce
- Use enjoyable, age-appropriate activities that will foster interactions among learner with ASD and peers.
VIDEO 4. Activity: Preschooler with ASD in inclusive child care setting

- What did you see in this inclusive preschool classroom?
- How could PMII be used to support this preschooler with ASD?
- Where would you begin?
- How would you choose peers? How would you choose activities?
Resources for Implementation

- Implementation Checklist
- Peer Pre-assessment
- Sample Antidotal Notes
- Sample Progress Monitoring Form
- PMII Professional’s Tip Sheet
- And MORE
Remember that

- PMII is useful for learners with ASD who need support with communication skills such as initiating and responding to social interactions with peers without disabilities.

- PMII is ideally suited to be used in inclusive classroom settings and for learners with ASD of all ages.
Structured Play Groups
What is it?

- Small inclusive groups of young children focusing on outcomes such as:
  - social,
  - communication,
  - play,
  - school readiness, and
  - academic skills.

- Structured Play Groups
  - Occur in defined area
  - Around a defined activity or theme
  - With group of children including typically developing peers
  - With clear roles
  - Facilitated by adults
Steps to Implementing

Plan
- Group
- Activity
- Outcomes/Goals
- Materials
- Role of Adult

Use
- Rules & Routines
- Peer Orientation & Training
- Adult support & Fading

Monitor
- Child Outcomes/Goals
- Group Goals
- Other Students' Goals
Plan Structured Play Groups

- Identify the outcome/goal for the child with ASD
- Determine group composition
  - Size
  - Peers
- Determine activity
  - How will outcome/goal will be addressed
  - What other group goals will be addressed
  - Plan activity
    - Time, space, materials needed, roles of children
- Plan for use of facilitator use of other EBPs
  - Prompting, reinforcement, visual supports
Selecting Materials/ Activities

Select materials that are supportive of the play themes. For example:

- Sensory exploration materials (e.g. bounce balls, play-doh, textured materials, sand, and water play)
- Building or construction materials (e.g. building blocks, Legos, Duplos, etc.)
- Vehicles (toy cars, trucks, trains)
- Socio-dramatic play materials (e.g. housekeeping, cooking, doll play, shopping, doctor, rescue, restaurant)
Materials/ Activities & Child w/ ASD

The materials selected should be:

- Of high interest to the learners with ASD,
- interactive in nature,
- provide structure for the activity,
- Create opportunities for child to practice goal/outcome and
- allow for differing levels of ability and complexity based on the members of the SPG.
Using Structured Play Groups

- Create and use group rules
  - Peaceful words, body, language
  - Ask a friend for help first

- Create and use routines
  - Greetings, Transitions, Clean up, Closing activity

- Provide orientation to members of the play group
  - What to expect and purpose of the group
  - Appreciation of differences
Using SPG: Training Peers

- Develop Peer Supportive skills:
  - organizing play sharing
  - providing assistance
  - providing affection and praise through hugging, putting arms around, patting, holding hands, shaking hands (Odom et al., 1993; Strain & Odom, 1986).
Using SPG: Fading Adult Support
Monitor Structured Play Groups

- Identify behaviors/skills to be observed and noted
  - Child with ASD
  - Group as a whole
  - Other children
Other Considerations

- **Length of group**
  - Each meeting 30-60 minutes
  - Typically meet 2x a week
  - For 3-12 months
Video 1 - Supporting Interactions
Video 2 - Igloo
Visual Supports in Our Everyday Lives
Common Uh-Oh’s

- All the visual supports look the same
- Visual supports are not age appropriate
- Visual supports are not developmentally appropriate
- Developed but not used
- Used inconsistently
- Used the same across students
Steps to Implementing

- **Plan**
  - Determine outcome/goal
  - Determine type of visual support
  - Create

- **Use**
  - TEACH child to use visual support
  - Use visual support consistently

- **Monitor**
  - Child Outcomes/Goals
  - Adult use of visual support appropriately
What is it?

Visual Supports and Young Children

- A concrete form of representation
- Developmentally appropriate

Caution: appropriate visual supports depends on the child’s developmental level.

2 Types
- Visual Schedules/ Routines
- Boundaries/ Spaces
**Visual Schedules / Routines**

**What** - Visually explains expectations for activity, routine, or organizing the day.

**Why** – Children with autism seek to clearly know what is expected of them and what they can expect throughout their day

**How** -

- Segment & sequence the day into predictable routines/activities
- Provide visuals (objects, photographs) for each of these routines/activities
- Warn child of changes
Our Daily Schedule

Morning Explore
Outdoor Grove
Snack
Morning Meeting
Learning Centers
Strands
Lunch
Rest Time
Snack
Closing Circle
Simple Object Schedule

Objects to help toddler/ preschooler transition:

- Select object that represents an activity
- Give object to child and use simple words “time for puzzle”
- When puzzle is completed, select object for next activity (i.e. snack – use cup)
Using Objects to Make a Choice
Anticipate and Plan for Transitions

Signal child prior to a change in the activity or routine

☐ Count down ("1 more minute") or visually count down

☐ Timers

☐ Use first/then (boards or statements)

☐ Simple songs ("clean up")
First

Then
Visual Countdown

Describe and demonstrate to children that when you ring a bell you will take off a number card. On the final number card, the activity is finished.
Visual Supports - Spaces & Boundaries

What - Visually give child information about what happens and where

Why - Children with autism seek to clearly know what is expected of them and what they can expect throughout their day

How -

- Segment the environment with furniture and other visual boundaries
- Provide visuals (objects, photographs) to define each space (e.g. paint on table = art, tablecloth = lunch)
Using Interests

What – Using the child’s interests in planned activities and in transition

Why – Children with autism may have special interests and thus are more likely to engage in activities which include those interests

How -

- Determine interests (toys, topics, characters, activities, colors, numbers, etc.)
- Include interests in existing activities, especially those that are hard
Other Ways to Promote Social Interactions

**Imitation** – Follow the child’s lead; imitate their actions with objects; imitate their sounds.

**Joint attention** – Support back and forth communication exchanges using simple action songs or games (“peek-a-boo”), and turn taking activities.

**Communication development** – Support communicative exchanges (use of eye contact, gestures, vocalizations) with child during routines and activities.

**Support flexible play** – Teach how to play with a toy and then introduce a variation in the theme (e.g. driving a car on a road; driving a car on a road and into the “garage”).
Since 2007, the National Professional Development Center on Autism Spectrum Disorder (NPDC) has worked to develop free professional resources for teachers, therapists, and technical assistance providers who work with individuals with ASD. Resources include detailed information on how to plan, implement, and monitor specific evidence-based practices.

http://autismmpdc.fpg.unc.edu
Start/Stop/Continue

- What do I/my team need to do?
  - Stop doing
  - Continue doing
  - Start doing

- What do I/my team need to learn?
- What resources do I/we have?
- What resources do I/we need?
- Who can coach me/us through implementation?
Thank you! Questions?

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