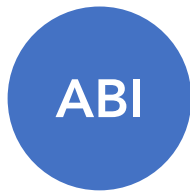
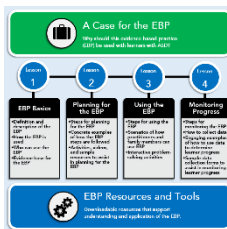


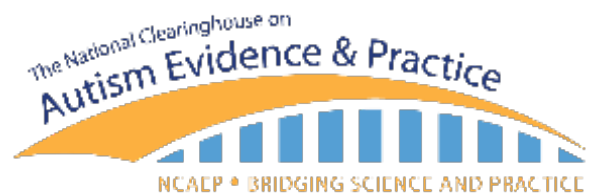
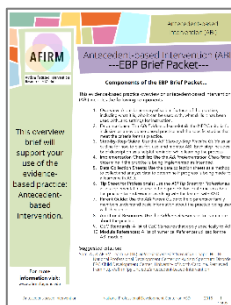


# ---Components of the Autism Focused Intervention Resources & Modules (AFIRM)---

This resource provides an overview of the Autism Focused Intervention Resources and Modules and includes descriptions of the following AFIRM components:



1. **Learn with AFIRM:** A summary of the learning features of AFIRM, including the module structure and who can use AFIRM.
2. **EBP Modules:** An overview of the EBP modules, including definitions of each EBP and what ages and domains research has demonstrated effectiveness for the EBP.
3. **Resources:** A summary and example of each AFIRM resource. AFIRM resources include: Evidence-base, Step-by-Step Guide, Implementation Checklist, Data Collection Sheets, and more.
4. **Professional Development Options:** A description of how to earn continuing education credits for professional development.
5. **Future of AFIRM:** Learn more about the future of AFIRM.



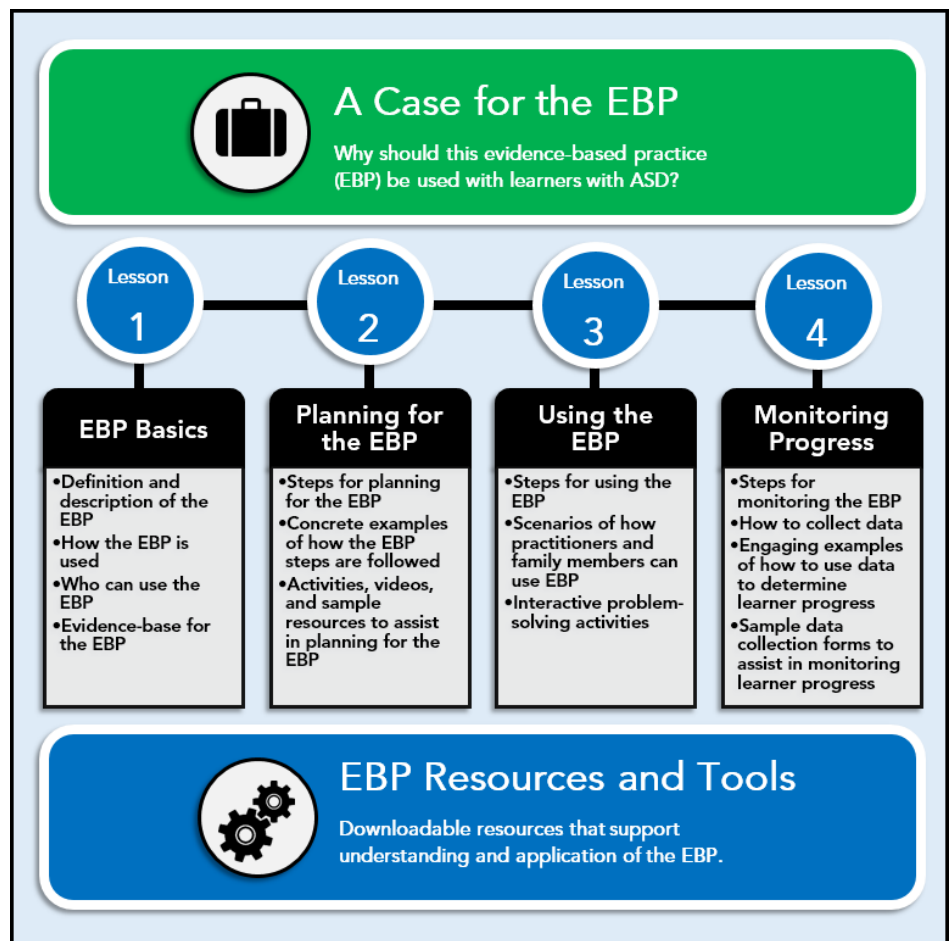
Suggested citation:

AFIRM Team. (2019). *Components of the Autism Focused Intervention Resources & Modules (AFIRM)*. Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, Frank Porter Graham Child Development Center, University of North Carolina. Retrieved from <https://afirm.fpg.unc.edu/afirm-modules>

## ---Learn with AFIRM---

The AFIRM modules facilitate learning of an evidence-based practice through four lessons and activities, such as case examples, videos, and knowledge checks for family members, school-based personnel, related service providers, and university faculty and students.

1. **EBP Basics:** A description of the evidence-based practice.
2. **Plan:** Steps to guide preparing to use the evidence-based practice.
3. **Use:** Descriptions of each step when using the evidence-based practice.
4. **Monitor:** Steps to guide monitoring the use of the evidence-based practice.

