Using Evidence-Based Practices for Children with ASD to Support Effective Inclusion

ANN SAM, PH.D.
Who We Are

The National Professional Development Center on Autism Spectrum Disorder

AFIRM
Autism Focused Intervention Resources & Modules

ASD toddler initiative
Objectives

- Identify 27 focused interventions as effective for children with ASD
- Learn a process for matching EBPs to address goals of students with autism.
- Describe the evidence-based practice, Structured Play Group, which supports inclusive practices in classrooms with children with ASD
- Know where to access internet supports for learning more about EBPs
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.

https://www.cdc.gov/ncbddd/actearly/index.html
How Might Characteristics of Child with ASD Impact an Inclusive Classroom?
How Might an Inclusive Classroom Be Supportive to Learning Needs of a Child with ASD?
Evidence-based Practices (EBPs)
What Are Evidence-based Practices (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
- Are used for a limited amount of time

(Odom, Colett-Klingenberg, Rogers, & Hatton, 2010)
NPDC Article Review Process

- NPDC EBP Workgroup
  - Title Review: 29,105
- NPDC EBP Workgroup
  - Abstract Review: 3,449
- NPDC EBP Reviewers
  - Article Review: 1,030
- NPDC EBP Workgroup
  - Final Check: 546
  - 456 acceptable studies
Age of Participants in Studies

![Bar chart showing the number of studies by age group for participants in autism spectrum disorder (ASD) studies. The age groups are 0 to 2, 3 to 5, 6 to 11, 12 to 14, 15 to 18, and 19 to 22. The chart indicates a significant number of studies for the 6 to 11 age group.]

The National Professional Development Center
on Autism Spectrum Disorder
Outcomes
Update on EBPs for Learners with ASD

2014 update of EBP Review:

- Covered years 1990-2011
- 27 EBPs identified
Implication of Findings

- Practitioners can build “eclectic”/evidence-supported programs to address specific needs of individual with ASD
- More research is needed to address focused intervention practices for infants, toddlers, and high school students
- Better child outcomes dependent on translation of EBPs
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 instruction & intervention
- Picture exchange communication system
- Pivotal response training
- Prompting
- Reinforcement
- Response interruption/redirection
- Scripting
- Self-management
- Social narrative
- Social skills training
- Structured play groups
- Task analysis
- Technology-aided instruction & 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 instruction & intervention
  - Picture exchange communication system
  - Pivotal response training
- **Prompting**
- **Reinforcement**
- Response interruption/redirection
- Scripting
- Self-management
- Social narrative
- Social skills training
- Structured play groups
- Task analysis
- Technology-aided instruction & intervention
- Time delay
- Video modeling
- **Visual supports**
Selecting EBPs
The EBP Process

Select EBP  Implement EBP  Assess Progress
Think About:

Child

______________________________________________________________________

1 priority outcome

______________________________________________________________________
When Selecting EBP Consider:

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

EBP
Instructional Domains

- Social
- Communication
- Behavior
- Joint attention
- Play
- Cognitive

- School-readiness
- Academic
- Motor
- Adaptive
- Vocational
- Mental health

The National Professional Development Center on Autism Spectrum Disorder
Matrix of EBPs by Outcome and Age

<table>
<thead>
<tr>
<th>EBP - Evidence-based Practice</th>
<th>Social</th>
<th>Communication</th>
<th>Joint Attention</th>
<th>Behavior</th>
<th>School-Readiness</th>
<th>Play</th>
<th>Cognitive</th>
<th>Motor</th>
<th>Adaptive</th>
<th>Vocational</th>
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</table>
Matching EBPs to Outcomes

Allison
Allison is four years old and is in an inclusive preschool. She will engage in 3 different pretend play sequences by following a 3 step sequence independently for 3 of 4 opportunities.
Allison:
Allison is four years old and is in an inclusive preschool. She will engage in 3 different pretend play sequences by following a 3 step sequence independently for 3 of 4 opportunities.

