



Autism Focused Intervention
Resources & Modules

BMI

EBP BRIEF PACKET: BEHAVIORAL MOMENTUM INTERVENTION

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



**FRANK PORTER GRAHAM
CHILD DEVELOPMENT INSTITUTE**

OVERVIEW OF CONTENT

1. **Table of BMI Contents:** This list details the specific BMI resources that apply to Behavioral Momentum Intervention.
2. **What is BMI:** A quick summary of salient features of Behavioral Momentum Intervention, including what it is, who it can be used with, what skills it has been used with, and settings for instruction.
3. **Evidence-base:** The evidence-base details the National Clearinghouse on Autism Evidence and Practice (NCAEP) criteria for inclusion as an evidence-based practice and the specific studies that meet the criteria for Behavioral Momentum Intervention.
4. **Planning Checklist:** This checklist details the steps for planning for Behavioral Momentum Intervention, including what prerequisite learning of practices are needed, collecting baseline data of the interfering behavior if needed, and what materials/resources are needed.
5. **Other Resources:** Other resources may include decision trees, checklists, and/or template forms that will support the use of Behavioral Momentum Intervention.
6. **Step-by-Step Guide:** Use this guide as an outline for how to plan for, use, and monitor Behavioral Momentum Intervention. Each step includes a brief description as a helpful reminder while learning the process.
7. **Implementation Checklist:** Use this checklist to determine if Behavioral Momentum Intervention are being implemented as intended.
8. **Monitoring Progress Checklist:** Use this form as a method for collecting and analyzing data to determine if the learner on the spectrum is making progress towards the interfering behavior.
9. **Tip Sheet for Professionals:** Use this tip sheet, intended for professionals working with learners on the spectrum, as a supplemental resource to help provide basic information about Behavioral Momentum Intervention.
10. **Parent Guide:** Use this guide intended for parents or family members of learners on the spectrum to help them understand basic information about Behavioral Momentum Intervention and how it is being used with their child.
11. **Additional Resources:** This list provides additional information for learning more about Behavioral Momentum Intervention as well as resources.
12. **CEC Standards:** This list details the specific CEC standards that apply to Behavioral Momentum Intervention.
13. **Glossary:** This glossary contains key terms that apply specifically to Behavioral Momentum Intervention.
14. **References:** This list details the specific references used for developing this BMI module in numerical order.



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BEHAVIORAL MOMENTUM INTERVENTION

WHAT IS BMI?

Behavioral Momentum Intervention (BMI) is 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.

Learners may experience challenges with transitions and may not comply with less preferred or unknown learning tasks. BMI capitalizes on an easy-to-hard task teaching sequence to build a pattern of correct responding. The quick pace of teaching requests and ample positive reinforcement of BMI support the learner's skill acquisition, compliance, and on-task behaviors.

EVIDENCE-BASE:

Based upon the 2020 systematic review conducted by the National Clearinghouse on Autism Evidence and Practice (NCAEP), Behavioral Momentum Intervention is a focused intervention that meets evidence-based practice criteria with 12 single case design studies. Behavioral momentum intervention has been effective with preschoolers (3-5 years), elementary schoolers (6-11 years), middle schoolers (12-14 years), and high schoolers (15-18 years) on the spectrum. Studies included the 2020 EBP report (Steinbrenner et al., 2020) detail how behavioral momentum intervention can be used to effectively address the following outcomes for a target goal/behavior/skill: academic/pre-academic, adaptive/self-help, behavior, communication, play, school readiness, and social.

HOW IS BMI BEING USED?

Behavioral Momentum Intervention can be used by a variety of professionals, including teachers, special educators, therapists, paraeducators, and early interventionists in educational and community-based environments. Parents and family members also can use behavioral momentum intervention in the home.

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EVIDENCE-BASE

The National Clearinghouse on Autism Evidence and Practice has adopted the following criteria to determine if a practice is evidence-based. The 2020 EBP report (Steinbrenner et al., 2020) provides more information about the systematic review process.

Efficacy must be established through high-quality, peer-reviewed research in scientific journals using:

- At least 2 randomized or quasi-experimental group design studies, or
- At least 5 single subject/case design studies, or a
- Combination of evidence of 1 randomized or quasi-experimental group design study and 3 single subject/case design studies

OVERVIEW:

Based upon the 2020 systematic review conducted by the National Clearinghouse on Autism Evidence and Practice (NCAEP), Behavioral Momentum Intervention is a focused intervention that meets evidence-based practice criteria with 12 single case design studies. Behavioral momentum intervention has been effective with preschoolers (3-5 years), elementary schoolers (6-11 years), middle schoolers (12-14 years), and high schoolers (15-18 years) on the spectrum. Studies included the 2020 EBP report (Steinbrenner et al., 2020) detail how behavioral momentum intervention can be used to effectively address the following outcomes for a target goal/behavior/skill: academic/pre-academic, adaptive/self-help, behavior, communication, play, school readiness, and social.