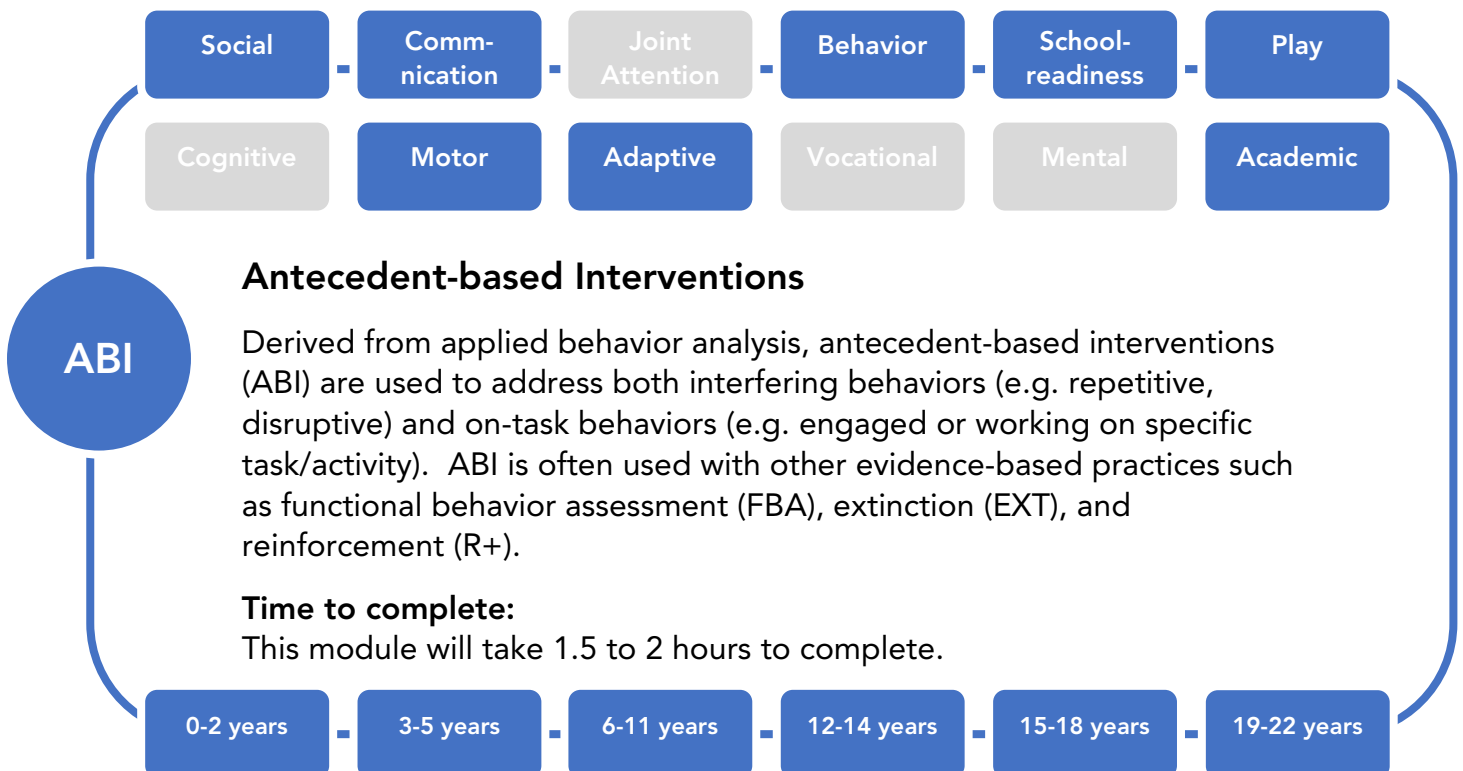


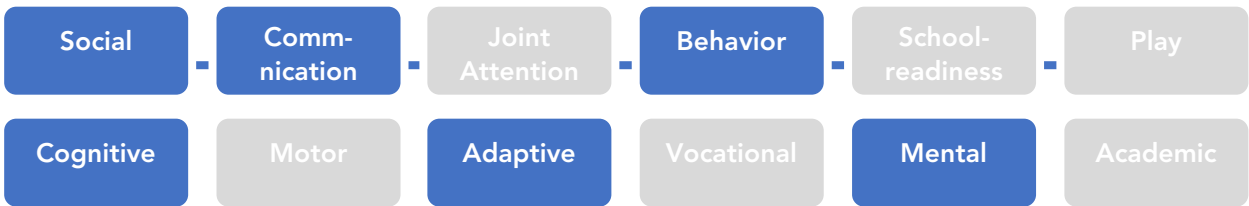
## ---AFIRM Modules---

In 2014, the National Professional Development Center on Autism Spectrum Disorders (ASD) identified 27 focused interventions as evidence-based practices based on rigorous criteria (Wong et al., 2014; 2015). These 27 evidence-based practices (EBP) are effective for students and individuals with ASD.

Each EBP below and on the following pages provides a description of the practice along with the domains (highlighted in blue; for example, social, communication, joint attention...), and ages (also highlighted in blue) research has proven the EBP is effective for addressing. This does not mean the practice will not work for domains and ages grayed out, only that there is no research yet showing effectiveness.

Each EBP diagram also provides the average time the module should take to complete. This may be more or less time depending the level of familiarity and previous knowledge of the practice.





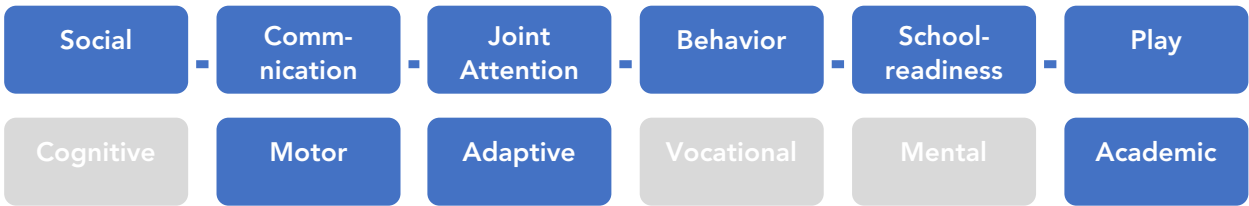
**CBI**

### Cognitive Behavioral Intervention

Learners with ASD often struggle with understanding their emotions, thoughts, behaviors, as well as how they are all connected. Cognitive behavioral intervention is used to teach learners with autism strategies to change negative emotions or thoughts from escalating.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.



**DR**

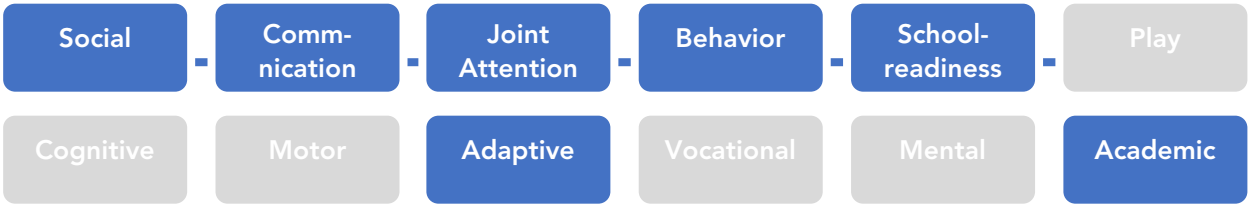
### Differential Reinforcement

The rationale for differential reinforcement is that by (a) reinforcing the nonoccurrence or decreased occurrence of interfering behaviors or (b) reinforcing behaviors that are more functional or incompatible with the interfering behavior, then interfering behaviors will decrease.

**Time to complete:**

This module will take 2.5 to 3 hours to complete.





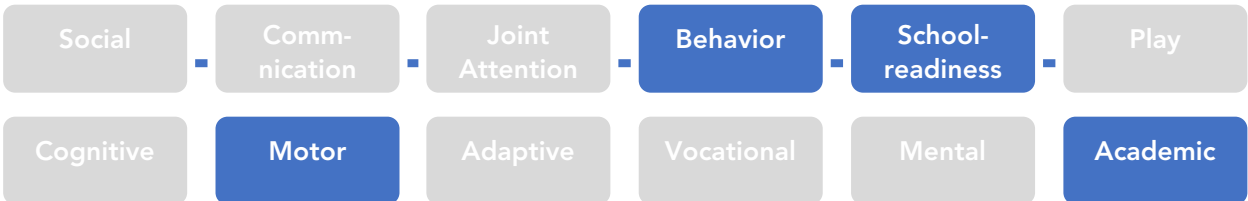
**DTT**

**Discrete Trial Training**

Based on the principles of applied behavior analysis (ABA), discrete trial training (DTT) is used to develop a new response to a stimulus. DTT is based upon the principle of breaking down behavior into discrete steps called a “single teaching unit” or learning trials. Trials are repeated several times with the learner receiving reinforcement for responding correctly.

**Time to complete:**

This module will take 2 to 3 hours to complete.



**ECE**

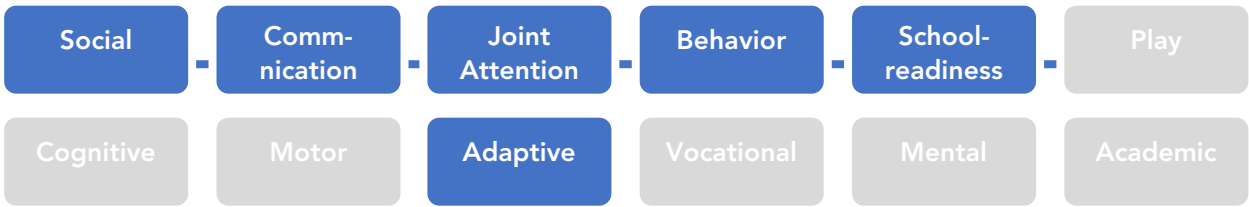
**Exercise**

In addition to physical fitness, exercise also can be used as an intervention for learners with ASD to increase desired behaviors, such as academic engagement, time on task, correct responding, and task completion. Exercise can decrease inappropriate behaviors, such as aggression, self-injury, self-stimulatory/stereotypic behaviors, and time off task.<sup>5-8</sup>

**Time to complete:**

This module will take 1.5 to 2 hours to complete.





