# **Evidence Based Practice Training:**

# Response Interruption & Redirection (RIR)

Adapted From: Tomaszewski, B., Regan, T., & AFIRM Team. (2017). Response interruption and redirection. 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/response-interruption-and-redirection





### What is CAPTAIN

The California Autism Professional Training And Information Network (CAPTAIN) is an interagency network developed to support the understanding and use of evidence based practices (EBPs) for individuals with Autism across the state of California.





### What is CAPTAIN

Marin County SELPA in partnership with CAPTAIN, are members of the Statewide System of Support as the Special Education Content Lead for Autism.

This project is funded by the California Department of Education and the California Collaborative for Educational Excellence.











# Levels of Professional Development to Reach Implementation







### Before We Begin...

Please complete the **Pre Training Survey** sent to your email





#### What are Evidence Based Practices?



#### NCAEP definition of an EBP:

"Focused intervention practices that have evidence of efficacy in promoting positive outcomes for learners with ASD."

Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, 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.





#### Evidence Based Practice Matrix (28 EBPs)

Table 3.7 Matrix of evidence-based practices, outcomes, and age categories

Evidence-Based		caden	nic/ emic	Ad Se	daptiv elf-he	ve/ elp	In	allen terfe ehav	ging/ ring vior	Co	ognit	ive		mmu catio			Joint			Menta healt		1	Moto	r		Play			Schoo		det	Self- ermina	ation		Socia	ı	Vor	cation	nal
Practices See Table 3.1 to link abbreviations to EBPs	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years	0-5 years	6-14 years	15-22 years
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VM																																							
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### Selecting EBPs

Before beginning a new practice with a learner, it is important to follow four planning steps

- 1. Identify the behavior
- 2. Collect baseline data on the behavior
- 3. Establish an observable and measurable goal
- 4. Choose an EBP
  - Consider the child and family characteristics
  - Consider the teacher and team characteristics
  - Consider other available resources





### Selecting an EBP Checklist

Autism Focused Intervention Resources & Modules For more information, please visit: https://afrom.fpu	unc.edu/ Resources & Modules	Selecting an EBP Checklist For more information, please visit: https://afr.m.fug.unc.edu/	AFIRM Autism Focused Intervention Resources & Modules	For me	Selecting an EBP of https://afirm.fpg.
Selecting an EBP Checklist AFI	CHECK ANNUAL GOAL FOR:		SELECT AN EBP:		
Selecting an EBP Checklist					
Learner's Name: Date/Time:	Target goal/behavior/skill (V perform)	What/Behavior the learner is to Yes No			
✓ — Observer(s):	Mastery (How/Criterion for I	learner progress/mastery			
Target Goal/Behavior/Skill (short):  Directions: Complete this checklist to select an appropriate practice to use with the learn					
ASD. Complete this checklist to select an appropriate practice to use with the learn	IDENTIFY CHARACTERISTICS				
IDENTIFY TARGET COAL IDENTALISM (INC.)	Child and Family Characteristics			Y ADDITIONALS EBPS TO	O BE USED WITH THE
IDENTIFY TARGET GOAL/BEHAVIOR/SKILL:	Student strengths:	Student challenges:	SELECTED EBP:		
			☐ Reinforcement (R+)	☐ Prompting (PP)	☐ Modeling (MD)
			Li Reinforcement (RT)	□ Prompting (PP)	Li Modeling (MD)
	Has worked before (home/school):	: Has not worked before (home/school):		П=	
	—  <b> </b>		☐ Task Analysis (TA)	☐ Time Delay (TD)	☐ Visual Supports (VS)
			☐ Functional Behavior	1_	_
COLLECT BASELINE DATA (OR USE SELECTING AN EBP DATA COLLECTIO	N Teacher/Team Characteristics		Assessment (FBA)	D	. 0
SHEET):	Knowledge level:	Successfully used EBPs:	, ,		
Date/Time Frequency/Duration To	ral		ADDITIONAL NOTES:		
	Clues found in the IEP Goal				
	Goal domain:	Potential EBPs (Refer to the Domain Matrix):			
	Other Resources  Current student supports:	Available equipment:			
	current stadent supports.	Available equipment.			
DEFINE AN ORGENVANIE AND MEAGURANTE IED COAL	_				
DEFINE AN OBSERVABLE AND MEASURABLE IEP GOAL:	Team members:	Additional learning experiences:			
	_				
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Selecti	ng an EBP	Selecting an EBP			
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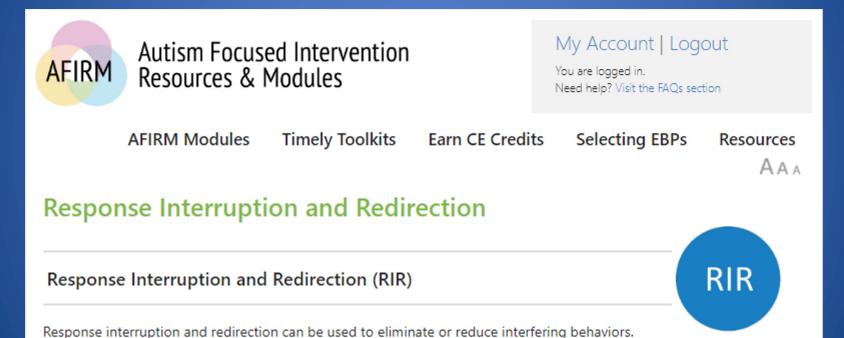




