AFIRM

Autism Focused Intervention Resources & Modules

EBP

Resource Packet: Selecting an Evidence-Based Practice

UNC Frank Porter Graham Child Development Institute
Autism Focused Intervention Resources & Modules
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The National Professional Development Center on Autism

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

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Overview of Content

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:

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Table of Contents

SELECTING AN EVIDENCE-BASED PRACTICE

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.

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.

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.

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.

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.

EBP Selection Checklist

	STEP 1: IDENTIFY GOAL	
1.1	Identify a target skill or behavior based on IEP goal/outcome	
1.2	If applicable, conduct a functional behavior assessment	
	STEP 2: ESTABLISH MEASURABLE GOAL	
2.1	Collect baseline data	
2.2	Determine context (the 'when' or the antecedent)	
2.3	Determine the target goal/behavior/skill (the 'what' or the behavior)	
2.4	Determine how the team will know with the learner has mastered the target goal/behavior/skill (the 'how' or the criterion)	
2.5	If applicable, complete goal attainment scaling	
	STEP 3: IDENTIFY POTENTIAL EBPS	
3.1	Identify domain outcome for the target goal/behavior/skill	
3.2	Use the NCAEP Domain Matrix to list potential EBPs	
	STEP 4: CHOOSE EBP	
4.1	Determine learner and/or family's preferences, needs, priorities, and/or other characteristics	
4.2	Determine team and/or teacher characteristics	
4.3	Look for additional clues in the target goal	
4.4	Determine other resources	
	STEP 5: TRAIN TEAM	
3.3	Train the team to use the selected evidence-based practice	

FUNCTIONAL BEHAVIOR ASSESSMENT

Learner's Name: _____ **Date/Time:** _____
Observer(s): _____
Interfering Behavior: _____
Directions: Complete this checklist to determine the function of the interfering behavior.

DEFINE THE INTERFERING BEHAVIOR:

1. Where does the behavior occur?
2. With whom does the behavior occur?
3. When does the behavior occur?
4. What activity is the learner participating in when the behavior occurs?
5. How long has the behavior been interfering with the learner's development and learning?
6. Does the behavior involve aggression or damage to property?
7. What are other students and adults doing when the behavior occurs?
8. What is the proximity of other students and adults when the behavior occurs?
9. What is the noise level of in the environment when the behavior occurs?
10. Number of individuals in the area:
11. Other environmental conditions:
12. Does the behavior occur because the learner is being asked to demonstrate a skill that he/she cannot perform (e.g., talking with peer, completing a difficult math assignment
13. Does the learner exhibit other behaviors immediately before the behavior occurs (antecedents)?
14. What happens immediately after the interfering behavior occurs (consequences)?

DETERMINE THE FUNCTION OF THE BEHAVIOR:

15. To get or obtain:
    - ❑ Attention
    - ❑ Food
    - ❑ Toys
    - ❑ Hugs
    - ❑ Sensory stimulation
    - ❑ Other: _____

To escape or avoid:
- ❑ Attention
- ❑ Difficult task/activity
- ❑ Undesirable activity
- ❑ Social stimulation
- ❑ Sensory stimulation
- ❑ Other: _____

DEVELOP HYPOTHESIS STATEMENT:

16. Antecedents & Consequences:

17. Interfering behavior:

18. Function of behavior:

HYPOTHESIS STATEMENT:

DATA COLLECTION: A-B-C

Learner's Name: _____ **Date/Time:** _____
Observer(s): _____
Interfering Behavior: _____
Directions: Collect data what happens directly before the behavior (antecedent), describe the behavior, and determine what happens directly after the behavior (consequence).