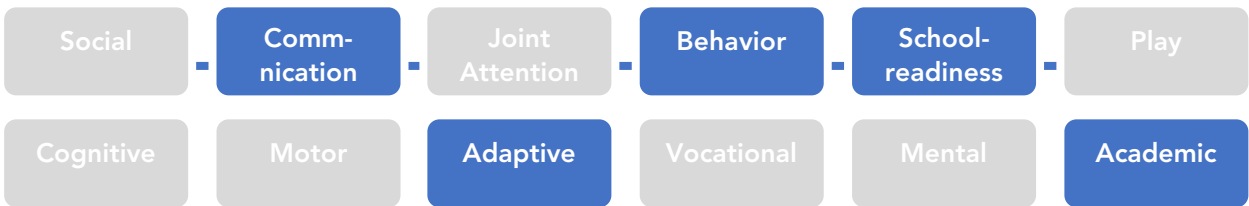
**EXT**

**Extinction**

Extinction is a behavioral procedure that results in the reduction or elimination of a behavior when an individual stops receiving reinforcement for engaging in that behavior.<sup>1</sup>

**Time to complete:**

This module will take 1.5 to 2 hours to complete.



**FBA**

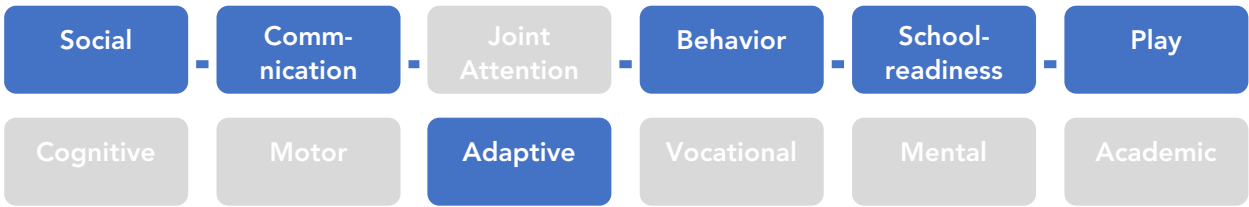
**Functional Behavior Assessment**

FBA can be used when the intensity, duration, or type of interfering behavior creates safety concerns or impacts a child’s development. An FBA assists the IEP team in understanding the function or purpose of a specific interfering behavior. Data collection is an essential component of FBA.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.





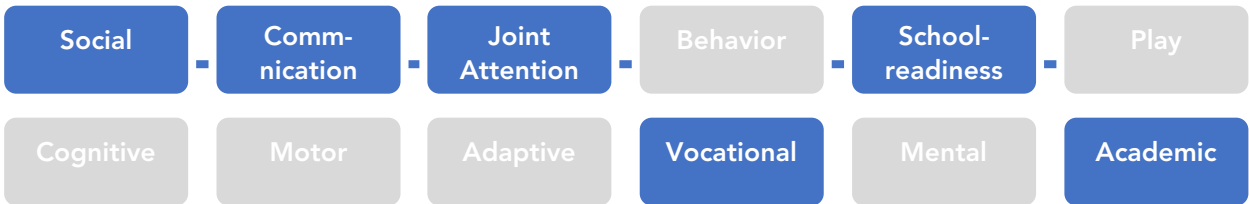
**FCT**

### Functional Communication Training

Functional communication training addresses inappropriate, maladaptive, and even aggressive behaviors towards others and themselves, by systematically identifying the function of the behavior and providing a replacement behavior in the form of appropriate communication that will enable the learner to get their needs met in a more acceptable way.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.



**MD**

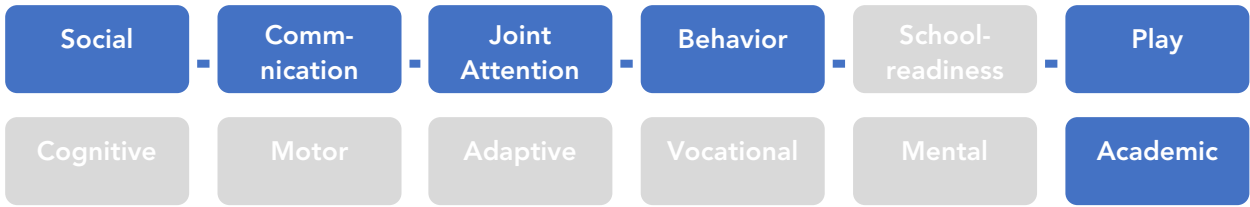
### Modeling

Modeling involves the learner observing someone correctly performing a target behavior. The demonstration of the behavior before the learner is expected to demonstrate the behavior serves as a primer for the behavior. In addition, modeling can be used as a prompt to provide extra support to the learner after the direction has been provided and the child is trying to use the behavior.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.





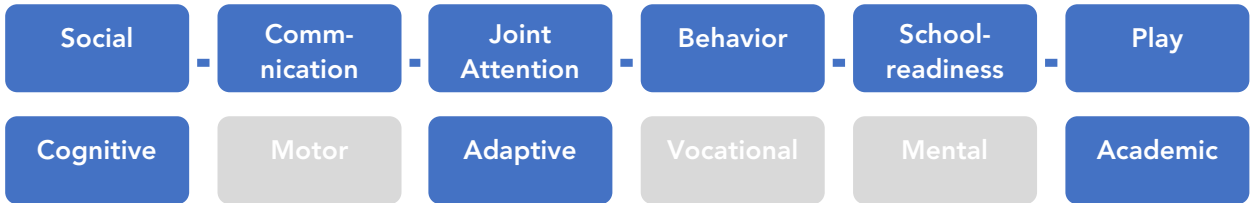
**NI**

**Naturalistic Interventions**

Naturalistic intervention (NI) integrates the principles of applied behavior analysis (ABA) into the natural environment, or into a learner’s everyday routines and activities so that the acquired skills may be more easily generalized.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.



**PII**

**Parent-implemented Interventions**

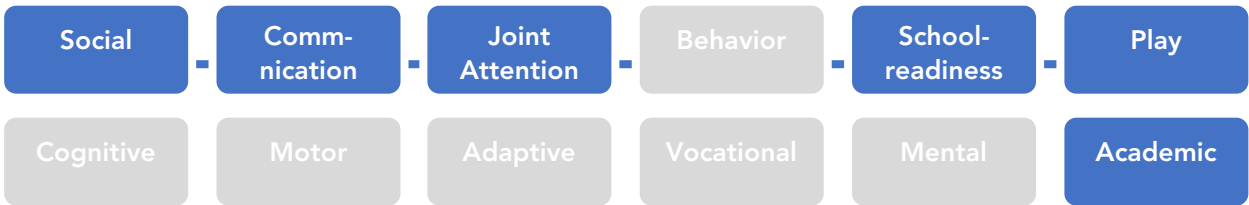
Parents often desire to gain skills and practices that they can implement with their children throughout these routines and activities. Practitioners should use parent-implemented interventions (PII) to train and coach parents to implement EBPs with their children throughout daily routines and activities.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.







