Evidence Based Practice Training: Peer-Based Instruction and Intervention (PBII)

What is CAPTAIN

The California Autism Professional Training And Information Network (CAPTAIN) is an interagency network developed to support the understanding and use of evidence based practices (EBPs) for individuals with Autism across the state of California.
What is CAPTAIN

Marin County SELPA in partnership with CAPTAIN, are members of the Statewide System of Support as the Special Education Content Lead for Autism.

This project is funded by the California Department of Education and the California Collaborative for Educational Excellence.

www.captain.ca.gov
Levels of Professional Development to Reach Implementation

This is a Workshop/Training and is designed to increase your KNOWLEDGE of the topic. Implementation supports to assist you with use of this EBP will be outlined following the TRAINING/WORKSHOP

www.captain.ca.gov
Before We Begin…

Please complete the Pre-Training Survey sent to your email
What are Evidence Based Practices?

NCAEP definition of an EBP:

“Focused intervention practices that have evidence of efficacy in promoting positive outcomes for learners with ASD.”

### Table 3.7 Matrix of Evidence-Based Practices, Outcomes, and Age Categories

| Evidence-Based Practices | 0-5 years | 6-14 years | 15-22 years | 0-5 years | 6-14 years | 15-22 years | 0-5 years | 6-14 years | 15-22 years | 0-5 years | 6-14 years | 15-22 years | 0-5 years | 6-14 years | 15-22 years | 0-5 years | 6-14 years | 15-22 years | 0-5 years | 6-14 years | 15-22 years | 0-5 years | 6-14 years | 15-22 years | 0-5 years | 6-14 years | 15-22 years |
|--------------------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|-------------|
| ABI                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| AAC                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| BMI                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| CBIS                     |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| DR                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| DI                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| DTT                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| EXM                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| EXT                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| FBA                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| FCT                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| MD                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| MMI                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| NI                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| PI                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| **PBII**                 |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| PP                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| R                        |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| RIR                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| SM                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| SI                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| SN                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| SST                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| TA                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| TAI                      |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| TD                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| VM                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
| VS                       |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |           |            |             |
Selecting EBPs

Before beginning a new practice with a learner, it is important to follow four planning steps:

1. Identify the behavior
2. Collect baseline data on the behavior
3. Establish an observable and measurable goal
4. Choose an EBP
   - Consider the child and family characteristics
   - Consider the teacher and team characteristics
   - Consider other available resources
High Quality Training: **Autism Focused Intervention Resources and Modules (AFIRM)**

Designed to help you learn the step-by-step process of planning for, using, and monitoring EBPs with learners with Autism from birth to 22 years of age.

Peer-mediated Instruction and Intervention (PMII)

With a foundation in behaviorism and social learning theory, PMII involves systematically teaching peers without disabilities ways of engaging learners with ASD in positive and meaningful social interactions.
Learning Objectives

By the end of this training, participants will be able to:

- Describe what are EBPs for Autism
- Define Peer-Based Instruction and Intervention (PBII/PMII)
- Describe how PBII/PMII can help learners and their peers
- Identify at least 3 activities that are particularly supportive of social interactions
- Identify the 6 steps for planning an activity
- List how progress monitoring assist educators
AFIRM has updated the EBP PMII to PBII
## Comparison

<table>
<thead>
<tr>
<th>Peer-Mediated Instruction and Intervention</th>
<th>Peer-Based Instruction and Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Original Name</strong></td>
<td><strong>Current Name</strong></td>
</tr>
<tr>
<td><strong>Age Range</strong>: 3-22</td>
<td><strong>Age Range</strong>: 3-18</td>
</tr>
<tr>
<td><strong>Skills</strong>: Communication, social, joint attention, play, cognitive, school readiness, academic</td>
<td><strong>Skills</strong>: Communication, social, joint attention, play, cognitive, school readiness, academic/pre-academic, challenging/interfering behavior, mental health</td>
</tr>
<tr>
<td><strong>Settings</strong>: Home, school, community</td>
<td><strong>Settings</strong>: Home, school, community</td>
</tr>
<tr>
<td><strong>Evidence Rating</strong>: Evidence Based</td>
<td><strong>Evidence Rating</strong>: Evidence Based</td>
</tr>
</tbody>
</table>