Date	Start Time	Stop Time	Antecedent	Behavior	Consequence

ANECDOTAL NOTES:

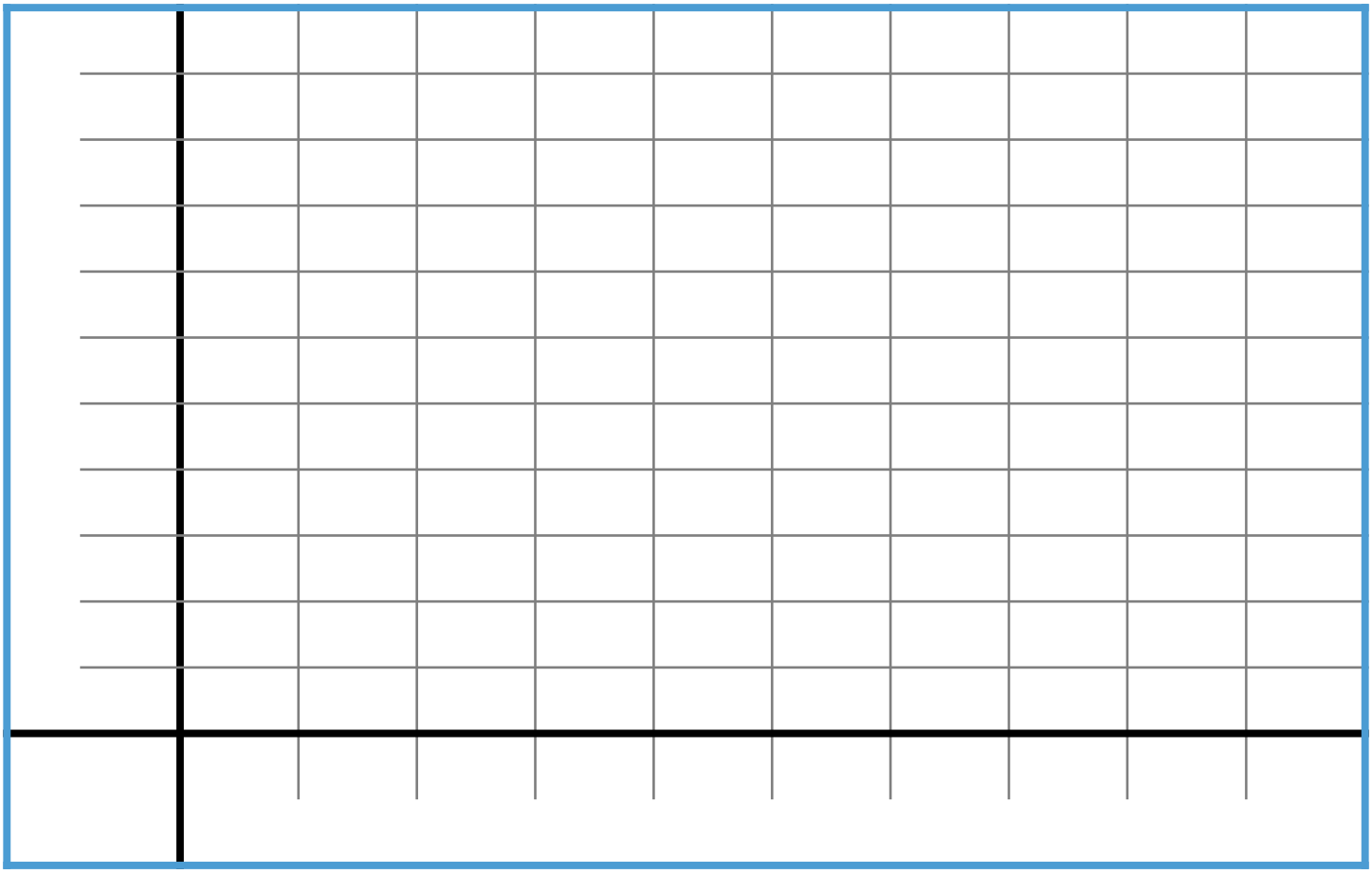
DATA COLLECTION: DURATION

Learner's Name: _____ **Date/Time:** _____
Observer(s): _____
Target Goal/Behavior/Skill: _____
Directions: Collect baseline data on the duration of the learner the behavior interfering with their learning.

Date	Setting	Start Time	Stop Time	Total Time (min)

ANECDOTAL NOTES:

GRAPH BASELINE DATA:



❑ Does the graph of baseline data show a stable trend of the learner's interfering behavior?

If no, continue to collect baseline data until a stable trend can be seen.