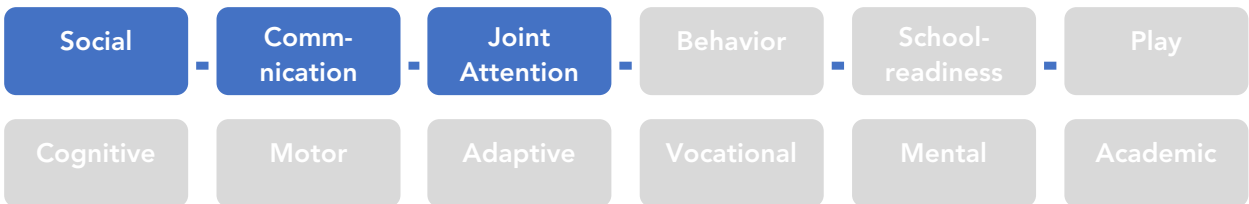
**PMII**

**Peer-mediated Instruction & Intervention**

Peer-mediated instruction and intervention (PMII) can address social concerns by training peers how to initiate and respond to social interactions of learners with ASD. With a foundation in behaviorism and social learning theory,<sup>1</sup> PMII involves systematically teaching peers without disabilities, ways of engaging learners with ASD in positive and meaningful social interactions.<sup>2-4</sup>

**Time to complete:**

This module will take 1.5 to 2 hours to complete.



**PECS**

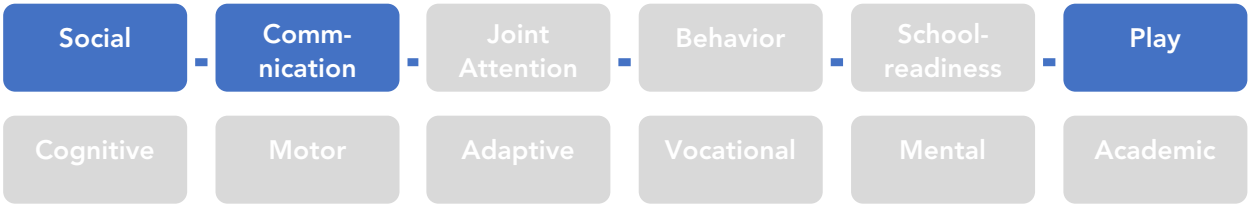
**Picture Exchange Communication System ®**

PECS is a behavior based intervention that teaches the learner to use visual-graphic symbols to communicate with others.<sup>2,5</sup> Learners with ASD are taught to give a picture or graphic symbol of a desired item to a communicative partner in exchange for the actual item through a six phase process. Each phase of PECS instruction builds upon the previous phase.

**Time to complete:**

This module will take 2.5 to 3 hours to complete.





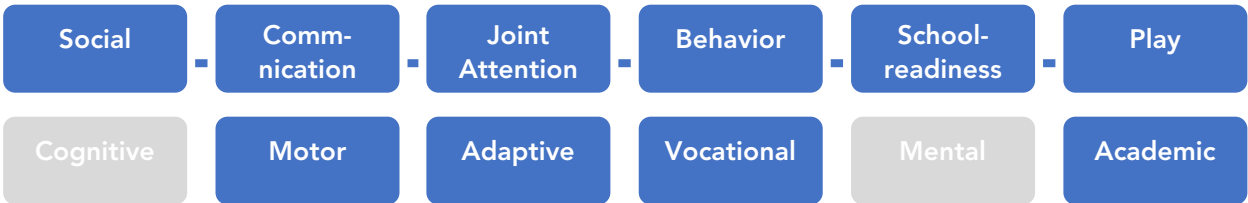
**PRT**

**Pivotal Response Training**

Facilitating a PRT interaction involves a simultaneous consideration of the learner with ASD’s developmental levels and progression, along with the intentional progression through the antecedent-behavior-consequence (ABC) pattern of behavior that is familiar in other behavioral interventions.

**Time to complete:**

This module will take 2 to 3 hours to complete.



**PP**

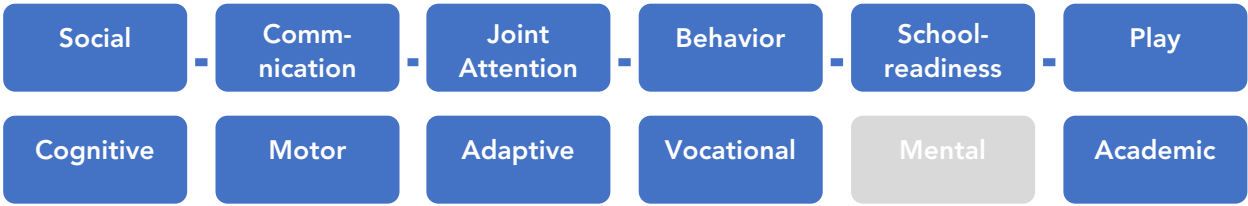
**Prompting**

Prompting includes any help given to a learner that assists the learner in using a specific skill or behavior. Sometimes referred to as an *errorless learning method*, prompting reduces incorrect responding as learners acquire new skills.

**Time to complete:**

This module will take 2.5 to 3 hours to complete.





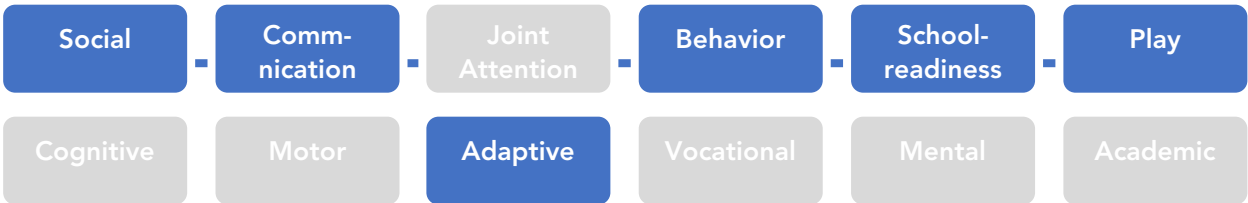
**R+**

**Reinforcement**

Reinforcement describes the relationship between learner behavior and a consequence that follows the behavior. The relationship between the learner’s use of a skill/behavior and the consequence is only reinforcing if the consequence increases the likelihood the learner performs the skill or behavior.

**Time to complete:**

This module will take 2.5 to 3 hours to complete.



**RIR**

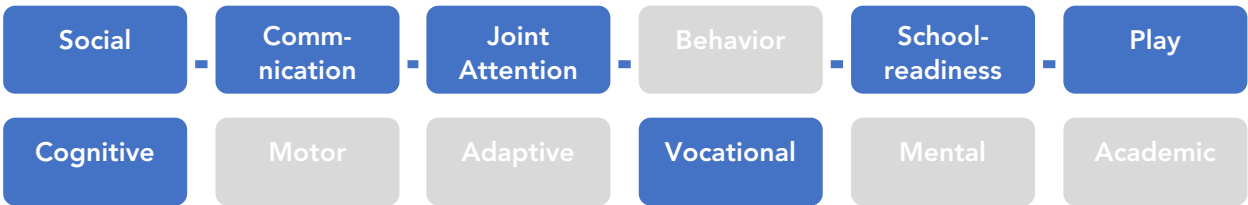
**Response Interruption & Redirection**

The rationale for RIR is that by introducing a prompt, comment, or other distractor when an interfering behavior is occurring, then occurrences of interfering behaviors will decrease.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.





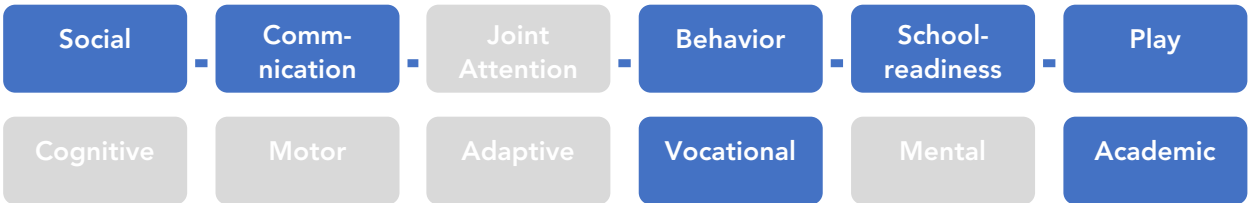
SC

### Scripting

The use of scripts as an intervention capitalizes upon the strengths of learners with ASD by providing specific, appropriate models for language and/or social behavior in a structured way that will support the learner in engaging in a communicative interaction with a partner.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.