Now includes adult-mediated interaction with peers in addition to peer-mediated intervention and the MIMC: Structured Playgroups.
Peer-Based Instruction and Intervention (PBII) In Peer-Based Instruction and Intervention (PBI) peer social interaction is the defining feature of the intervention. Most often but not always the peer of the learner is a neurotypical child of the same general age. There are two types of PBIIIs, which are characterized by the role of the peer and the teacher. In peer-mediated instruction and interventions (PMIIs), the peer receives training and perhaps coaching from an adult (e.g., teacher, clinician) to deliver social initiations or instructions in a way that supports the learning goal of the learner with autism. In a variation of this approach, a sibling of the learner may serve in the peer role (e.g., sibling-mediated intervention), but the procedures are the same. In adult-mediated instruction and interventions (AMIIs) the teacher or other adults arranges the social environment (e.g., brings children in proximity) and provides coaching, prompts, and/or reinforcement for both the learner and the peer to engage in social interaction.
PBII Also Includes a MIMC Manualized Intervention Meeting Criteria as an EBP (MIMC)

- MIMC is operationally defined as an intervention that a) is manualized, b) has unique features that create an intervention identity, and c) shares common features with other practices grouped within the superordinate EBP classification

- The 2020 NCAEP report reclassified the EBP, Structured Play Groups, as a MIMC and included it into the PBII EBP
Structured Play Groups (SPG) are interventions used to teach a broad range of skills and behaviors. SPG groups are characterized by:

- a small predetermined group of children including children who are typically developing,

- who meet consistently across time to engage in structured routines and defined play activities,

- within a defined space, and

- are facilitated by adults who through clear roles use EBPs, such as Prompting and Reinforcement, to support the target child’s use of skills and behavior during playtime.
Goals That Can Be Addressed Using Structured Play Groups

- Increase social skills
- Decrease in maladaptive behavior
- Increase social interactions
- Increase peer-directed commenting
- Increase language diversity and complexity
- Increase communication skills
- Decrease isolated play
- Decrease stereotyped object play
- Increase in social forms of play
- Increase in functional object play
To Learn More About the MIMC: Structured Play Groups

AFIRM Online Learning Module:
https://afirm.fpg.unc.edu/structured-play-
PBII INTERVENTION FACT SHEET

NCAEP Report April 2020

- Definition of the intervention
- Age Range
- Outcome Areas
- References (specific articles that provide the evidence for the efficacy of the practice)

<table>
<thead>
<tr>
<th>Name of EBP</th>
<th>Peer-Based Instruction and Intervention (PBII) peer social interaction is the defining feature of the intervention. Most often but not always, the peer of the learner is a neurotypical child of the same general age. There are two types of PBII, which are characterized by the role of the peer and the teacher. In peer-mediated instruction and interventions (PMIs), the peer receives training and perhaps coaching from an adult (e.g., teacher, clinician) to deliver social initiations or instructions in a way that supports the learning goal of the learner with autism. In a variation of this approach, a sibling of the learner may serve in the peer role (e.g., sibling-mediated intervention), but the procedures are the same. In adult-mediated instruction and interventions (AMI), the teacher or other adults arranges the social environment (e.g., brings children in proximity) and provides coaching, prompts, and/or reinforcement for both the learner and the peer to engage in social interaction.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition of EBP</td>
<td>In Peer-Based Instruction and Intervention (PBII) peer social interaction is the defining feature of the intervention. Most often but not always, the peer of the learner is a neurotypical child of the same general age. There are two types of PBII, which are characterized by the role of the peer and the teacher. In peer-mediated instruction and interventions (PMIs), the peer receives training and perhaps coaching from an adult (e.g., teacher, clinician) to deliver social initiations or instructions in a way that supports the learning goal of the learner with autism. In a variation of this approach, a sibling of the learner may serve in the peer role (e.g., sibling-mediated intervention), but the procedures are the same. In adult-mediated instruction and interventions (AMI), the teacher or other adults arranges the social environment (e.g., brings children in proximity) and provides coaching, prompts, and/or reinforcement for both the learner and the peer to engage in social interaction.</td>
</tr>
<tr>
<td>Outcome Areas</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>✓</td>
</tr>
<tr>
<td>Social</td>
<td>✓</td>
</tr>
<tr>
<td>Joint attention</td>
<td>✓</td>
</tr>
<tr>
<td>Play</td>
<td>✓</td>
</tr>
<tr>
<td>Cognitive</td>
<td>✓</td>
</tr>
<tr>
<td>School readiness</td>
<td>✓</td>
</tr>
<tr>
<td>Academic/Pre-academic</td>
<td>✓</td>
</tr>
<tr>
<td>Adaptive/self-help</td>
<td>✓</td>
</tr>
<tr>
<td>Challenging/Interfering behavior</td>
<td>✓</td>
</tr>
<tr>
<td>Vocational</td>
<td>✓</td>
</tr>
<tr>
<td>Motor</td>
<td>✓</td>
</tr>
<tr>
<td>Mental health</td>
<td>✓</td>
</tr>
<tr>
<td>Self-determination</td>
<td>✓</td>
</tr>
</tbody>
</table>
## Evidence (Age and Domains)