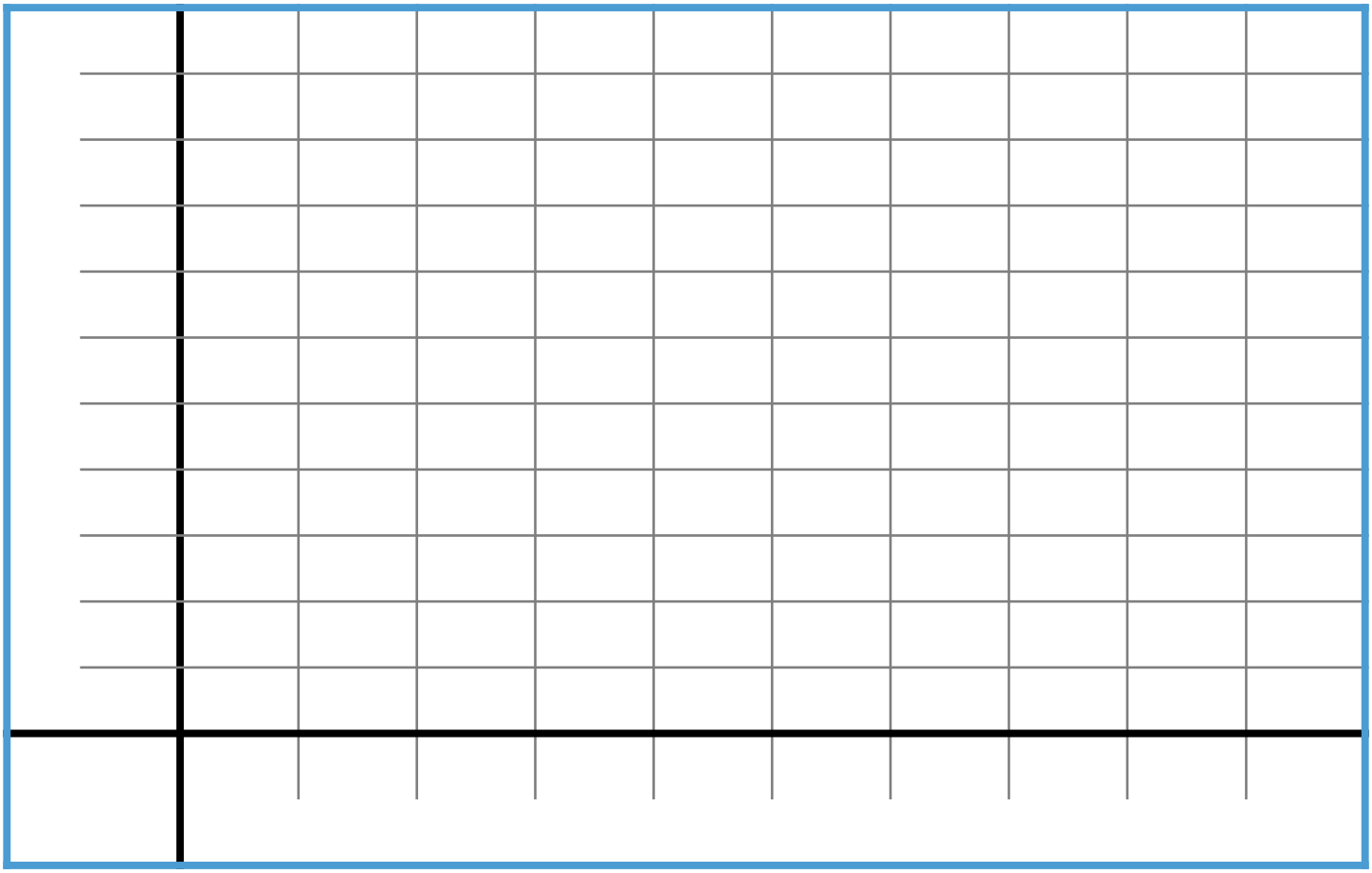
DATA COLLECTION: EVENT SAMPLING

Learner's Name: _____ **Date/Time:** _____
Observer(s): _____
Target Skill/Goal/Behavior: _____
Directions: Collect data on the frequency of the learner demonstrating a behavior that is interfering with their learning.

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

ANECDOTAL NOTES:

GRAPH BASELINE DATA:



❑ Does the graph of baseline data show a stable trend of the learner's interfering or challenging behavior?