SM

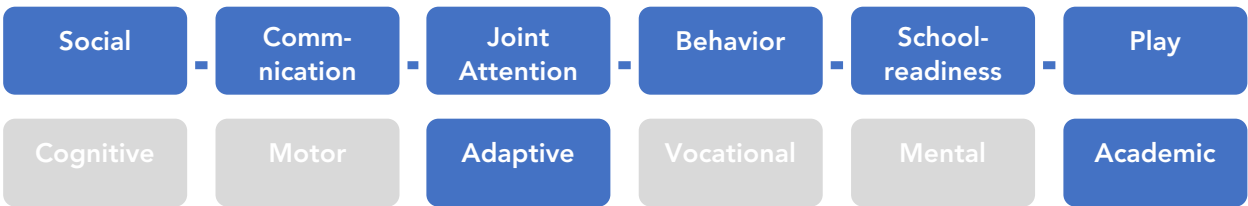
### Self-management

Self-management systematizes self-regulation strategies for learners with ASD to learn the rules and norms needed to act appropriately in a given situation. Self-regulation strategies can include self-monitoring, self-reflection, and adapting to a given context.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.





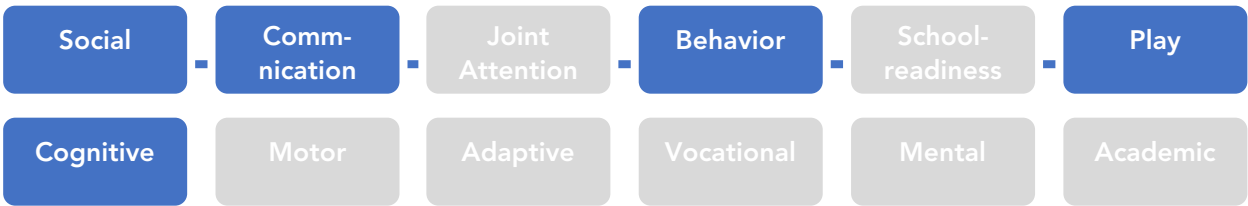
**SN**

### Social Narratives

Social narratives describe social situations for learners with ASD by providing relevant cues, explanation of the feelings and thoughts of others in the social situation, and descriptions of appropriate behavior expectations.<sup>4</sup> Typically, social narratives are individualized based upon the needs of the learner, short, and written from the perspective of the learner.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.



**SST**

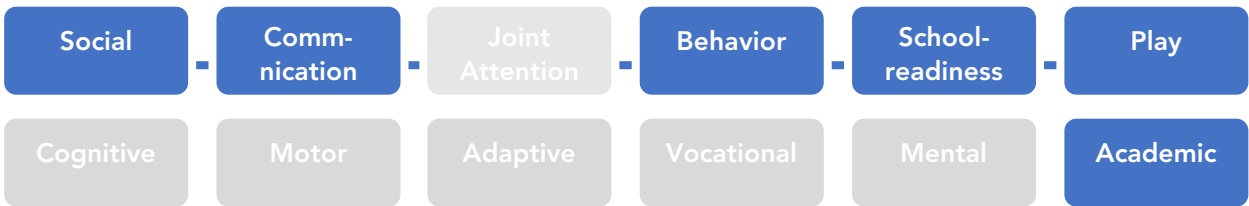
### Social Skills Training

Social skills training (SST) refers to any adult-directed instruction in which social skills are targeted for improvement. SST typically occurs in either a group<sup>4</sup> or individual format,<sup>12</sup> and may also include facilitated practice in classroom settings.<sup>7,10</sup>

**Time to complete:**

This module will take 1.5 to 2 hours to complete.





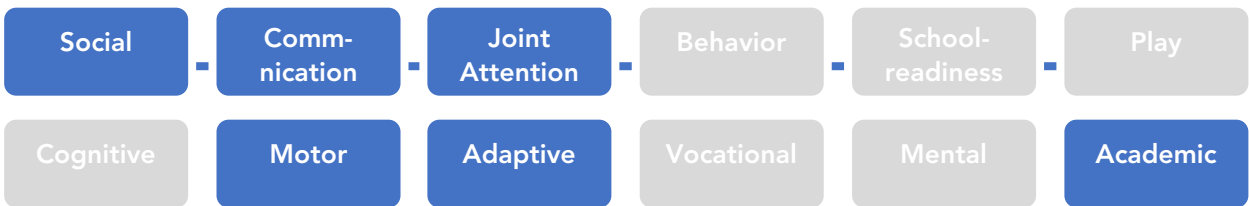
**SPG**

### Structured Play Groups

Structured play groups (SPG) are interventions facilitated by adults used to teach a broad range of skills and behaviors during playtime with a small group of children who meet consistently in a defined space.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.



**TA**

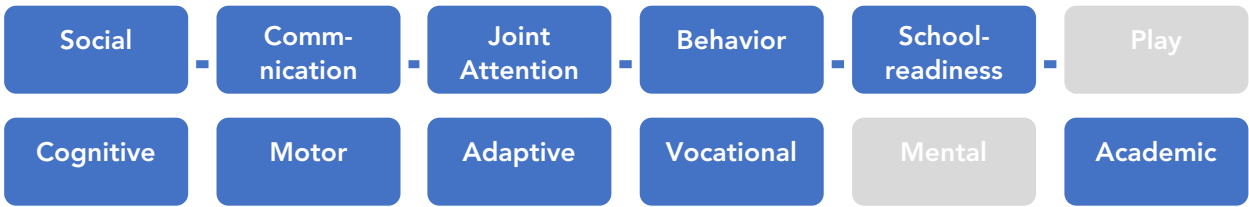
### Task Analysis

Task analysis (TA) can be used to help break down and teach these chained behaviors.<sup>1</sup> Chained behaviors are behaviors or skills which consist of multiple steps such as tying shoes, grocery shopping, writing a paper, or cooking. Once chained behaviors are broken into smaller steps, team members work with the learner to systematically teach the individual steps.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.





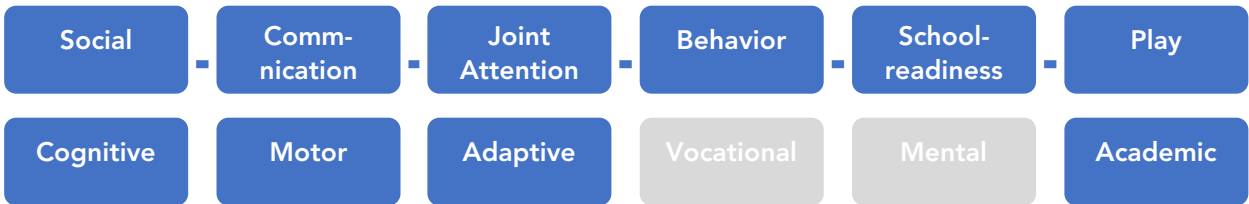
**TAII**

**Technology-aided Instruction & Intervention**

TAll refers to instruction or intervention in which technology is the central feature supporting the acquisition of a goal for the learner. Technology is defined as “any electronic item, equipment, application, or virtual network that is used intentionally to increase/maintain, and/or improve daily living, work/productivity, and recreation/leisure capabilities of children with autism spectrum disorders.”<sup>1</sup>

**Time to complete:**

This module will take 2 to 2.5 hours to complete.