<table>
<thead>
<tr>
<th>Outcome Areas</th>
<th>0-2</th>
<th>3-5</th>
<th>6-11</th>
<th>12-14</th>
<th>15-18</th>
<th>19-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Social</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Joint attention</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Play</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cognitive</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>School readiness</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Academic/Pre-academic</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Adaptive/self-help</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Challenging/Interfering behavior</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Vocational</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Motor</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mental health</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Self-determination</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

[www.captain.ca.gov](http://www.captain.ca.gov)
AFIRM MODULES
www.captain.ca.gov
http://afirm.fpg.unc.edu

Peer-mediated Instruction and Intervention

Peer-mediated Instruction and Intervention (PMII)

With a foundation in behaviorism and social learning theory, PMII involves systematically teaching peers without disabilities ways of engaging learners with ASD in positive and meaningful social interactions.1-4

What Will I Learn?

The AFIRM model guides the learner through four lessons to facilitate:

- Learning basic knowledge about peer-mediated instruction and intervention (PMII).
- Applying PMII in activity based scenarios that promote real-world application.

The PMII module will take approximately 1.5 to 2 hours to complete. However, the module is broken into individual lessons to help guide your learning:
Peer-Mediated Instruction and Intervention (PMII)

---Step-by-Step Guide---

BEFORE YOU START...

Each of the following points is important to address so that you can be sure the selected EBP is likely to address the learning needs of your student.

Have you found out more information about . . . ?

- Established a goal or outcome that clearly states when the behavior will occur, what the target skill is, and how the team will know when the skill is mastered...
- Identifying evidence-based practices...

If the answer to any of these is “no,” review the process of how to select an EBP.

For more information visit:

www.afirm.fpg.unc.edu
What is Peer-Mediated Instruction and Intervention?

A method to systematically teach peers without disabilities ways to engage learners with Autism in positive and meaningful social interactions.

- A group of specific interventions that address social skills of learners with Autism by using trained peers.

PMII increases the frequency that learners with Autism will interact with peers without disabilities.

PMII teaches peers without disabilities ways to socialize with learners with Autism.
Skills addressed by PBII/PMII can include:

- Saying hello
- Playing with others
- Joining a game or activity
- Having a conversation with peer
- Create opportunities for a student to interact with peers (such as a sports team, church group, school clubs, or play group)
Examples

A Case for PMII

Video Story: A Case for PMII

Key Points
- Focal Learner with ASD: blond hair boy with the blue backpack.
- Notice how the student with ASD interacts with peers and how his peers interact with him.
- Determine if you think PMII could be a possible intervention for this learner.

AFIRM E-LEARNING MODULE
Autism Focused Intervention Resources and Modules

PMII (Musical Intro Playing)

www.captain.ca.gov
5 Types of Peer-Mediated Instruction and Intervention

<table>
<thead>
<tr>
<th>TYPE OF PMII</th>
<th>DESCRIPTION</th>
<th>SKILLS</th>
<th>AGES</th>
</tr>
</thead>
</table>
| PEER MODELING                             | Train peers to demonstrate use of target skills to learner with ASD         | • Requesting assistance                      | • Young children  
|                                            |                                                                             | • Joining activity                          | • Elementary|
|                                            |                                                                             | • Following directions                       |            |
|                                            |                                                                             | • Greetings                                 |            |
| PEER INITIATION TRAINING                  | Train peers in use of strategies to encourage peers to interact with learner with ASD in natural settings | • Responding to invitations                 | • Young children  
|                                            |                                                                             | • Maintaining conversations                 | • Elementary|
|                                            |                                                                             | • Turn-taking                               |            |
| DIRECT TRAINING FOR TARGET STUDENT AND PEER | Teach peers and learner with ASD specific target skills                    | • Initiating conversations                  | • Young children  
|                                            |                                                                             | • Perspective taking                        | • Elementary|
|                                            |                                                                             | • Accepting 'no'                            |            |
| PEER NETWORKS                             | Peers interact with learner with ASD in a facilitated, regular meeting held outside of instructional time. | • Joining peer groups                       | • Upper elementary  
|                                            |                                                                             | • Promoting social networks                 | • Middle school   
|                                            |                                                                             |                                              | • High school    |
| PEER SUPPORTS (e.g. best buddies, peer tutoring) | Peers provide social and academic support to learner with ASD within and inclusive environment | • Academic skills                           | • Upper elementary  
|                                            |                                                                             | • Social skills                             | • Middle school   
|                                            |                                                                             |                                              | • High school    |
Think - Pair - Share

