



Autism Focused Intervention
Resources & Modules



OVERVIEW & RESOURCE PACKET:

SELECTING AN EVIDENCE-BASED PRACTICE

UNC Frank Porter Graham Child Development Institute

Autism Focused Intervention Resources & Modules

Sam, A., Waters, V., Dee, R., & AFIRM Team, 2022

 **FRANK PORTER GRAHAM
CHILD DEVELOPMENT INSTITUTE**

 **The National Professional Development Center
on Autism Spectrum Disorder**

The National Clearinghouse on
Autism Evidence & Practice
NCAEP • BRIDGING SCIENCE AND PRACTICE

Overview of Content

EBP

1. **Table of Contents:** This list details the specific resources that apply to selecting an evidence-based practice.
2. **Overview:** A quick summary of the steps for selecting an evidence-based practice.
3. **EBP Selection Checklist:** This checklist details the steps for selecting an appropriate evidence-based practice to use with a learner.
4. **Planning Checklist:** This checklist details the steps for planning for selecting an evidence-based practice, including what prerequisite learning of practices are needed, collecting baseline data of the target goal/behavior/skill if needed, and what materials/resources are needed.
5. **Data Collection Form(s):** Use this form as a method for collecting and analyzing baseline data on the learner with autism's demonstration of the interfering behavior.
6. **Glossary:** This glossary contains key terms that apply specifically to selecting an evidence-based practice.
7. **Additional Resources:** A quick highlight of additional tools and resources to aid in the selection of an evidence-based practice to use with a learner.
8. **References:** This list details the specific references used for developing this selecting an evidence-based practice module.

Suggested Citation:

Sam, A., Waters, V., Dees, R., & AFIRM Team. (2022). *Selecting an Evidence-Based Practice*. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, Autism Focused Intervention Modules and Resources. <https://afirm.fpg.unc.edu/selecting-evidence-based-practice>

Steps for Selecting an EBP

EBP

1- IDENTIFY THE TARGET SKILL OR INTERFERING BEHAVIOR:

The target behavior must be observable and clearly defined in the setting where it occurs. All team members should be able to identify the behavior (including its frequency and duration) based on the clarity of the definition of the behavior.

2- ESTABLISH AN OBSERVABLE AND MEASURABLE GOAL:

When the behavior has been clearly defined and is observable, members of the team will need to collect data to determine how often (frequency) and for how long (duration) the behavior occurs before beginning an intervention. This is called baseline data collection and is important for establishing a measurable IEP goal or IFSP outcome.

The team will then need to review the original IEP or IFSP goal or outcome. These outcomes need to be written in clear, measurable terms. If the goal or outcome was stated in broad terms, it will need smaller and more defined “steps” or objectives. These smaller steps or objectives will target a specific skill or behavior. Targeting a specific skill or behavior will help the team monitor progress toward achieving the broader IEP/IFSP goal or outcome.

3- IDENTIFY POTENTIAL EVIDENCE-BASED PRACTICES:

Once an observable and measurable goal or outcome is determined, the next step is to identify a list of potential EBPs by using NCAEP’s Domain Matrix. Consider into what domain the outcome/goal can be categorized.

Look at the identified domain on the Domain Matrix for the child's age. All of the highlighted EBPs are appropriate to use based on research. To narrow the list down further, you will need to consider additional factors:

4- CHOOSE AN EVIDENCE-BASED PRACTICE:

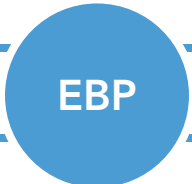
Information obtained by considering key sources will provide clues that can inform your EBP selection. The NCAEP Age and Domain Matrix (Steinbrenner et al., 2020) can be used to identify those EBPs identified by the research literature for the age of the learner and the domain of instruction.

5- TRAIN THE TEAM:

Once an EBP or several EBPs have been selected as probable interventions, the team needs to identify who will implement the practice(s) with the learner. With time and success in the use of the intervention, others with whom the learner engages could be trained to use the intervention effectively so that consistency across settings is maximized.



Functional Behavior Assessment



Learner's Name: _____ Date/Time: _____

Observer(s): _____

Target Goal/Behavior/Skill (short): _____

Directions: Complete this checklist to determine the function of an interfering behavior.

DEFINE INTERFERING BEHAVIOR:

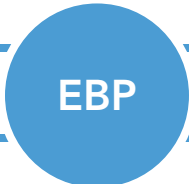
Blank area for defining interfering behavior.