**TD**

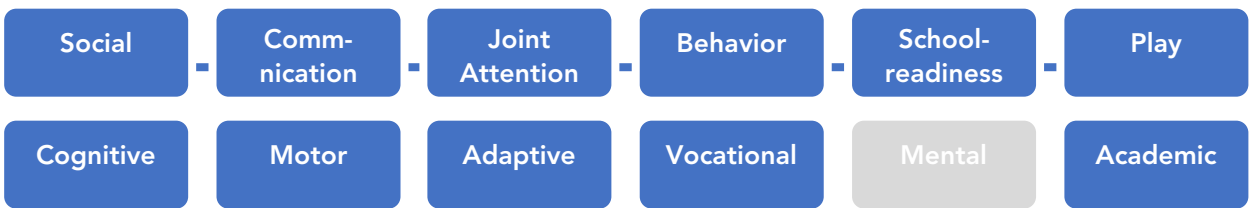
**Time Delay**

Prompt dependence limits a learner’s ability to generalize skills to new situations, activities, and individuals. Adults and team members can prevent prompt dependence by using time delay. Time delay is a response prompting procedure that systematically fades prompts during instructional activities.<sup>2</sup>

**Time to complete:**

This module will take 1.5 to 2 hours to complete.





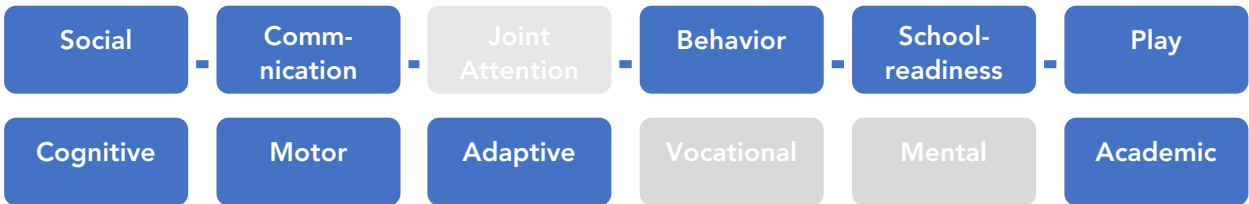
VM

### Video Modeling

Video modeling (VM) is an intervention that uses technology (video recording and display equipment) to provide a visual model of a targeted behavior or skill. Thus, it is often referred to as an assistive technology method.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.



VS

### Visual Supports

Visual supports are concrete cues that are paired with, or used in place of, a verbal cue to provide the learner with information about a routine, activity, behavioral expectation, or skill demonstration.<sup>4</sup> Visual supports might include: pictures, written words, objects, arrangement of the environment, visual boundaries, schedules, maps, labels, organization systems, timelines, and scripts.

**Time to complete:**

This module will take 1.5 to 2 hours to complete.





# ---AFIRM Resources---

Each of the AFIRM modules comes with free resources to aid in the planning, using, and monitoring of the evidence-based practice, along with additional resources, tip sheets, and guides. These resources are located within each module and on the **Resources** tab after logging into AFIRM.

1. **Evidence-base:** The *EBP Evidence-base* details the NPDC criteria for inclusion as an evidence-based practice and the specific studies that meet the criteria for this practice.

**---Evidence-base for Differential Reinforcement---**

The National Professional Development Center on ASD has adopted the following criteria to determine if a practice is evidence-based. The EBP Report provides more information about the review process (Wong et al., 2014). Efficacy must be established through high quality, peer-reviewed research in scientific journals using:

- randomized or quasi-experimental design studies (two high quality experimental or quasi-experimental group design studies),
- single-subject design studies (three different investigators or research groups must have conducted five high quality single subject design studies), or
- combination of evidence (one high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups (across the group and single subject design studies)).

**---OVERVIEW---**

Differential reinforcement is an application of reinforcement designed to reduce the occurrence of interfering behaviors (e.g., aggression, self-injury, stereotypic behavior). Differential reinforcement meets the evidence-based practice criteria with 35 single case design studies. The practice has been effective with learners in preschool (4.5 years) to high school learners (15-22 years). Studies included in the 2014 EBP report detailed how differential reinforcement can be used effectively to address: social, communication, joint attention, behavior, school-readiness, play, motor, adaptive and academic outcomes.

In the table below, the outcomes identified by the evidence base are shown by age of participants.

Early Intervention (0-3)	Preschool (3-6)	Elementary (6-11)	Middle (12-14)	High (15-22)
	Social	Social	Social	
		Communication	Communication	
		Joint Attention		
	Behavior	Behavior	Behavior	Behavior
	School-Readiness	School-Readiness	School-Readiness	
		Play		
		Motor		
		Adaptive		Adaptive
		Academic		

Differential Reinforcement National Professional Development Center on ASD 2017 3 of 25

2. **Step-by-Step Guide:** Use the *EBP Step-by-Step Practice Guide* as an outline for how to plan for, use, and monitor EBP. Each step includes a brief description as a helpful reminder while learning the process.

**Discrete Trial Training (DTT) ---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...?

- Identified the behavior...
- Collected baseline data through direct observation...
- 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...

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](http://www.afirm.fpg.unc.edu)

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3. **Implementation Checklist:** Use the *EBP Implementation Checklist* to determine if the practice is being implemented as intended.

Extinction (EXT)  
---Implementation Checklist---

Observation Date Observer's Initials	1	2	3	4
	Observer's Initials			
<b>Step 1: Planning</b>				
1.1 Conduct a functional behavior assessment				
1.2 Determine if EXT is appropriate				
1.3 Select an appropriate replacement behavior				
1.4 Select prompt for the replacement behavior				
1.5 Identify additional evidence-based practices				
1.6 Identify variables that may affect EXT				
1.7 Create and have a crisis plan in place in the event of learner aggression				
1.8 Identify and train team members and others				
<b>Step 2: Using</b>				
2.1 Describe the plan to the learner, if appropriate				
2.2 Consistently withhold reinforcers and maintaining consequences				
2.3 Prompt and reinforce use of the replacement behavior				
2.4 Gradually fade prompts				
2.5 Expect extinction burst, but do not reinforce them				
<b>Step 3: Monitoring</b>				
3.1 Collect and analyze data on interfering behavior and prompting				
3.2 Look for signs of spontaneous recovery				
3.3 Continue to reinforce use of the replacement behavior				
3.4 Determine next steps based on learner progress				

*Before you start:*

*Have you...*

- Identified the behavior?
- Collected baseline data through direct observation?
- 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.

*If the answer to any of these is "no", refer to the "Selecting EBPs" section on the website.*

AFIRM Autism Focused Intervention Resources & Modules  
Extinction National Professional Development Center on ASD 2018 12 of 24

4. **Planning Worksheets & EBP Diagrams:** Use the planning worksheets & EBP diagrams to guide understanding of the EBP and prepare for using the EBP.

Social Skills Training

AFIRM  
Autism Focused Intervention Resources & Modules

---SST Planning Worksheet---

Learner's Name: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
Observer's: \_\_\_\_\_  
Target Behavior: \_\_\_\_\_

**Social Skills Training:**  
Use this worksheet as a guide for planning a social skills training intervention.

**Select learners:**

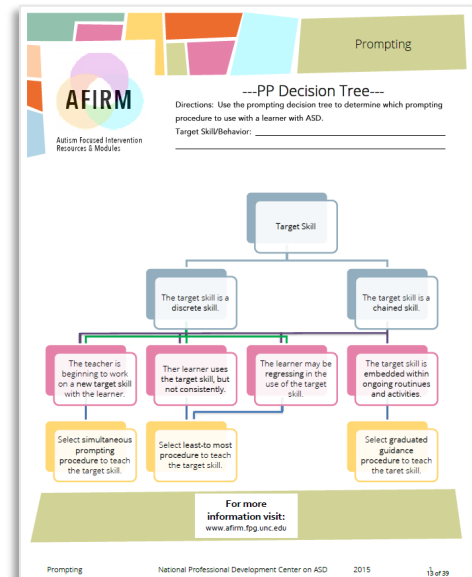
- Group or individual training?  
I will plan to train a (circle 1): group individual  
(if individual is selected, move on to 2.)
- Social skills training: Planning for a group  
What grade level(s) will be included: \_\_\_\_\_  
Needs of included student: \_\_\_\_\_  
Include peer models:  Yes  No

**Identify social skills to target:**  
Identifying skills includes conducting a social skills assessment. Select any or all of the following options.