If no, continue to collect baseline data until a stable trend can be seen.

OUTCOMES

OUTCOME	DEFINITION	EXAMPLES (NOT AN EXHAUSTIVE LIST)
Academic/ Pre-academic	related to performance on tasks typically taught and used in school settings	matching, sorting, classification, identification of shapes/colors/numbers/letters, sequencing, reading, writing, math, spelling, science, social studies
Adaptive	related to independent living skills and personal care skills	telephone, shopping, transportation, map skills, budgeting, cleaning, cooking, opening containers, eating, dressing, grooming, toileting, safety, health
Behavior	related to decreasing or eliminating behaviors that interfere with the individual's ability to learn, especially those that cause harm to self or others	destructive, self-injurious, aggressive, repetitive, maladaptive
Cognitive	related to performance on measures of intelligence, executive function, problem solving, information processing, reasoning, theory of mind, memory, creativity, or attention	test, achievement tests, early learning scales, Tower of London test, Sally Anne test, Test of Problem Solving
Communication	related to the ability to express wants, needs, choices, feelings, or ideas	language, speech, augmentative communication, sign language, manding, tacting, imitating, gestures and/or symbol use
Joint attention	related to behaviors needed for sharing interests and/or experiences	initiating and responding to eye gaze, coordinated joint looks, showing, pointing
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

MEASURABLE TARGET GOAL

Learner's Name: _____ **Date/Time:** _____
Observer(s): _____
Target Skill/Goal/Behavior: _____
Directions: Use this form to ensure the target behavior is measurable and observable by addressing the when, what, and how.

CREATE A MEASURABLE AND OBSERVABLE GOAL:

1. **WHAT** is the target goal/behavior/skill?

2. **WHEN** and **WHERE** should the target goal/behavior/skill occur?

3. **HOW** will team members/observers know the target goal/behavior/skill has been mastered?

GOAL:

Goal Attainment Scaling

Learner's Name: _____ **Date/Time:** _____
Observer(s): _____
Target Skill/Goal/Behavior: _____
Directions: Establish performance criteria for each target skill or behavior to monitor progress. Goal Attainment Scaling (GAS) can be used to help establish these performance criteria as objectives.

Current Level of Performance **Data gathered on:** _____	
Initial Objective	
Secondary Objective	
Expected Level of Outcome **By when:** _____	
Exceeds Outcome	