QUESTIONS:

1.	How long has the behavior been interfering with the learner's development and learning?	
2.	Does the behavior involve aggression or damage to property?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.	Where is the behavior occurring?	
4.	What activities is the learner participating in when the behavior occurs?	
5.	What are others (teacher, peer, practitioner) doing when the behavior occurs?	
6.	What is the proximity of others (e.g., teacher, peer, practitioner) when the behavior occurs?	
7.	What is the noise level in the environment when the behavior occurs?	
8.	How many peers and adults are present when the behavior occurs?	
9.	What other environmental conditions (e.g., lighting) are present when the behavior occurs?	



Data Collection: Event Sampling



Learner's Name: _____

Date/Time: _____

Observer(s): _____

Interfering Behavior: _____

Directions: Collect data on the frequency of the learner demonstrating the interfering behavior.

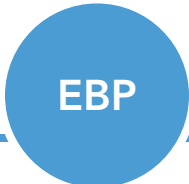
EVENT SAMPLING:

Date	Tally (each occurrence of the interfering behavior)	Total Tally

ANECDOTAL NOTES:



Data Collection: Duration (Bar)



Learner's Name: _____ Date/Time: _____

Observer(s): _____

Interfering Behavior: _____

Directions: This sheet could be completed by highlighting, circling, or shading the duration (length of the behavior). The sheet is designed to provide a graphic representation of the duration over time (the resulting data, if blocks are circled or highlighted, will appear similar to a bar graph).

Starting from the bottom, shade the number of boxes that represent the length of the interfering behavior. Each box represents ONE minute.

LENGTH OF INTERFERING BEHAVIOR IN ONE MINUTE INCREMENTS:				
Monday __ / __	Tuesday __ / __	Wednesday __ / __	Thursday __ / __	Friday __ / __
15	15	15	15	15
14	14	14	14	14
13	13	13	13	13
12	12	12	12	12
11	11	11	11	11
10	10	10	10	10
9	9	9	9	9
8	8	8	8	8
7	7	7	7	7
6	6	6	6	6
5	5	5	5	5
4	4	4	4	4
3	3	3	3	3
2	2	2	2	2
1	1	1	1	1
0	0	0	0	0



Mental health	related to emotional well-being	self-esteem or self-efficacy, anxiety, stress, depression, co-occurring conditions, phobias, other psychiatric conditions
Motor	related to movement or motion, including both fine and gross motor skills, sensory system/sensory functioning	balance, gait, vestibular/proprioceptive functioning, handwriting, typing, use of tools, grip, exercise, participation in recreation
Play	related to the use of toys or leisure materials	symbolic/pretend/functional play, use of toys or leisure materials, development of play schemes, cooperative play with peers/adults, generalization of play behaviors, recess or playground skills, participation in games or play activities
Self-determination	related to self-directed actions in setting and achieving goals or making decisions and problem-solving	self-awareness, assertiveness, self-esteem, self-advocacy, problem-solving, evaluating choices, setting goals, motivation, decision-making, goal achievement
School readiness	related to performance during a task that is NOT directly related to task content	on task, task engagement, waiting, remaining seated, orienting to materials, self-regulation, and self-monitoring, responding to instruction
Social	related to skills needed to interact with others	initiating, facial expression recognition, emotion recognition, empathy, body language, responding to others, taking turns
Vocational	related to employment or employment preparation, self-advocacy, self-determination, and transition planning	changing oil, cake decorating, assembly, filing, relating to customers, problem-solving, time management, computer skills



EVIDENCE-BASED PRACTICES FOR EARLY INTERVENTION (0-2.9):