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

Age	Academic	Adaptive	Behavior	Communication	Play	School Readiness	Social
3-5	Yes	Yes		Yes	Yes	Yes	Yes
6-11	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12-14			Yes			Yes	
15-18		Yes	Yes				



PRESCHOOL (3-5 YEARS):

- Ducharme, J. M., Lucas, H., & Pontes, E. (1994). Errorless embedding in the reduction of severe maladaptive behavior during interactive and learning tasks. *Behavior Therapy*, 25(3), 489-501. [https://doi.org/10.1016/S0005-7894\(05\)80159-5](https://doi.org/10.1016/S0005-7894(05)80159-5)
- Houlihan, D., Jacobson, L., & Brandon, P. K. (1994). Replication of a high-probability request sequence with varied interprompt times in a preschool setting. *Journal of Applied Behavior Analysis*, 27(4), 737-738. <https://doi.org/10.1901/jaba.1994.27-737>
- *Jung, S., Sainato, D. M., & Davis, C. A. (2008). Using high-probability request sequences to increase social interactions in young children with autism. *Journal of Early Intervention*, 30(3), 163-187. <https://doi.org/10.1177/1053815108317970>
- Kelly, L., & Holloway, J. (2015). An investigation of the effectiveness of Behavioral Momentum on the acquisition and fluency outcomes of tacts in three children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 9, 182-192. <https://doi.org/10.1016/j.rasd.2014.10.007>**
- Patel, M., Reed, G. K., Piazza, C. C., Mueller, M., Bachmeyer, M. H., & Layer, S. A. (2007). Use of a high-probability instructional sequence to increase compliance to feeding demands in the absence of escape extinction. *Behavioral Interventions*, 22(4), 305-310. <https://doi.org/10.1002/bin.251>
- *Pitts, L., & Dymond, S. (2012). Increasing compliance of children with autism: Effects of programmed reinforcement for high-probability requests and varied inter-instruction intervals. *Research in Autism Spectrum Disorders*, 6(1), 135-143. <https://doi.org/10.1016/j.rasd.2011.03.013>**

ELEMENTARY SCHOOL (6-11 YEARS):

- Davis, C. A., Brady, M. P., Williams, R. E., & Hamilton, R. (1992). Effects of high-probability requests on the acquisition and generalization of responses to requests in young children with behavior disorders. *Journal of Applied Behavior Analysis*, 25(4), 905-916. <https://doi.org/10.1901/jaba.1992.25-905>
- Esch, K., & Fryling, M. J. (2013). A comparison of two variations of the high-probability instructional sequence with a child with autism. *Education & Treatment of Children*, 36(1), 61-72. <https://doi.org/10.1353/etc.2013.0008>
- *Jung, S., Sainato, D. M., & Davis, C. A. (2008). Using high-probability request sequences to increase social interactions in young children with autism. *Journal of Early Intervention*, 30(3), 163-187. <https://doi.org/10.1177/1053815108317970>
- *Pitts, L., & Dymond, S. (2012). Increasing compliance of children with autism: Effects of programmed reinforcement for high-probability requests and varied inter-instruction intervals. *Research in Autism Spectrum Disorders*, 6(1), 135-143. <https://doi.org/10.1016/j.rasd.2011.03.013>**
- Riviere, V., Becquet, M., Peltret, E., Facon, B., & Darcheville, J. C. (2011). Increasing compliance with medical examination requests directed to children with autism: Effects of a high-probability request procedure. *Journal of Applied Behavior Analysis*, 44(1), 193-197. <https://doi.org/10.1901/jaba.2011.44-193>
- Romano, J. P., & Roll, D. (2000). Expanding the utility of behavioral momentum for youth with developmental disabilities. *Behavioral Interventions*, 15(2), 99-111. [https://doi.org/10.1002/\(SICI\)1099-078X\(200004/06\)15:23.0.CO;2-K](https://doi.org/10.1002/(SICI)1099-078X(200004/06)15:23.0.CO;2-K)

MIDDLE SCHOOL (12-14 YEARS):

- Banda, D. R., & Kubina, R. M. (2006). The effects of a high-probability request sequencing technique in enhancing transition behaviors. *Education and Treatment of Children*, 29(3), 507-516.

HIGH SCHOOL (15-18 YEARS):