#### **High Quality Training:**

Autism Focused Intervention Resources and Modules (AFIRM)

Designed to help you learn the step-by-step process of planning for, using, and monitoring EBPs with learners with Autism from birth to 22 years of age







### **Learning Objectives**

From this workshop, participants will learn:

- The basics of RIR
- How to use RIR
- How to monitor RIR





#### **Evidence Base for RIR**

				Age Ra	nges		
Outcome Area	ıs	0-2 Toddlers	3-5 Preschoolers	6-11 Elementary School	12-14 Middle School	15-18 High School	19-22 Young Adults
	Communication		✓	✓	✓		
	Social		✓	✓			
	Joint attention						
	Play		✓	✓			
	Cognitive						
	School readiness		✓	✓			
	Academic/ Pre-academic		✓	1			
	Adaptive/ self-help		✓	✓			
	Challenging/ Interfering behavior		1	✓	1	1	✓
(t).=	Vocational						
	Motor			✓			
End	Mental health						
4 L. 3	Self- determination						

(Steinbrenner, 2020)





### Basics of RIR





#### What is RIR?

- Response interruption/redirection (RIR) is an evidence-based practice designed to reduce the occurrence of interfering behaviors (e.g., stereotypical, selfinjurious)
- The rationale for RIR is that by introducing a prompt, comment, or other distractor when an interfering behavior is occurring, then interfering behaviors will decrease





#### RIR Goals

#### Goals that can be addressed with RIR include:

- Decreasing stereotypy (repetitive behaviors)
- Decreasing self-injurious behaviors
- Decreasing challenging behaviors
- Increasing appropriate vocalizations
- Increasing on-task behavior
- Increasing play skills





#### **Response Interruption/Redirection Procedures**

Procedure	Purpose	Definition	Example
Response Interruption	Reduce the interfering behavior	Stop the behavior through verbal or physical blocking	Student displays vocal stereotypy, or repetition of speech sounds that serve no apparent social function. The teacher gains learner's attention by stating the learner's name.
Redirection	Increase appropriate behaviors	Prompting the learner to engage in a more appropriate behavior.	After student's response is interrupted and the teacher has the learner's attention, the teacher asks the learner to answer a question.





### Video

## Video from AFIRM RIR Module: A Case for RIR

**AFIRM** 

Autism Focused Intervention Resources and Modules





#### Example:

#### **Example**

Bradley, a learner with ASD, has difficulty participating in a discussion during language arts class because he recites movie lines repeatedly. If his teacher interrupts Bradley by asking a question that requires a response, he is more likely to engage in appropriate discussion and reduce the amount of time reciting movie lines.







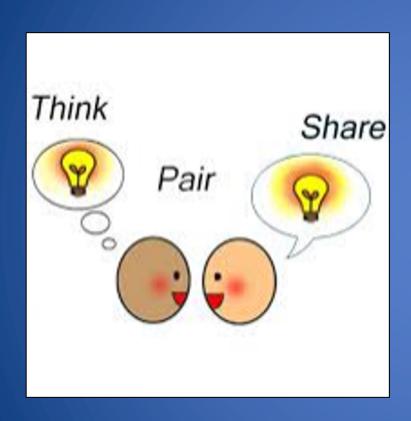
### How can RIR help learners?

- By diverting the learner's attention away from the interfering behavior and redirecting the learner to more appropriate, alternative behaviors
- RIR is cost-effective and can be used to address significant interfering behaviors (e.g., stereotypies or self-injury) that are often difficult to address





### Think - Pair - Share:



Share with the person next to you:

Do you know a student who could benefit from RIR?

What are the interfering behaviors demonstrated by the student?