- Review of records and previous assessments
- Interviews with parents and current or recent providers
- Talking with the learner
- Observations
- Use of formal assessment tools
- Completion of skill inventories

**Content of lessons:**  
Determine what social skill will be addressed: \_\_\_\_\_  
Describe the underlying components to the skill that will need to be addressed. \_\_\_\_\_

Social Skills Training National Professional Development Center on ASD 2015 15 of 27





5. **Data Collection Sheets:** Use the data collection sheets as a method to collect and analyze data to determine if progress is being made for a learner with ASD.

Reinforcement

AFIRM  
Autism Focused Intervention Resources & Modules

---Time Sampling Data Collection---

Learner's Name: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Observer(s): \_\_\_\_\_  
 Target Behavior(s): \_\_\_\_\_

**Time Sampling:**  
 Use time sampling to monitor the frequency of the target behavior by recording if the learner is engaging in the behavior before, during, or after (re)reinforcement.

Date	Time			Total	Before, During, or After reinforcement

**Anecdotal Notes:**

Date	Observer Initials	Target Skill/Behavior, Comments, and Plans for Next Steps

For more information visit: [www.afirm.fpg.unc.edu](http://www.afirm.fpg.unc.edu)

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6. **Tip Sheet for Professionals:** Use the *EBP Tip Sheet for Professionals* as a supplemental resource to help provide basic information about the practice to professionals working with the learner with ASD.

Functional Communication Training (FCT)  
---Professional's Guide---

**STEPS FOR IMPLEMENTING**

**1. Plan**

- Identify an interfering behavior appropriate for FCT
- Determine function of interfering behavior through Functional Behavior Assessment
- Choose a replacement communicative behavior
- Ensure all team members are familiar with the replacement communicative behavior
- Gather and organize supporting materials

**2. Use**

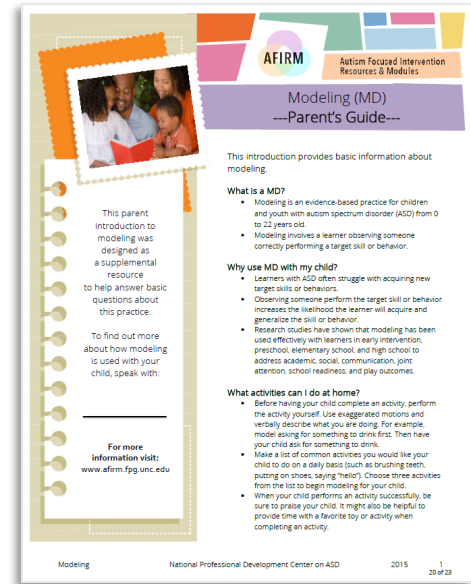
- Teach use of the replacement communicative behavior using a most to least prompt hierarchy
- Reinforce the replacement communicative behavior
- Remove reinforcement for the interfering behavior
- Support the learner's generalization of the replacement communicative behavior across people and settings
- Consider shaping the replacement communicative behavior
- Thin reinforcement for replacement communicative behavior

**3. Monitor**

- Collect data on the interfering behavior and learner's replacement communicative behavior
- Determine next steps based on the learner's progress

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7. **Parent Guide:** Use the *EBP Parent Guide* to help parents or family members understand basic information about the practice being used with their child.



**AFIRM** Autism Focused Intervention Resources & Modules

**Modeling (MD)**  
---Parent's Guide---

This introduction provides basic information about modeling.

**What is a MD?**

- Modeling is an evidence-based practice for children and youth with autism spectrum disorder (ASD) from 0 to 22 years old.
- Modeling involves a learner observing someone correctly performing a target skill or behavior.

**Why use MD with my child?**

- Learners with ASD often struggle with acquiring new target skills or behaviors.
- Observing someone perform the target skill or behavior increases the likelihood the learner will acquire and generalize the skill or behavior.
- Research studies have shown that modeling has been used effectively with learners in early intervention, preschool, elementary school, and high school to address academic, social, communication, joint attention, school readiness, and play outcomes.


**What activities can I do at home?**

- Before having your child complete an activity, perform the activity yourself. Use exaggerated motions and verbally describe what you are doing. For example, model asking for something to drink first. Then have your child ask for something to drink.
- Make a list of common activities you would like your child to do on a daily basis (such as brushing teeth, putting on shoes, saying hello). Choose three activities from the list to begin modeling for your child.
- When your child performs an activity successfully, be sure to praise your child. It might also be helpful to provide time with a favorite toy or activity when completing an activity.

For more information visit: [www.afirm.fpg.unc.edu](http://www.afirm.fpg.unc.edu)

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8. **Additional Resources:** Use the *Additional Resources* to learn more about the practice.



**AFIRM** Autism Focused Intervention Resources & Modules

**Naturalistic Intervention**  
---Additional Resources---

Check out these resources to support your use of naturalistic intervention.

For more information visit: [www.afirm.fpg.unc.edu](http://www.afirm.fpg.unc.edu)

**Articles:**

Gainey, S., & Falcomata, T. S. (2013). Training teachers to use a naturalistic communication intervention may increase communicative interactions in young children with ASD. *Evidence-Based Communication Assessment and Intervention*, 7(1), 26-30. doi:10.1080/17489539.2013.802422

Harjoto-Wieda, S. M., & Robbins, S. H. (2012, 2013). The effects of teacher-implemented naturalistic intervention on the communication of preschoolers with autism. *Topics in Early Childhood Special Education*, 32(2), 99-110. doi:10.1177/0271121410397060

Ingersoll, B., Meyer, K., Borner, N., & Jelinek, S. (2012). A comparison of developmental social-pragmatic and naturalistic behavioral interventions on language use and social engagement in children with autism. *Journal of Speech, Language, and Hearing Research*, 55(5), 1301-1313. doi:10.1044/1092-4388(2012)12(03-45)

Lane, J. D., Lefford, J. R., Shapley, C., Mataras, T. K., Ayres, K. M., & Davis, A. B. (2016). A brief coaching intervention for teaching naturalistic strategies to parents. *Journal of Early Intervention*, 38(3), 135-150. doi:10.1177/10634269156668178

Lane, J. D., Lieberman-Betz, R., & Gast, D. L. (2016). An analysis of naturalistic interventions for increasing spontaneous expressive language in children with autism spectrum disorder. *The Journal of Special Education*, 50(1), 49-61. doi:10.1177/0022466915614837

McDuffie, A., Machalicek, W., Oakes, A., Heebig, E., Weismer, S. E., & Abbeduto, L. (2013). Distance video-teleconferencing in early intervention: Pilot study of a naturalistic parent-implemented language intervention. *Topics in Early Childhood Special Education*, 32(3), 172-185. doi:10.1177/0271121413476758

Nair, M. K. C., Russell, P. S. S., George, B., Prasad, G. L., Mimi, A. O., Leena, M. L., . . . Manj, K. A. (2014). CDS-LENS: Effectiveness of a clinic-based, low intensity, early intervention for children with autism spectrum disorder in India: A naturalistic observational study. *The Indian Journal of Pediatrics*, 81(2), 110-114. doi:10.1007/s12098-014-1601-6

Pindropo, S. S. (2012). A review of naturalistic interventions with young children with autism. *Journal of the International Association of Special Education*, 12(1), 69.