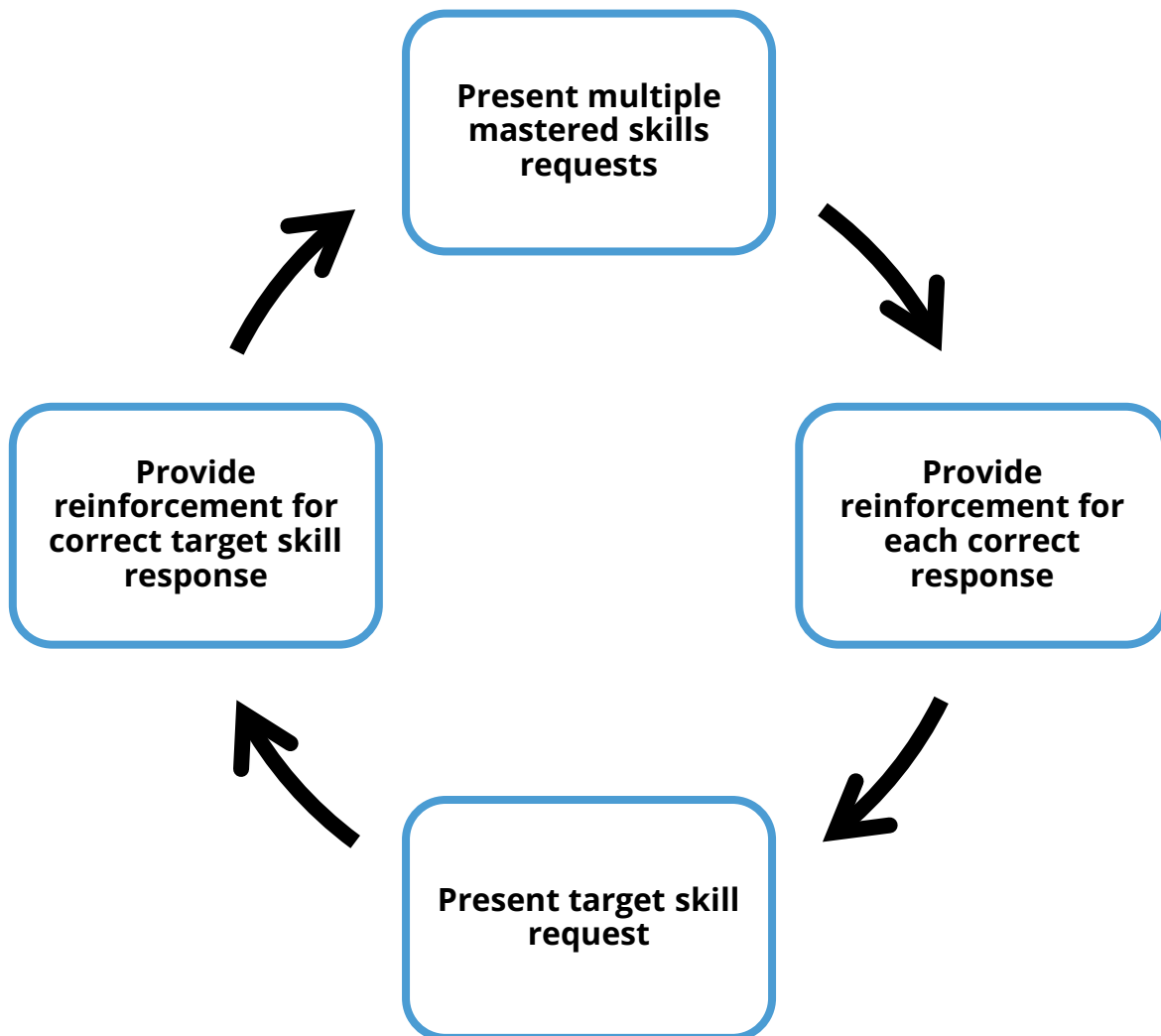
- Ewry, D. M., & Fryling, M. J. (2016). Evaluating the high-probability instructional sequence to increase the acceptance of foods with an adolescent with autism. *Behavior Analysis in Practice*, 9(4), 380-383. <https://doi.org/10.1007/s40617-015-0098-4>

Notes: * denotes the study has participants in at least two age ranges
Bold denotes new studies since 2011 (2012 till 2017)

BMI PROCESS

There are three main components of BMI:

1. Presentation of requests to perform mastered skills.
 2. Immediately followed by the presentation of request to perform the target skill.
 3. Reinforcement after each correct response.
- **Request mastered skills:** Clap, Give me 5, touch head, touch tummy, stomp feet
 - Provide **reinforcement** for correct response of mastered skills request
 - **Request target skill:** Stand up
 - Provide **reinforcement** for correct response of target skill request





DATA COLLECTION: MASTERED SKILLS

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Target Goal/Behavior/Skill: _____

Directions: Use this form to assess/determine skills the learner has mastered (performed accurately 80-100% of the time) that are from the same category as the target skill.

Mastered Skill	Probes			Tally Count number of correct tally marks and divide by the total number of probes	Mastery? Has the learner performed the skill accurately at least 80% of the time?
	Check for skill mastery several times a day over multiple days = performed skill correctly X = performed skill incorrectly				
	Date:	Date:	Date:		
					☐ Yes
					☐ Yes
					☐ Yes
					☐ Yes
					☐ Yes
					☐ Yes
					☐ Yes
					☐ Yes
					☐ Yes
					☐ Yes



REINFORCER SAMPLING & CHECKLIST

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Target Goal/Behavior/Skill: _____

Directions: Use this worksheet and checklist to identify and select reinforcers/rewards based on the learner's preferred items, interests, and activities for **Positive Reinforcement** and **Token Economy**.

CONDUCT A REINFORCER SAMPLING:

1. Sit in front of the learner and hold up two items. Ask the learner to "Pick one."
2. Wait 10 seconds for the learner to indicate selection in manner that is appropriate for the learner (e.g., verbalization, pointing, using an augmentative communication device).
3. Place the selected object in a container for learner's selection and non-selected item in the not selected container.
4. Repeat steps 1 through 3 until half of the objects presented are selected.