- In an inclusive classroom
- ABA after school
- Enjoys holding toy horses and plays in stereotypic ways
- Follows a model

- Teacher has great interactions with Allison
- Teacher likes to use peer buddies during centers
- Teacher creates nice visuals

EBP(s):

- Dad and mom concerned she does not play with siblings and cousins
Think About:

Child

____________________________

1 priority outcome

____________________________
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 facilitator’s 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)
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
Implementing EBPs

Now what?
Next steps?
How do you know what to do?
AFIRM – Autism Focused Intervention Resources & Modules
AFIRM

E-learning modules for 27 EBPs
- http://afirm.fpg.unc.edu/

Target audience
- Special educators
- General education teachers
- Related service personnel
- Early interventionists

Planning, using, monitoring EBPs
### Who Are Our Users?

<table>
<thead>
<tr>
<th>Occupation</th>
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<td>Family Member</td>
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<tr>
<td>Technical Assistant Provider</td>
<td>537</td>
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<tr>
<td>University Faculty</td>
<td>751</td>
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<td>Health Care Provider</td>
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<td>General Education</td>
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<td>Early Interventionist</td>
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<td>Other</td>
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<td>Paraeducator</td>
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<td><strong>Total</strong></td>
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![User Occupation (n=24795)](image)
AFIRM Structure

4 lessons
- Basics of EBP
- Plan for EBP
- Use EBP
- Monitor EBP

Key components of EBPs

Step-by-step process for applying practice
AFIRM Content

- Engaging case examples
- Multimedia presentation of content
- Interactive assessments
- Free professional completion certificates
AFIRM Supplemental Materials

- Implementation checklist
- Step-by-step practice guide
- Parent’s guide
- Tip sheet for professionals
- Data sheets
- Evidence-base
AFIRM Certificates

My Account

- Resume your learning from the My Modules tab by selecting the last page viewed.
- View or print module certificates you have earned from My Certificates.

AFIRM Modules
Visit the AFIRM Modules page to see a list of available and upcoming modules

FAQs
- Frequently Asked Questions

Account Information
- Username:
- E-mail:
Send me e-mail updates when a new EBP is available: No

Edit Information or Change password

Peer-Mediated Instruction and Intervention
Last page viewed: Monitoring Activity
Module in Progress: Non-certificate Track
Take the Pre-assessment
Submit Module Evaluation

Time Delay
Last page viewed: Lesson 3: Use TD
Module in Progress: Certificate Track
Take the Pre-assessment
Submit Module Evaluation

The National Professional Development Center on ASD
Awards this Certificate of Completion to
Jane Smith
For completing the AFIRM Module

Time Delay
January 8, 2016
Time to complete: 2 hours

Signature: Samuel L. Colten, Ph.D.
Director, FPG Child Development Institute

Signature: Ann W. Cole, Ph.D.
Director, NOSRC and AFIRM Module Projects

AFIRM
Autism Focused Intervention Resources and Modules

The National Professional Development Center on Autism Spectrum Disorder
Confidence in Using EBPs

How confident do you feel in implementing the evidence-based practices you reviewed on the AFIRM modules?

Not Confident: 34
Somewhat Confident: 471
Very Confident: 527
How can you use AFIRM in your setting?
AFIRM Survey Results

How have you applied information from the AFIRM modules to your work?

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<th>How users have applied information from AFIRM</th>
<th>%</th>
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<td>Using implementation checklists to ensure fidelity</td>
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<td>Sharing information with parents</td>
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<tr>
<td>Sharing information with colleagues and other professionals</td>
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<td>Planning lessons using identified practices</td>
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<td>Other</td>
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<td>Monitoring IEP goals</td>
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<td>Modifying use of evidence-based practices based on data collected</td>
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<td>Individualizing instruction</td>
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<td>Developing IEP goals</td>
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<td>Determining the learner’s needs</td>
<td>47.18%</td>
<td>494</td>
</tr>
<tr>
<td>Assessing student outcomes</td>
<td>27.03%</td>
<td>283</td>
</tr>
<tr>
<td>Achieving IEP goals</td>
<td>24.26%</td>
<td>254</td>
</tr>
</tbody>
</table>

Top 3 applications of AFIRM:

1. Determining the learner’s needs
2. Sharing information with colleagues and other professionals
3. Individualizing instruction
Questions?

Ann Sam
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