Rajak, S. (2014). Parent-implemented naturalistic language interventions for young children with disabilities: A systematic review of single-subject experimental research studies. *Educational Research Review*, 13, 35-51. doi:10.1016/j.edurev.2014.09.001

Schreibman, L., Dawson, G., Spharim, A. C., Landa, R., Rogers, S. J., McGee, G. G., . . . Halasy, A. (2015). Naturalistic developmental behavioral interventions: Empirically validated treatments for autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 45(8), 2411-2428. doi:10.1007/s10803-015-2407-8

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9. **CEC Standards:** A list of CEC Standards that apply specifically to EBP.

**Parent Implemented Intervention CEC Standards**

The CEC Standards that apply to all 27 evidence-based practices can be found on our website at: <http://afirm.fpg.unc.edu/learn-afirm>

Below are CEC Standards that apply specifically to Parent Implemented Intervention (PII) module:

Standard	Description
<b>Initial Preparation Standard 1: Learner Development and Individual Learning Differences</b>	
IGI 1 K3	Family systems and the role of families in supporting development
<b>Initial Preparation Standard 2: Learning Environments</b>	
IGI 2 S5	Modify the learning environment to manage behaviors
IGI 2 S10	Use effective and varied behavior management strategies
IGI 2 S12	Design and manage daily routines
<b>Initial Preparation Standard 4: Assessment</b>	
DD44 K2	Assessments of environmental conditions that promote maximum performance of individuals with developmental disabilities/autism spectrum disorders
<b>Initial Preparation Standard 5: Instructional Planning &amp; Strategies</b>	
IGI 5 S19	Use strategies to support and enhance communication skills of individuals with exceptionalities
DD45 S5	Consistent use of proactive strategies and positive behavioral supports
DD45 S10	Structure the physical environment to provide optimal learning for individuals with developmental disabilities/autism spectrum disorders
DD45 S15	Use specialized instruction to enhance social participation across environments
<b>Initial Preparation Standard 7: Collaboration</b>	
IGI 7 K3	Concerns of families of individuals with exceptionalities and strategies to help address these concerns
IGI 7 S2	Collaborate with families and others in assessment of individuals with exceptionalities
IGI 7 S3	Foster respectful and beneficial relationships between families and professionals
IGI 7 S4	Assist individuals with exceptionalities and their families in becoming active participants in the educational team
IGI 7 S8	Model techniques and coach others in the use of instructional methods and accommodations

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10. **EBP Brief Packet:** A quick overview of salient features of the practice, including what it is, who it can be used with, what skills it has been used with, and settings for instruction. And all the above-mentioned resources for the EBP, including the numerical references utilized for the module.

**Antecedent-based Intervention (ABI) ---EBP Brief Packet---**

**Components of the EBP Brief Packet...**

This evidence-based practice overview on antecedent-based intervention (ABI) includes the following components:

1. **Overview:** A quick summary of salient features of the practice, including what it is, who it can be used with, what skills it has been used with, and settings for instruction.
2. **Evidence-base:** The ABI Evidence-base details the NPDC criteria for inclusion as an evidence-based practice and the specific studies that meet the criteria for this practice.
3. **Step-by-Step Guide:** Use the ABI Step-by-Step Practice Guide as an outline for how to plan for, use, and monitor ABI. Each step includes a brief description as a helpful reminder while learning the process.
4. **Implementation Checklist:** Use the ABI Implementation Checklist to determine if the practice is being implemented as intended.
5. **Data Collection Sheets:** Use the data collection sheets as a method to collect and analyze data to determine if progress is being made for a learner with ASD.
6. **Tip Sheet for Professionals:** Use the ABI Tip Sheet for Professionals as a supplemental resource to help provide basic information about the practice to professionals working with the learner with ASD.
7. **Parent Guide:** Use the ABI Parent Guide to help parents or family members understand basic information about the practice being used with their child.
8. **Additional Resources:** Use the Additional Resources to learn more about the practice.
9. **CEC Standards:** A list of CEC Standards that apply specifically to ABI.
10. **Module References:** A list of numerical References utilized for the ABI module.

**Suggested citation:**  
Sam, A., & AFIRM Team. (2016). *Antecedent-based intervention*. 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/antecedent-based-intervention>

For more information visit: [www.afirm.fpg.unc.edu](http://www.afirm.fpg.unc.edu)

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**What is Antecedent-based Intervention?**

Derived from applied behavior analysis, antecedent-based interventions (ABI) are used to address both interfering behaviors (e.g. repetitive, disruptive) and on-task behaviors (e.g. engaged or working on specific task/activity) behaviors. ABI is commonly used with other evidence-based practices such as functional behavior assessment (FBA), extinction (EXT), and reinforcement (R+).

With ABI, teachers and practitioners focus on identifying the events that take place immediately before and after an identified interfering behavior. The identification of both before and after events, allow for teachers and practitioners to identify the conditions or events within the environment that prompt the learner to exhibit the identified behavior (i.e., antecedents and the conditions or events that are reinforcing the behavior after it occurs (i.e., consequences).

**Evidence-base**

Based upon the recent review, antecedent-based intervention meets the evidence-based practice criteria with 32 single case design studies. The practice has been effective for preschoolers (3-5 years) to high school learners (15-22 years) with ASD. Evidence-based practices (EBP) and studies included in the 2014 ESP report detailed how antecedent-based intervention can be used effectively to address: social, communication, behavior, school-readiness, play, motor, adaptive, and academic outcomes.

**How is ABI Being Used?**

Antecedent-based intervention can be used by a variety of professionals, including teachers, special educators, therapists, paraprofessionals, and early interventionists in educational and community-based environments. Parents and family members also can use antecedent-based intervention in the home.

For more information visit: [www.afirm.fpg.unc.edu](http://www.afirm.fpg.unc.edu)

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## ---Earning Professional Development---

If the ***Certificate Track*** is selected before beginning a module, AFIRM users can earn a free *Certificate of Completion* that can be used to meet professional development needs. These free certificates are located on the *My Account* page of AFIRM (located at the top right of the screen after login).

However, in some cases the free *Certificate of Completion* is not enough to meet an agency's or organization's professional development requirements. The AFIRM user will need to check with their agency or organization for this information, as AFIRM does not maintain a registry of this information.

If this is the case, AFIRM offers CEUs from the Friday Center at the University of North Carolina at Chapel Hill for \$35 per module. Links to registering for and providing payment for CEUs become active on the AFIRM user's *My Account* page after they have earned the free *Certificate of Completion*.

For BCBA's only, AFIRM is an approved provider of Type-II CEs for \$35 per module. Links to registering for and providing payment for Type-II CEs become active on the AFIRM user's *My Account* page after they have earned the free *Certificate of Completion*.

**Note:** Post-assessments expired after a year. Please review the module and re-take the post-assessment to become eligible for CEUs or Type-2 CEs.

For more information  
visit:

[www.afirm.fpg.unc.edu](http://www.afirm.fpg.unc.edu)



## ---Future of AFIRM---

Although funding has ended, with continued support for the National Clearinghouse on Autism Evidence and Practice, AFIRM hopes to continue to add new modules as new evidence-based practices emerge, as well as update current modules.



The National Clearinghouse on Autism Evidence and Practice (NCAEP) is conducting a systematic review of current intervention literature intended to help individuals with autism. NCAEP will examine the impact of behavioral, clinical, and educational practices and service models used with individuals on the autism spectrum from birth through age 21. Identifying evidence-based practices provides guidance and support for these individuals and their families, educators and practitioners in schools, advocacy groups, and policy makers, as well as health-care providers and insurance companies. NCAEP builds on an evidence review completed in 2014 by the National Professional Development Center on Autism Spectrum Disorder (NPDC).

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<http://ncaep.fpg.unc.edu/>