Item 1	Selected?	Item 2	Selected?
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No

LIST SELECTED REINFORCERS:



LIST POTENTIAL REINFORCERS:

	AGE APPROPRIATE?	
1. What natural reinforcers could be used?	Yes	No
2. What activities, objects, and/or foods does the learner select independently?	Yes	No
3. What phrases or gestures seem to produce a pleasant response from the learner?	Yes	No
4. What does the learner say they would like to work for (if appropriate)?	Yes	No
5. What reinforcers were identified by parents/family members and/or team members as being successful in the past?	Yes	No
6. Does the learner require additional adaptations/modifications/supports? Such as visual supports or a communication device?	Yes	No
7. Have reinforcers/rewards for the learner been identified based on the learner's interests/preferred items and/or activities?	Yes	No
8. Are additional materials and/or resources for using Functional Behavior Assessment ready and available?	Yes	No



FOODS FOR SNACKS/MEALTIME ROUTINES:

- | | | |
|--|------------------------------------|-----------------------------------|
| ☐ Cheese | ☐ Fruit | ☐ Pretzels |
| ☐ Chicken Nuggets | ☐ Goldfish | ☐ Other: |
| ☐ Chips | ☐ Ice Cream | ☐ Other: |
| ☐ French Fries | ☐ Pizza | ☐ Other: |

GAMES FOR PLAY/RECESS ROUTINES:

- | | | |
|---|-------------------------------------|---------------------------------|
| ☐ Burrito games with a blanket | ☐ Peek-a-Boo | ☐ Other: |
| ☐ Chase | ☐ Tickle | ☐ Other: |
| ☐ Pat-a-Cake | ☐ Other: | ☐ Other: |

TOYS FOR PLAY/RECESS ROUTINES:

- | | | |
|---|-------------------------------------|---|
| ☐ Books | ☐ Legos | ☐ Remote controlled toys |
| ☐ Cars/Trains/Trucks | ☐ Noisy toys | ☐ Other: |
| ☐ Computer | ☐ Phones | ☐ Other: |
| ☐ Doll house | ☐ Puzzles | ☐ Other: |

SPECIAL INTERESTS FOR ACTIVITIES/ROUTINES:

- | | | |
|---|---|--------------------------------------|
| ☐ Book Character: | ☐ Movie Character: | ☐ TV Show: |
| ☐ Book: | ☐ Movie: | ☐ Video Game: |
| ☐ Cars, Trains, Trucks | ☐ Music | ☐ Other: |
| ☐ Computers/Technology | ☐ Numbers | ☐ Other: |
| ☐ Dinosaurs | ☐ Real-Life Person: | ☐ Other: |
| ☐ Letters | ☐ TV Show Character: | ☐ Other: |



PROMPTING HIERARCHY

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Target Skill/Goal/Behavior: _____

Directions: Use this checklist to determine order of prompts based on the learner's needs and the target skill.

PROMPTS:

- **Gestural** – a physical movement that provides the learner with information about how to perform the target skill/behavior
- **Independent** – the learner can perform the target skill/behavior without assistance or support from others
- **Model** – demonstrating the correct way to perform the target skill/behavior for the learner
- **Physical** – hands-on assistance given to the learner to support them to perform the target skill/behavior
- **Verbal** – any spoken words direct to the learner to help them perform the target skill/behavior
- **Visual** – a picture, icon, or physical object used to provide the learner with information on how to perform the target skill/behavior

Level	Prompt	Instructions
Level 1	Independent	
Level 2		
Level 3		
Level 4		
Level 5		
Level 6		



PLANNING CHECKLIST

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Target Skill/Goal/Behavior: _____

Directions: Complete this checklist to determine if Behavioral Momentum Intervention is appropriate to use with the learner on the spectrum as well as if BMI is ready to be implemented.

PLANNING:

- ☐ Has the target goal/behavior/skill been identified?
- ☐ 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 mastered skills been identified? Does the learner have needed prerequisite mastered skills/abilities?
- ☐ Have reinforcers/rewards for the learner been identified based on the learner's interests/preferred items and/or activities?
- ☐ Has the prompt order been determined?
- ☐ Has the response time been determined?
- ☐ Is Behavioral Momentum Intervention appropriate for the learner's target goal/behavior/skill?
- ☐ Does the learner require additional adaptations/modifications/supports? Such as a communication device?
- ☐ Are materials and/or activities for using Behavioral Momentum Intervention ready and available?