Checking In

A special education teacher trains two peers, who are developing typically, how to use visual cues and prompts to encourage a classmate with ASD to stay on topic when having a conversation at lunch.

Select the type of PMII the special education teacher is using:

- Peer Modeling
- Peer Initiation Training
- Peer Networks
- Peer Supports
How PBII/PMII Help Learners and Their Peers

PBII/PMII is useful for learners with Autism who need support with communication skills such as initiating and responding to social interaction with peers without disabilities.

Peer Benefits of PBII/PMII

www.captain.ca.gov
How is PBII/PMII Being Used

• Increase the likelihood that learners with Autism will **generalize and use new social skills** in different activities with different peers

• Increase the likelihood that **social interaction will be naturally reinforced** by enjoyable exchange between power without disability and learners with Autism

• **Benefits peers** without disabilities by providing them with the training and support needed to successfully interactions with learnigner with Autism.
Steps to Assess and Implement

1. Identify the behavior
2. Collect baseline data through direct observation
3. Establish a goal or outcome that clearly states: when the behavior will occur, what the target skill is, and how the team will know when the skill mastered
Practice with Feedback

Select which goals would be best to address using PBII/PMII and which goals would not?

1. During 20 minutes of a group activity, Jayden will verbally contribute to the group (e.g. offer feedback, share knowledge, ask questions) 4 times in 1 class context.
2. Providing visual cues, Madison will complete 6/9 steps of the laundry process independently.
3. In a small group session when given a verbal reminder, Robert will make on-topic contributions to the daily group task 3 times during the group work.

OR

PMII

Not PMII

www.captain.ca.gov
Ready Set Go.....

Step #1 Planning
Step #2 Using
Step #3 Monitoring

www.captain.ca.gov
Step #1 Planning

- **Identify when social interaction naturally occurs**
  - Use the Pre-Assessment for Learner to help identify the times

- **Select and recruit peers to participate in the intervention**
  - Use the Peer Selection Checklist to help identify & select peers

- **Prepare for peer training session**
  - At this time you need permission from peers, teachers and parents

- **Introduce target skills or strategy to peers**
  - First training session by teaching peers to recognize and appreciate individual differences, likes, dislikes, strengths relating to the intervention
  - Keep in mind confidentiality and privacy
Cont. Step #1 Planning

- Develop scripts for peers
- Use role play with peers
- Middle and High Schoolers
  - Write down schedule and match them with the schedule of the learner with Autism  
    [LINK TO: Daily Schedule for Peer]
  - If appropriate provide notebooks, for peers to record notes on the intervention  
    [LINK TO: PMII Peer Notebook]
Step 2 Using PBII/PMII

- Assign peers to learner with Autism
- Conduct a minimum of one regular 15 minutes session daily
- Provide materials for learner to participate in session
- Provide support & feedback to peers
  - During weekly problem solving meetings
Step 3: Monitoring PBII/PMII

- Observe and document behavior of learner with Autism
- Determine if peers need additional support/training
- Determine next steps based on progress of learner with Autism

Self Monitoring Template
Implementation Fidelity is Critical!

What does this mean?

“Implementing an intervention in the same manner in which it was done in the evidence based research”
Implementation Checklist

- Determine if the practice is being implemented as intended.

- When PBII/PMII activities are used as intended, learners with Autism and peers experience more meaningful social interaction which can result in more positive social relationships.
Implementation Fidelity is Critical!

How implementation fidelity achieved:

1. Use Implementation Checklists for the EBP to capture fidelity of implementation
2. Refer to NCAEP EBP Fact Sheets
3. Use AFIRM self-learning modules on EBPs
4. Attend training on the EBPs
5. Access coaching on the EBP until fidelity is attained
My Takeaways

1. What are 4 things you remember from today’s training?

1. What are 2 things you see yourself doing?

1. What is the 1 thing you can implement tomorrow?
After the Training…

Please complete the Post Training Survey that will be sent to your email