	ACADEMIC	ADAPTIVE	BEHAVIOR	COGNITIVE	COMMUNICATION	JOINT ATTENTION	MENTAL HEALTH	MOTOR	PLAY	SCHOOL-READINESS	SOCIAL
Antecedent-Based Interventions (ABI)		✓	✓		✓				✓		
Augmentative & Alternative Communication (AAC; includes PECS)					✓	✓			✓		✓
Differential Reinforcement (DR)		✓	✓		✓						
Discrete Trial Training (DTT)						✓					✓
Extinction (EXT)		✓									
Functional Behavior Assessment (FBA)			✓								
Modeling (MD)					✓			✓			✓
Music-Mediated Interventions (MMI)		✓			✓						
Naturalistic Interventions (NI; includes IMPACT, JASPER, Milieu, PRT)	✓	✓	✓		✓	✓	✓		✓	✓	✓
Parent-Implemented Interventions (PII; includes Stepping Stones)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Prompting (PP; includes prompt-based Scripting)					✓	✓		✓	✓		✓
Reinforcement (R)		✓	✓		✓	✓		✓		✓	✓
Social Skills Training (SST; includes PEERS)					✓				✓		✓
Technology-Aided Instruction & Intervention (TAII; includes MindReading, FaceSay)		✓		✓	✓			✓			
Time Delay (TD)						✓					✓
Video Modeling (VM)					✓	✓			✓		
Visual Supports (VS; includes visual-based Scripting)								✓			



EVIDENCE-BASED PRACTICES FOR ELEMENTARY SCHOOL (6-11.9):

	ACADEMIC	ADAPTIVE	BEHAVIOR	COGNITIVE	COMMUNICATION	JOINT ATTENTION	MENTAL HEALTH	MOTOR	PLAY	SCHOOL-READINESS	SELF-DETERMINATION	SOCIAL	VOCATIONAL
Antecedent-Based Interventions (ABI)	✓	✓	✓		✓		✓		✓	✓		✓	
Augmentative & Alternative Communication (AAC; includes PECS)	✓		✓		✓	✓			✓			✓	
Ayres Sensory Integration (ASI)	✓	✓	✓		✓				✓	✓		✓	
Behavior Momentum Intervention (BMI)	✓	✓	✓	✓	✓		✓			✓	✓	✓	
Cognitive Behavioral Instructional Strategies (CBIS; includes CBI)	✓	✓	✓		✓	✓		✓	✓	✓		✓	
Differential Reinforcement (DR)	✓			✓	✓					✓			
Direct Instruction (DI)	✓	✓	✓	✓	✓	✓			✓			✓	✓
Discrete Trial Training (DTT)		✓	✓	✓	✓			✓		✓		✓	
Exercise & Movement (EXM; includes ECE)		✓	✓		✓					✓		✓	
Extinction (EXT)	✓	✓	✓		✓					✓			
Functional Behavior Assessment (FBA)		✓	✓		✓				✓	✓		✓	
Functional Communication Training (FCT)	✓	✓	✓		✓				✓	✓		✓	
Modeling (MD)			✓		✓			✓		✓		✓	
Music-Mediated Interventions (MMI)			✓	✓	✓	✓	✓	✓	✓	✓		✓	
Naturalistic Interventions (NI; includes ImPACT, JASPER, Milieu, PRT)		✓	✓		✓		✓		✓	✓		✓	
Parent-Implemented Interventions (PII; includes Stepping Stones)	✓		✓	✓	✓	✓	✓		✓	✓		✓	
Peer-Based Instruction & Intervention (PBI; includes SPG, PMII)	✓	✓	✓		✓	✓		✓	✓	✓		✓	
Prompting (PP; includes prompt-based Scripting)	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	
Reinforcement (R)	✓	✓	✓		✓			✓	✓	✓		✓	
Response Interruption & Redirection (RIR)	✓		✓		✓				✓	✓	✓	✓	
Self-Management (SM)	✓	✓	✓	✓	✓			✓	✓	✓		✓	
Social Narratives (SN; includes Social Stories)	✓	✓	✓		✓	✓			✓	✓		✓	
Social Skills Training (SST; includes PEERS)		✓	✓	✓	✓		✓		✓	✓	✓	✓	
Task Analysis (TA)	✓	✓	✓		✓			✓	✓	✓		✓	
Technology-Aided Instruction & Intervention (TAII; includes MindReading, FaceSay)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	
Time Delay (TD)	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓
Video Modeling (VM)	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓
Visual Supports (VS; includes visual-based Scripting)	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓



EVIDENCE-BASED PRACTICES FOR MIDDLE SCHOOL (12-14.9):