DECISION TREE

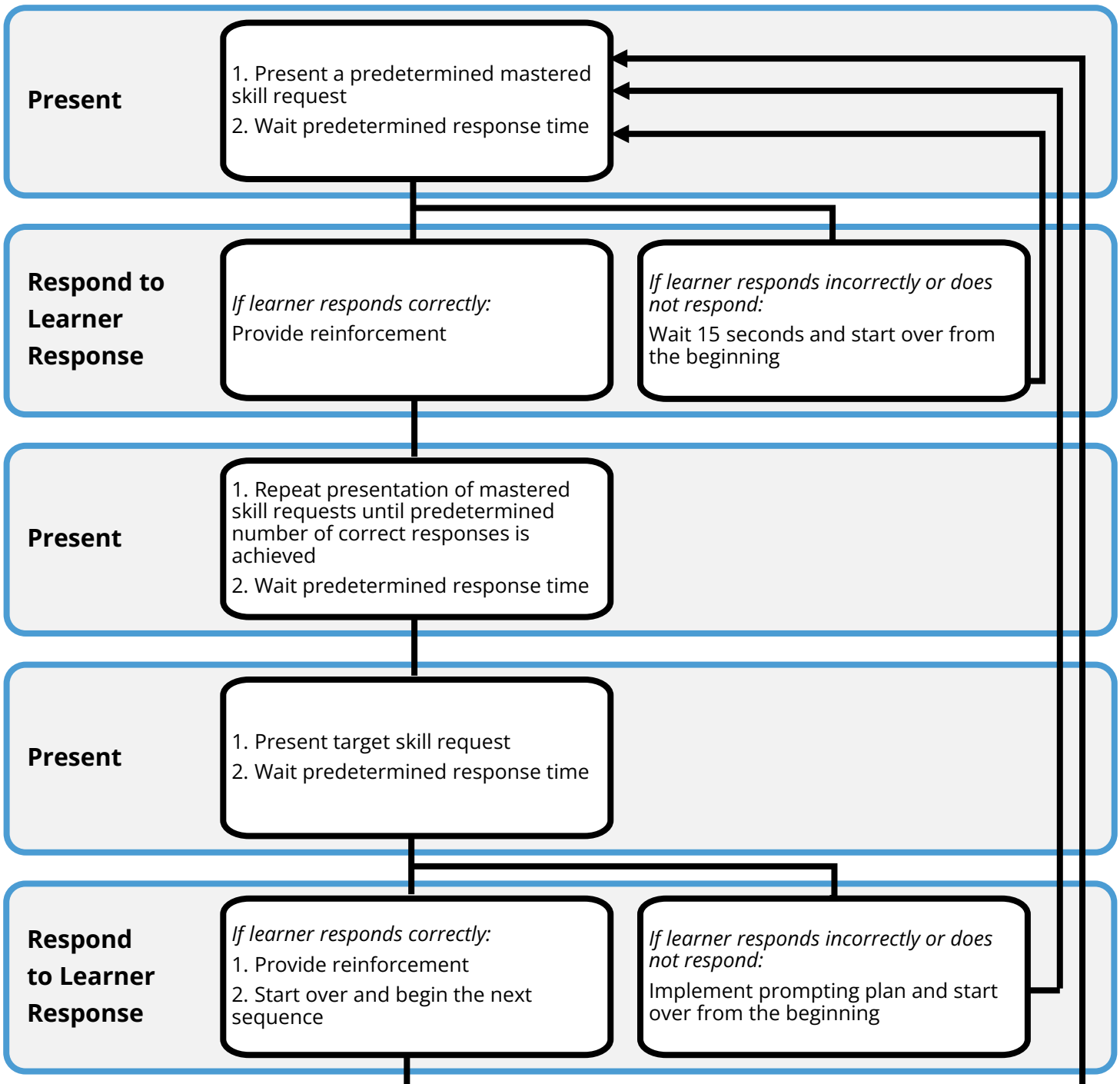
Learner's Name: _____

Date/Time: _____

Observer(s): _____

Target Skill/Goal/Behavior: _____

Directions: Use this decision tree for following the BMI teaching sequence with a learner on the spectrum.





DATA COLLECTION: TARGET SKILL REQUEST

Learner's Name: _____

Observer(s): _____

Target Goal/Behavior/Skill: _____

Goal: _____ correct responses out of _____ presented opportunities to respond

Directions: Collect data on the frequency of the learner demonstrating the target goal/behavior/skill to determine if the learner is making progress.

Date/Time: _____

Setting: _____

Date										
Trial 1										
Trial 2										
Trial 3										
Trial 4										
Trial 5										
Trial 6										
Trial 7										
Trial 8										
Trial 9										
Trial 10										
%										

Prompt Key: V = Verbal; G = Gestural; M = Model; P = Physical; I = No prompts needed/Independent

Response Key: ✓ = Correct; X = Incorrect; 0 = No response



TRIALS DATA:

% Independent/Correct Response	100 %										
	90%										
	80%										
	70%										
	60%										
	50%										
	40%										
	30%										
	20%										
	10%										
	0%										

ANECDOTAL NOTES:



MONITORING PROGRESS CHECKLIST

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Target Skill/Goal/Behavior: _____

Directions: Complete this checklist to determine if the learner is making progress with using Behavioral Momentum Intervention.

MONITORING PROGRESS:

- ☐ Is the target skill or behavior well defined?
- ☐ Is the skill or behavior measurable and observable?
- ☐ Has data been collected and analyzed?
- ☐ Is the skill or behavior too difficult for the learner? Does it need to be broken down into smaller steps?
- ☐ Has enough time been devoted to using this practice (frequency, intensity, and/or duration)?
- ☐ Was Behavioral Momentum Intervention used with fidelity?
- ☐ Does the learner require additional adaptations/ modifications/supports? Such as visual supports or a communication device?

ANECDOTAL NOTES:

STEP-BY-STEP GUIDE

This step-by-step practice guide outlines how to plan for, use, and monitor Behavioral Momentum Intervention.

BEFORE YOU BEGIN...

Each of the following points is important to address so that you can be sure Behavioral Momentum Intervention is likely to address the target goal/behavior/skill of your learner on the spectrum.



HAVE YOU FOUND OUT MORE INFORMATION ABOUT...?

- ☐ Identifying the interfering behavior...?
- ☐ Collecting baseline data through direct observation...?
- ☐ Establishing a target goal or outcome that clearly states when the behavior will occur, what the target goal or outcome is, and how team members and/or observers will know when the skill is mastered...?

If the answer to any of the above questions is 'No,' review the process of how to select an appropriate EBP (<https://afirm.fpg.unc.edu/selecting-EBP>).