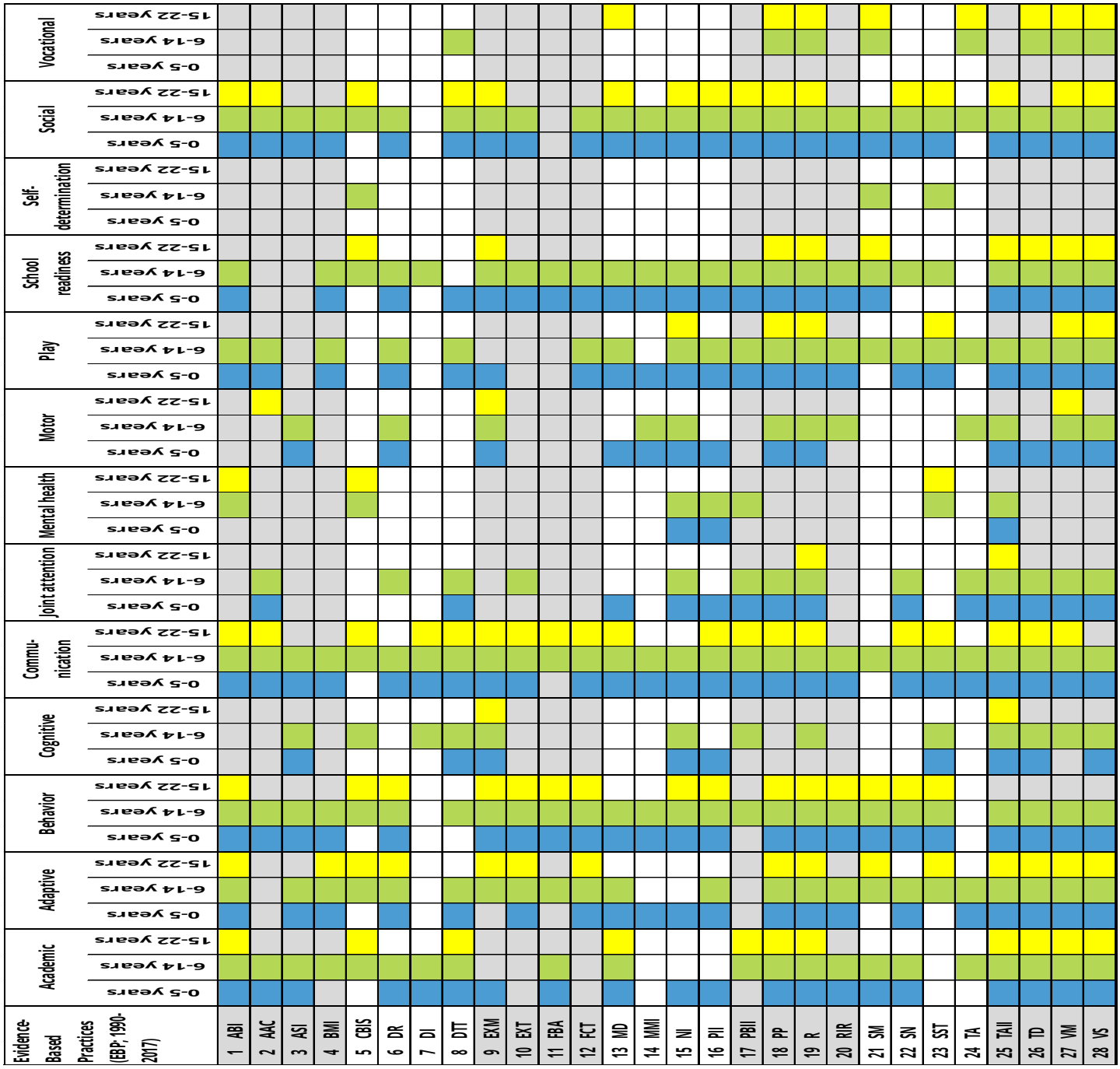
CONSIDERATIONS

Learner's Name: _____ **Date/Time:** _____
Observer(s): _____
Target Skill/Goal/Behavior: _____
Directions: Collect information child and family characteristics, teacher and/or team characteristics, clues found in the goal, and what other resources are available to inform your selection of an EBP.

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 in the goal:	
OTHER RESOURCES	
Current learner supports:	Available equipment:
Team members:	Additional learning experiences:

Domain Matrix

Learner's Name: _____ **Date/Time:** _____
Observer(s): _____
Target Skill/Goal/Behavior: _____
Directions: Use the domain matrix (Steinbrenner et al., 2020) to select an appropriate evidence-based practice to use with a learner with autism. Definitions for the EBPs are located on the following pages.



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 PRESCHOOL (3-5.9):

	ACADEMIC	ADAPTIVE	BEHAVIOR	COGNITIVE	COMMUNICATION	JOINT ATTENTION	MENTAL HEALTH	MOTOR	PLAY	SCHOOL-READINESS	SOCIAL
Antecedent-Based Interventions (ABI)	✓	✓	✓		✓				✓	✓	✓
Augmentative & Alternative Communication (AAC; includes PECS)	✓		✓		✓	✓			✓		✓
Ayres Sensory Integration (ASI)		✓	✓		✓				✓	✓	✓
Behavior Momentum Intervention (BMI)	✓	✓	✓		✓			✓	✓	✓	✓
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 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 (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 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 HIGH SCHOOL (15-18.9):

	ACADEMIC	ADAPTIVE	BEHAVIOR	COGNITIVE	COMMUNICATION	JOINT ATTENTION	MENTAL HEALTH	MOTOR	PLAY	SCHOOL-READINESS SOCIAL	VOCATIONAL
Antecedent-Based Interventions (ABI)	✓	✓	✓		✓		✓				
Augmentative & Alternative Communication (AAC; includes PECS)					✓			✓			✓
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)	✓				✓						✓
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 ADULTS (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)	✓	✓					✓	✓	✓	✓

DEFINITIONS OF EVIDENCE-BASED PRACTICES:

1. **Antecedent-Based Interventions (ABI)** Arrangement of events or circumstances that precede an activity or demand in order to increase the occurrence of a behavior or lead to the reduction of the interfering behaviors.
2. **Ayres Sensory Integration® (ASI®)** Interventions that target a person's ability to integrate sensory information (visual, auditory, tactile, proprioceptive, and vestibular) from their body and environment in order to respond using organized and adaptive behavior.
3. **Augmentative & Alternative Communication (AAC)** Interventions using and/or teaching the use of a system of communication that is not verbal/vocal which can be aided (e.g., device, communication book) or unaided (e.g., sign language)
4. **Behavioral Momentum Intervention (BMI)** The organization of behavior expectations in a sequence in which low probability, or more difficult, responses are embedded in a series of high probability, or less effortful, responses to increase persistence and the occurrence of the low probability responses.
5. **Cognitive Behavioral/Instructional Strategies (CBIS)** Instruction on management or control of cognitive processes that lead to changes in behavioral, social, or academic behavior.
6. **Differential Reinforcement of Alternative, Incompatible, or Other Behavior (DR)** A systematic process that increases desirable behavior or the absence of an undesirable behavior by providing positive consequences for demonstration/non-demonstration of such behavior. These consequences may be provided when the learner is: a) engaging in a specific desired behavior other than the undesirable behavior (DRA), b) engaging in a behavior that is physically impossible to do while exhibiting the undesirable behavior (DRI), or c) not engaging in the undesirable behavior (DRO).
7. **Direct Instruction (DI)** A systematic approach to teaching using a sequenced instructional package with scripted protocols or lessons. It emphasizes teacher and student dialogue through choral and independent student responses and employs systematic and explicit error corrections to promote mastery and generalization.
8. **Discrete Trial Training (DTT)** Instructional approach with massed or repeated trials with each trial consisting of the teacher's instruction/presentation, the child's response, a carefully planned consequence, and a pause prior to presenting the next instruction.
9. **Exercise & Movement (EXM)** Interventions that use physical exertion, specific motor skills/ techniques, or mindful movement to target a variety of skills and behaviors.
10. **Extinction (EXT)** The removal of reinforcing consequences of a challenging behavior in order to reduce the future occurrence of that behavior.
11. **Functional Behavioral Assessment (FBA)** A systematic way of determining the underlying function or purpose of a behavior so that an effective intervention plan can be developed.
12. **Functional Communication Training (FCT)** A set of practices that replace an interfering behavior that has a communication function with more appropriate and effective communication behaviors or skills.
13. **Modeling (MD)** Demonstration of a desired target behavior that results in use of the behavior by the learner and that leads to the acquisition of the target behavior.

14. **Music-Mediated Intervention (MMI)** Intervention that incorporates songs, melodic intonation, and/or rhythm to support learning or performance of skills/behaviors. It includes music therapy, as well as other interventions that incorporate music to address target skills.
15. **Naturalistic Intervention (NI)** A collection of techniques and strategies that are embedded in typical activities and/or routines in which the learner participates to naturally promote, support, and encourage target skills/behaviors.
16. **Parent-Implemented Intervention (PII)** Parent delivery of an intervention to their child that promotes their social communication or other skills or decreases their challenging behavior.
17. **Peer-Based Instruction & Intervention (PBII)** Intervention in which peers directly promote autistic children's social interactions and/or other individual learning goals, or the teacher/ other adult organizes the social context (e.g., play groups, social network groups, recess) and when necessary, provides support (e.g., prompts, reinforcement) to the autistic children and their peer to engage in social interactions.
18. **Prompting (PP)** Verbal, gestural, or physical assistance given to learners to support them in acquiring or engaging in a targeted behavior or skill.
19. **Reinforcement (R)** The application of a consequence following a learner's use of a response or skills that increases the likelihood that the learner will use the response/skills in the future.
20. **Response Interruption & Redirection (RIR)** The introduction of a prompt, comment, or other distractors when an interfering behavior is occurring that is designed to divert the learner's attention away from the interfering behavior and results in its reduction.
21. **Self-Management (SM)** Instruction focusing on learners discriminating between appropriate and inappropriate behaviors, accurately monitoring, and recording their own behaviors, and rewarding themselves for behaving appropriately.
22. **Social Narratives (SN)** Interventions that describe social situations in order to highlight relevant features of a target behavior or skill and offer examples of appropriate responding.
23. **Social Skills Training (SST)** Group or individual instruction designed to teach learners ways to participate in their interactions appropriately and successfully with others.
24. **Task Analysis (TA)** A process in which an activity or behavior is divided into small, manageable steps in order to assess and teach the skill. Other practices, such as reinforcement, video modeling, or time delay, are often used to facilitate acquisition of the smaller steps.
25. **Technology-Aided Instruction & Intervention (TAII)** Instruction or intervention in which technology is the central feature and the technology is specifically designed or employed to support the learning or performance of a behavior or skill for the learner.
26. **Time Delay (TD)** A practice used to systematically fade the use of prompts during instructional activities by using a brief delay between the initial instruction and any additional instructions or prompts.
27. **Video Modeling (VM)** A video-recorded demonstration of the target behavior or skill shown to the learner to assist learning in or engaging in a desired behavior or skill.
28. **Visual Supports (VS)** A visual display that supports the learner engaging in a desired behavior or skills independent of additional prompts.