	ACADEMIC	ADAPTIVE	BEHAVIOR	COGNITIVE	COMMUNICATION	JOINT ATTENTION	MENTAL HEALTH	MOTOR	PLAY	SCHOOL-READINESS	SELF-DETERMINATION	SOCIAL	VOCATIONAL
Antecedent-Based Interventions (ABI)		✓	✓		✓		✓			✓		✓	
Augmentative & Alternative Communication (AAC; includes PECS)					✓								
Ayres Sensory Integration (ASI)			✓							✓			
Behavior Momentum Intervention (BMI)	✓	✓	✓	✓	✓		✓			✓	✓	✓	
Cognitive Behavioral Instructional Strategies (CBIS; includes CBI)			✓		✓			✓		✓		✓	
Differential Reinforcement (DR)				✓	✓					✓			
Direct Instruction (DI)					✓							✓	
Discrete Trial Training (DTT)		✓	✓	✓	✓			✓		✓		✓	
Exercise & Movement (EXM; includes ECE)			✓		✓	✓				✓		✓	
Extinction (EXT)			✓							✓			
Functional Behavior Assessment (FBA)			✓		✓								
Functional Communication Training (FCT)	✓				✓					✓		✓	
Modeling (MD)					✓							✓	
Music-Mediated Interventions (MMI)			✓		✓				✓			✓	
Naturalistic Interventions (NI; includes ImPACT, JASPER, Milieu, PRT)		✓	✓		✓		✓					✓	
Parent-Implemented Interventions (PII; includes Stepping Stones)	✓			✓	✓		✓		✓	✓		✓	
Peer-Based Instruction & Intervention (PBII; includes SPG, PMII)	✓	✓			✓	✓			✓	✓		✓	✓
Prompting (PP; includes prompt-based Scripting)	✓	✓	✓		✓					✓		✓	✓
Reinforcement (R)			✓		✓								
Response Interruption & Redirection (RIR)		✓	✓						✓	✓	✓	✓	✓
Self-Management (SM)			✓					✓				✓	
Social Narratives (SN; includes Social Stories)			✓		✓							✓	
Social Skills Training (SST; includes PEERS)		✓	✓	✓	✓		✓		✓	✓	✓	✓	
Task Analysis (TA)	✓				✓	✓			✓				✓
Technology-Aided Instruction & Intervention (TAII; includes MindReading, FaceSay)	✓		✓	✓	✓	✓	✓			✓		✓	
Time Delay (TD)	✓	✓			✓							✓	✓
Video Modeling (VM)	✓	✓	✓		✓				✓	✓		✓	✓
Visual Supports (VS; includes visual-based Scripting)	✓	✓	✓		✓				✓	✓		✓	✓



EVIDENCE-BASED PRACTICES FOR YOUNG ADULT (19-22):

	ACADEMIC	ADAPTIVE	BEHAVIOR	COMMUNICATION	JOINT ATTENTION	MOTOR	PLAY	SCHOOL-READINESS	SOCIAL	VOCATIONAL
Antecedent-Based Interventions (ABI)			✓						✓	
Cognitive Behavioral Instructional Strategies (CBIS; includes CBI)	✓	✓							✓	
Differential Reinforcement (DR)			✓							
Discrete Trial Training (DTT)				✓					✓	
Functional Behavior Assessment (FBA)			✓							
Modeling (MD)				✓					✓	✓
Naturalistic Interventions (NI; includes ImPACT, JASPER, Milieu, PRT)			✓				✓		✓	
Prompting (PP; includes prompt-based Scripting)	✓		✓	✓				✓		✓
Reinforcement (R)		✓		✓	✓		✓		✓	✓
Response Interruption & Redirection (RIR)			✓							
Self-Management (SM)								✓		✓
Social Skills Training (SST; includes PEERS)									✓	
Task Analysis (TA)										✓
Technology-Aided Instruction & Intervention (TAII; includes MindReading, FaceSay)	✓	✓		✓	✓				✓	
Time Delay (TD)	✓	✓		✓				✓		✓
Video Modeling (VM)	✓	✓				✓			✓	✓
Visual Supports (VS; includes visual-based Scripting)	✓	✓					✓	✓	✓	✓



CHECK ANNUAL GOAL FOR:			
1.	Context (When/Antecedent)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2.	Target goal/behavior/skill (What/Behavior the learner is to perform)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3.	Mastery (How/Criterion for learner progress/mastery)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

LEARNER AND FAMILY PRIORITIES, PREFERENCES, & CHARACTERISTICS:	
Learner strengths:	Learner challenges:
Has worked before home:	Has not worked before school:
Learner/Family's needs and/or priorities for target goal:	
Learner/Family's preferences for which EBP(s) to use:	

TEACHER/TEAM CHARACTERISTICS:	
Knowledge level:	Successfully used EBPs:
Past EBP trainings:	EBP trainings needed:

CLUES FOUND IN THE TARGET GOAL/SKILL/BEHAVIOR:	
Goal domain:	Potential EBPs (Refer to the Domain Matrix):
Additional EBPs mentioned:	

OTHER RESOURCES	
Current Learner supports:	Available equipment:
Team members:	Additional learning experiences:



SELECT AN EBP:

IF APPLICABLE, IDENTIFY ADDITIONAL EBPS TO BE USED WITH THE SELECTED EBP:		
<input type="checkbox"/> Reinforcement (R+)	<input type="checkbox"/> Prompting (PP)	<input type="checkbox"/> Modeling (MD)
<input type="checkbox"/> Task Analysis (TA)	<input type="checkbox"/> Time Delay (TD)	<input type="checkbox"/> Visual Supports (VS)
<input type="checkbox"/> Functional Behavior Assessment (FBA)	<input type="checkbox"/> _____	<input type="checkbox"/> _____

GENERAL PLANNING:			
1.	Is this selected practice appropriate for the learner’s target goal/behavior/skill?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2.	Does the learner have needed prerequisite skills/abilities?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3.	Does the learner require additional adaptations/modifications/supports? Such as visual supports or a communication device?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
4.	Have reinforcers/rewards for the learner been identified based on the learner’s interests/preferred items and/or activities?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5.	Are additional materials and/or resources for using this selected practice ready and available?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

ANECDOTAL NOTES:

Glossary

EBP



Below are the key terms that apply specifically to this evidence-based practice.

For more information about this selected evidence-based practice, please visit <https://afirm.fpg.unc.edu/>.

Duration data:

records how long a learner engages in a particular behavior or skill

Event sampling:

collects frequency data at every instance the behavior occurs

Evidence-based practice:

is an instructional/intervention procedure for which research has shown there are positive outcomes for learners

Fidelity:

how well and how often the implementation steps for an evidence-based practice are followed

Functional Behavior Assessment (FBA):

is an evidence-based practice used when the intensity, duration, or type of interfering behavior creates safety concerns or impacts a child's development

Implementation checklist:

the specific steps needed to accurately follow an evidence-based practice

Interfering behavior:

is a challenging behavior that interferes with the learner's ability to learn

Team members:

includes the parents, other primary caregivers, IEP/IFSP team members, teachers, therapists, early intervention providers, and other professionals involved in providing services for the learner with autism



Additional Resources

EBP

IEP to EBP Tool:

The IEP to EBP Tool is designed to support your selection of an evidence-based practice for a learner with autism.

For more information, please visit: <https://afirm.fpg.unc.edu/iep-to-ebp-tool>

NCAEP EBP Database:

The EBP database is designed to help you in the EBP selection process.

For more information, please visit: <https://ncaep.fpg.unc.edu/ebp-database>

AFIRM Modules:

AFIRM Modules are designed to help you learn the step-by-step process of planning for, using, and monitoring an EBP with learners with ASD from birth to 22 years of age. Supplemental materials and handouts are available for download.

For more information, please visit: <https://afirm.fpg.unc.edu/>

2020 NCAEP EBP Report:

National Clearinghouse on Autism Evidence & Practice team at the Frank Porter Graham Child Development Institute has completed a report on Evidence Based Practices (EBPs). The report includes literature published from 2012-2017 and the findings are combined with the literature from the previous review (NPDC) from 1990-2011.

Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yucesoy-Ozkan, S., & Savage, M. N. (2020). *Evidence-based practices for children, youth, and young adults with autism*. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team. <https://ncaep.fpg.unc.edu/research-resources>



References

EBP

NPDC Staff. (2017). *How do I find out more about EBPs?* Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from <http://autismpdc.fpg.unc.edu/how-do-i-find-out-more-about-ebps>

NPDC Staff. (2017). *The NPDC model: Outcomes.* Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from <http://autismpdc.fpg.unc.edu/outcomes>

NPDC Staff. (2017). *What are evidence-based practices?* Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from <http://autismpdc.fpg.unc.edu/evidence-based-practices>

Sam, A., & AFIRM Team. (2015). *Functional Behavior Assessment.* Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from <http://afirm.fpg.unc.edu/functional-behavior-assessment>

Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yucesoy-Ozkan, S., & Savage, M. N. (2020). *Evidence-based practices for children, youth, and young adults with autism.* The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team. <https://ncaep.fpg.unc.edu/research-resources>