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

Keep in mind that **Behavioral Momentum Intervention** can be used to support skill acquisition and increase compliance.

STEP 1: PLANNING FOR BMI

The planning step details the initial steps and considerations involved to prepare for using Behavioral Momentum Intervention with a learner on the spectrum.

1. Select target skill

To select a target skill, team members should identify a singular discrete skill or a few discrete target skills from a group of similar skills. Usually, 1-3 specific target skills are identified to work on during teaching sessions.

2. Identify set of mastered skills

Collect data to help identify a list of known or mastered skills. The list should include at least double the number of target skills identified. Mastered skills should:

- be categorically similar to the target skill.
- have a high likelihood of compliance.
- be performed accurately 80-100% of the time.

 Use the **Data Collection: Mastered Skills** form to determine what skills the learner has mastered.

3. Determine how many mastered skills will be performed in each teaching sequence

Team members must decide on the number of known skills the learner must correctly perform prior to requesting the learner to perform the target skill. Usually, having the learner perform three to five known skills prior to requesting that they perform the target skill is sufficient to build the momentum of correct responding.

4. Determine reinforcement, response time and prompts

- Use the Reinforcer Checklist and Sampling form to determine what type of positive reinforcement will be delivered after all correct responses.
- Identify an exact amount of allowable response time to allow for the quick pace of BMI.
- Additionally, team members may choose to include a prompting plan to supplement BMI.

📄 Use the **Reinforcer Checklist and Sampling** to determine which reinforcers to use based on learner preference.

📄 Use the **Prompting Hierarchy** to determine prompt order based on learner's needs.

5. Train all team members

Prior to using BMI, team members should be trained on, and practice, the BMI teaching sequence as planned for the learner. Practice should include:

- role playing the teaching sequence
- collecting data
- accurately performing at least 80% of the steps on the Implementation Checklist

📄 Use the **Implementation Checklist** to check fidelity when learning to use BMI.

6. Have materials ready and available

Verify that all the materials are ready and space for teaching is available. Materials should include:

- include a data sheet
- items necessary for teaching the target skill(s) (e.g., visuals, flashcards, food and eating utensils, play toys, etc.)
- reinforcers

📄 Use the **Planning Checklist** to determine if ready to use BMI.

STEP 2: USING BMI

This step details the process of implementing Behavioral Momentum Intervention with a learner on the spectrum.

1. Obtain learner's attention and present request to perform a mastered skill

After obtaining the learner's attention, present a request to perform a mastered skill and wait the predetermined amount of time of the learner to respond.

2. Respond to learner's response

After presenting the first request to perform a mastered skill, the learner will respond in one of three ways.

- If the learner responds correctly, provide a brief reinforcement.
- If the learner responds incorrectly, wait 15 seconds then start the teaching sequence from the beginning with a different mastered skill request.
- If the learner does not respond within the predetermined allowable response time, wait 15 seconds then start the teaching sequence from the beginning with a different mastered skill request.

3. Repeat steps above until the predetermined number of correct responses is achieved

When repeating the steps above, randomly rotate requests to perform mastered skills from the predetermined list. Stop presenting mastered skill requests when the learner has correctly responded to the predetermined consecutive number of mastered skills.

4. Present request to perform target skill and respond to learner's response

Once the learner has correctly performed the predetermined number of mastered skills, immediately present the request to perform the target skill. A quick pace is key to building compliance and correct responding momentum.

 Use the **Decision Tree** to follow BMI procedure with the learner.

STEP 3: MONITORING BMI

The following step details how to monitor the use of Behavioral Momentum Intervention with a learner on the spectrum and how to determine next steps based on the data.

1. Collect and analyze data

Only collect data on the learner's response to the target skill request, not the mastered/known requests. Note correct and incorrect responses as well as any prompts used.

 Use the **Data Collection** form to collect data monitor learner progress toward BMI goals.

2. Determine next steps based on learner progress

Collecting data will help team members decide about the effectiveness of using Behavioral Momentum Intervention and whether the learner on the spectrum is making progress. If a learner is making progress based upon data collected, team members should continue to use the selected strategies.

If team members determine that the learner is not making progress, consider the following:

- Is the target goal/behavior/skill well defined?
- Is the target goal/behavior/skill measurable and observable?
- Is the target goal/behavior/skill too difficult/complex? Does it need to be broken down into smaller steps?
- Has enough time been devoted to using behavioral momentum intervention (frequency, intensity, and/or duration)?
- Is the learner correctly responding to the known/mastered requests and accessing reinforcement for those correct responses?
- Did the learner successfully perform a sufficient number of known/mastered skills prior to being asked to perform the target skill?
- Is the pace of the request delivery sufficiently quick to build the momentum of correct responding prior to the target skill request?
- Was behavioral momentum intervention implemented with fidelity (see Implementation Checklist)?
- Does the learner need additional supports?
- Are the selected reinforcers preferred items/activities for the learner?

If these issues have been addressed and the learner on the spectrum continues not to show progress, consider selecting a different evidence-based practice to use with the learner on the spectrum.



IMPLEMENTATION CHECKLIST

BEFORE YOU START, HAVE YOU...?

- ☐ Identifying the target goal/behavior/skill...?
- ☐ Collecting baseline data through direct observation...?
- ☐ Establishing a target goal or outcome that clearly states when the behavior will occur, what the target goal or outcome is, and how team members and/or observers will know when the skill is mastered...?