PLANNING CHECKLIST

Learner's Name: _____ **Date/Time:** _____
Observer(s): _____
Target Skill/Goal/Behavior: _____
Directions: Complete this checklist to select an appropriate practice to use with the learner.

PLANNING:

- ❑ Has the target goal/behavior/skill been identified?
- ❑ Has baseline data and/or a functional behavior assessment been collected through direct observation of the learner?
- ❑ Is the baseline data stable? **If no, continue to collect data until the trend is stable.**
- ❑ Is the target goal/behavior/skill measurable and observable? Does it clearly state **what** the target goal/behavior/skill is, **when** it will occur, and **how** team members/observers will know it has been mastered?
- ❑ Have considerations (learner and family priorities, preferences, and characteristics, teacher/team characteristics, clues found in the target goal/skill/behavior, and other resources) been identified?

SELECT AN EBP:

Selected EBP: _____

- ❑ Is this selected practice appropriate for the learner's target goal/behavior/skill?
- ❑ Does the learner have needed prerequisite skills/abilities?
- ❑ Does the learner require additional adaptations/ modifications/supports? Such as visual supports or a communication device?
- ❑ Have reinforcers/rewards for the learner been identified based on the learner's interests/preferred items and/or activities?
- ❑ Are additional materials and/or resources for using this selected practice ready and available?

SELECT ADDITIONAL EBPS:

- ❑ Reinforcement (R)
- ❑ Prompting (PP)
- ❑ Modeling (MD)
- ❑ Task Analysis (TA)
- ❑ Time Delay (TD)
- ❑ Visual Supports
- ❑ Other: _____

ADDITIONAL RESOURCES

IEP to EBP Tool:
The IEP to EBP Tool is designed to support your selection of an evidence-based practice for a learner on the spectrum.

For more information, please visit: **https://afirm.fpg.unc.edu/selecting-an-ebp**

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**

GLOSSARY

Baseline data - data collected on current performance level prior to implementation of intervention.

Baseline - information gathered from multiple sources to better understand the target behavior, before using an intervention or practice

Duration data - Records how long a learner engages in a particular behavior or skill.

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

Frequency data - used to measure how often the learner engages in the target skill or behavior.

Functional Behavioral Assessment (FBA) - a systematic way of determining the underlying function or purpose of a behavior so that an effective intervention plan can be developed.

Event sampling - collects frequency data at every instance the behavior occurs

Evidence-Based Practice (EBP) - is an instructional/intervention procedure for which research has shown there are positive outcomes for learners

Generalization - when the target skill or behavior continues to occur when the intervention ends, in multiple settings, and with multiple individuals (e.g., peers, teachers, parents)

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

Interfering behavior - is a behavior that interferes with the learner's ability to learn.

Individualized intervention: an intervention that is planned and implemented in a way specific to the learner receiving the intervention

Target behavior - the behavior or skill that is the focus of the intervention. Behavior may need to be increased or decreased.

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 on the spectrum

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