If the answer to any of the above questions is 'No,' review the process of how to select an appropriate EBP (<https://afirm.fpg.unc.edu/selecting-EBP>).

		Observation:	1	2	3	4	5
		Date:					
		Observer's Initials:					
STEP 1: PLANNING							
1.1	Select target skill(s)						
1.2	Identify set of mastered skills						
1.3	Determine how many mastered skills will be performed in each teaching sequence						
1.4	Determine reinforcement, response time, and a prompting plan						
1.5	Train all team members in planned behavioral momentum teaching sequence						
1.6	Have materials ready and available						
STEP 2: USING							
2.1	Obtain learner's attention and present request to perform a mastered skill						
2.2	Respond to learner's response						
	If learner responds correctly: Provide reinforcement						
	If learner responds incorrectly or does not respond within the predetermined response time: Wait 15 seconds and start over from step 2.1						
2.3	Repeat steps 2.1 - 2.2, varying the mastered skills presented, until the predetermined number of correct responses is achieved						
2.4	Present request to perform target skill						
2.5	Respond to learner's response						
	If learner responds correctly: Provide reinforcement Return to step 2.1 and repeat the teaching sequence, randomly rotating the order of the mastered skills, until the predetermined teaching time expires.						
	If learner responds incorrectly or does not respond: Deliver prompt according to predetermined prompting plan followed by reinforcement. Return to step 2.1 and repeat the teaching sequence until the predetermined session time expires.						
STEP 3: MONITORING							
3.1	Collect and analyze data						
3.2	Determine next steps based on learner progress						

TIP SHEET FOR PROFESSIONALS

BEHAVIORAL MOMENTUM INTERVENTION ...

- An evidence-based practice that capitalizes on an easy-to-hard task teaching sequence and positive reinforcement to build a pattern of correct responding.
- Used to increase a target goal/behavior/skill and/or to decrease interfering or challenging behaviors



WHY USE WITH LEARNERS ON THE SPECTRUM?

- BMI is always used with positive reinforcement which has been shown to support new skill acquisition in learners on the spectrum.
- BMI is an antecedent-based intervention which has been shown to decrease noncompliance and interfering behaviors for learners on the spectrum.
- BMI may be a good strategy to use when other teaching strategies have not been successful or when compliance with a particular target skill is low.

TIPS:

- Identify a list of mastered skills that the learner can accurately perform 80-100% of the time.
- Keeping the flow of skill requests as quick as possible is key to building momentum. Select reinforcers that are fast to administer and to experience by the learner.
- Target skills should be discrete, meaning they are short, closed-ended and requiring a single response.

INSTRUCTIONAL OUTCOMES:

The evidence-base for Behavioral Momentum Intervention supports its use to address the following outcomes, according to age range, in the table below:

Age	Academic	Adaptive	Behavior	Communication	Play	School Readiness	Social
3-5	Yes	Yes		Yes	Yes	Yes	Yes
6-11	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12-14			Yes			Yes	
15-18		Yes	Yes				

STEPS FOR IMPLEMENTING:

1. PLAN

- Select target skill(s)
- Identify set of mastered skills
- Determine how many mastered skills will be performed in each teaching sequence
- Determine reinforcement, response time, and a prompting plan
- Train all team members in planned behavioral momentum teaching sequence
- Have materials ready and available

2. USE

- Obtain learner's attention and present request to perform a mastered skill
- Respond to learner's response
- Repeat steps above, varying the mastered skills presented, until the predetermined number of correct responses is achieved
- Present request to perform target skill and respond to learner's response

3. MONITOR

- Collect and analyze data on target behaviors
- Determine next steps based on learner progress



Behavioral Momentum Intervention BMI

This sheet was designed as a supplemental resource to provide basic information about Behavioral Momentum Intervention for professionals working with learners on the spectrum.

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

PARENT'S GUIDE

WHAT IS BMI?

- BMI is an evidence-based practice for children on the spectrum from 3-18 years old.
- BMI capitalizes on an easy-to-hard task teaching sequence and positive reinforcement to build a pattern of correct responding.



WHY USE THIS BMI WITH MY CHILD?

- BMI can be used to increase a target behavior or skill and/or to decrease interfering or challenging behaviors.
- Research studies have shown BMI has been used effectively with learners on the spectrum to address academic, adaptive, communication, play, school readiness, social and behavior outcomes.
- BMI may be a good strategy to use when other strategies have not been successful or when compliance with particular target skills is low.

WHAT ACTIVITIES CAN I DO AT HOME?

- Choose a target skill or behavior that is discrete, meaning it is short, closed-ended and requires a single response. Some examples include putting an item away, taking off shoes or hanging up a coat.
- In quick succession, request that your child perform several known/mastered skills prior to requesting the target skill to be performed.
- Provide a brief reinforcer after every correct response to build momentum of correct responding, increasing your child's likelihood of correctly performing the target skill

Behavioral Momentum Intervention BMI

This parent introduction to BMI was designed as a supplemental resource to help answer questions about Behavioral Momentum Intervention.

To find out more about how this BMI is being used with your child, please talk with:

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



ADDITIONAL RESOURCES

APPS:

Icon	Developer	Name	Available	Pricing
	Track & Share Apps, LLC	<i>Autism Tracker Lite</i>	App Store	\$Free
	Touch Autism	<i>Preference Assessment</i>	App Store	\$9.99

WEBSITES:

Nebraska Autism Spectrum Disorders Network. (2021, September 2021). *Behavior Momentum*.
<https://www.unl.edu/asdnetwork/virtual-strategies/behavior-momentum>



CEC STANDARDS

INITIAL PRACTICE-BASED STANDARDS FOR EARLY INTERVENTIONISTS/EARLY CHILDHOOD (0-5 YEARS; CEC, 2020)

Standard 4: Assessment Processes

- 4.2 Develop and administer informal assessments and/or select and use valid, reliable formal assessments using evidence-based practices, including technology, in partnership with families and other professionals.

Standard 5: Application of Curriculum Frameworks in the Planning of Meaningful Learning Experience

- 5.1 Collaborate with families and other professionals in identifying an evidence-based curriculum addressing developmental and content domains to design and facilitate meaningful and culturally responsive learning experiences that support the unique abilities and needs of all children and families.

Standard 6: Using Responsive and Reciprocal Interactions, Interventions, and Instruction

- 6.1 In partnership with families, identify systematic, responsive, and intentional evidence-based practices and use such practices with fidelity to support young children's learning and development across all developmental and academic content domains.
- 6.3 Engage in ongoing planning and use flexible and embedded instructional and environmental arrangements and appropriate materials to support the use of interactions, interventions, and instruction addressing developmental and academic content domains, which are adapted to meet the needs of each and every child and their family.
- 6.4 Promote young children's social and emotional competence and communication, and proactively plan and implement function-based interventions to prevent and address challenging behaviors.
- 6.5 Identify and create multiple opportunities for young children to develop and learn play skills and engage in meaningful play experiences independently and with others across contexts.
- 6.7 Plan for, adapt, and improve approaches to interactions, interventions, and instruction based on multiple sources of data across a range of natural environments and inclusive settings.

Standard 7: Professionalism and Ethical Practice

- 7.2 Engage in ongoing reflective practice and access evidence-based information to improve own practices.



INITIAL PRACTICE-BASED STANDARDS FOR (GRADES K-12; CEC, 2020):

Standard 2: Understanding and Addressing Each Individual's Developmental and Learning Needs

- 2.1 Apply understanding of human growth and development to create developmentally appropriate and meaningful learning experiences that address individualized strengths and needs of students with exceptionalities.

Standard 4: Using Assessment to Understand the Learner and the Learning Environment for Data-Based Decision Making

- 4.1 Collaboratively develop, select, administer, analyze, and interpret multiple measures of student learning, behavior, and the classroom environment to evaluate and support classroom and school-based systems of intervention for students with and without exceptionalities.
- 4.3 Assess, collaboratively analyze, interpret, and communicate students' progress toward measurable outcomes using technology as appropriate, to inform both short- and long-term planning, and make ongoing adjustments to instruction.

Standard 5: Supporting Learning Using Effective Instruction

- 5.2 Use effective strategies to promote active student engagement, increase student motivation, increase opportunities to respond, and enhance self-regulation of student learning.
- 5.3 Use explicit, systematic instruction to teach content, strategies, and skills to make clear what a learner needs to do or think about while learning.
- 5.6 Plan and deliver specialized, individualized instruction that is used to meet the learning needs of each individual.

Standard 6: Supporting Social, Emotional, and Behavioral Growth

- 6.2 Use a range of preventive and responsive practices documented as effective to support individuals' social, emotional, and educational well-being.

ADVANCED PRACTICE-BASED STANDARDS (CEC, 2012):

Standard 1: Assessment

- 1.2 Design and implement assessments to evaluate the effectiveness of practices and programs.

Standard 2: Curricular Content Knowledge

- 2.2 Continuously broaden and deepen professional knowledge and expand expertise with instructional technologies, curriculum standards, effective teaching strategies, and assistive technologies to support access to and learning of challenging content.

Standard 3: Programs, Services, and Outcomes

- 3.1 Design and implement evaluation activities to improve programs, supports, and services for individuals with exceptionalities.
- 3.4 Use instructional and assistive technologies to improve programs, supports, and services for individuals with exceptionalities.



GLOSSARY

Antecedent - the activities and specific events preceding the behavior

Baseline data - information gathered from multiple sources to better understand the target behavior, before using an intervention or practice; data collected on current performance level prior to implementation of intervention

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.

Discrete task - a close-ended task that requires a single response and is of a relatively short duration

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.

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

Fade - to systematically reduce and eventually withdraw the use of stimulus such as a prompt, request, or reinforcer

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

Focused intervention - a practice designed to address a single skill or goal of a learner

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

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

Mastered skill - a skill that is known by the learner and typically has a high rate of correct responding and compliance

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.

Prompting (PP) - Verbal, gestural, or physical assistance given to learners to support them in acquiring or engaging in a targeted behavior or skill.



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.

Response time - the allowable amount of time in which the learner may respond correctly after the teaching request is made

Target skill - skill that is the focus of the intervention

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

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.

Topographically similar - describes behaviors that look similar or are categorically similar

Visual Supports (VS) - A visual display that supports the learner engaging in a desired behavior or skills independent of additional prompts.



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