### **Using RIR**





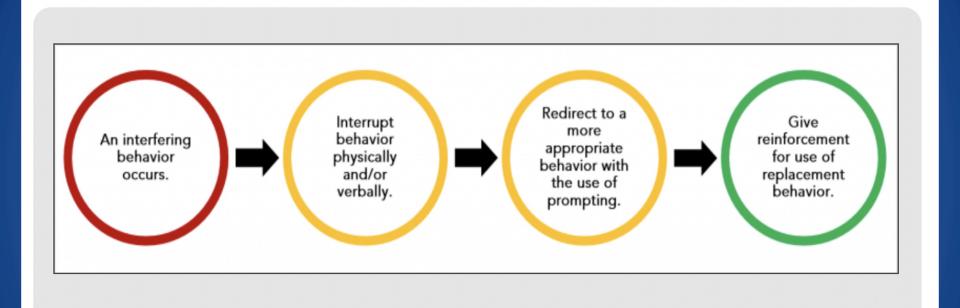
#### RIR is best to use with:

- Persistent interfering behaviors that occur in various settings across a variety of tasks (or even when other people are not present)
- Behaviors that are likely maintained by sensory reinforcement/automatic reinforcement (function=sensory access or sensory avoidance)





### RIR Procedure







#### RIR Procedure:

- Interrupt/stop the interfering behavior through verbal or physical blocking e.g. touch Bobby's hands & say "Bobby"
- 2. Redirect to a brief behavior the student can do and is likely to engage in e.g. "clap hands"





#### **Considerations for RIR**

Interfering Behaviors	Description	Function of Behavior	Response interruption	Redirection
Motor stereotypy	Movement of body parts that have no apparent function and/or movement that is not directed toward another individual (e.g., hand flapping, hand mouthing, putting fingers in ears, fanning/spreading fingers, spinning toy).	Sensory stimulation	-Physically block (e.g., stopping toy from moving) -Verbally block (e.g., state learner's name in a neutral tone of voice)	-Prompt learner for a motor response (e.g., "Hold hands in lap.") - Ask learner a social question or give prompt that requires a verbal response (e.g., "Where do you live?")
Vocal stereotypy	Vocalizations that have no apparent function and are not directed toward another individual (e.g., echolalia, non-contextual laughing/giggling, non-contextual words/phrases, non-recognizable words).	Sensory stimulation	-Verbally block (e.g., state learner's name in a neutral voice)	-Prompt learner for a motor response (e.g., "Clap your hands") -Ask learner a social question or give prompt that requires a verbal response (e.g., "Say Mom")
Self-injury	Any aggressive behavior that is directed towards oneself (e.g., hitting, scratching, biting).	Sensory stimulation	-Physically block (e.g., touch body part that is involved in self- injurious behavior) -Verbally block (e.g., say "Stop")	-Providing preferred toys and/or objects - Prompt learner to engage in physical and verbal task (e.g., "Fold your hands and count aloud to 10")
Challenging behavior	Any behavior that is disruptive (e.g., screaming, aggression towards others, eloping, falling to the ground).	Sensory stimulation	-Physically block (e.g., touch body part that is involved in challenging behavior) -Verbally block (e.g., say "Stop")	-Providing preferred toys and/or objects -Prompt learner to engage in physical task (e.g., sit in a chair, stand up, fold arms)





#### Determine an Appropriate Alternative Behavior

Once the learner's interfering behavior has been:

- 1. Interrupted (e.g. touched hands & said "Bobby") and
- Redirected (e.g. "clap hands")

the learner should be prompted to engage in an alternative behavior (e.g. "do a puzzle")





#### Determine an Appropriate Alternative Behavior

Interfering Behavior	Example	Alternative Behavior
Motor stereotypy	During free play, Lily often grabs a toy and holds it near her eyes swinging it repeatedly back and forth. Mr. Lance uses RIR by stopping the toy physically from moving and telling Lily to put her hands on her lap.	After Lily's hands are in her lap, Mr. Lance prompts Lily to engage in playing with toys, such as putting a puzzle piece in a puzzle or looking through pages of a book.
Vocal stereotypy	Dylan often repeats sounds, such as "ee ee" during the start of group work with peers. Ms. Clary uses RIR by stating Dylan's name and gaining his attention, and asking "What do you like about Spiderman?"	After Dylan has provided verbal responses to the social questions, Ms. Clary prompts him to say "Hello" to peers and begin engaging in-group work.





#### Determine an Appropriate Alternative Behavior

Interfering Behavior	Example	Alternative Behavior
Self-injury	During the transition to lunchtime, Alex begins biting his hand. Mrs. Murphy uses RIR by physically touching his hand and providing Alex with his lunch box.	After Alex is holding his lunch box, Mrs. Murphy prompts Alex to get in line with his class to walk to the cafeteria.
Challenging behavior	Suzy screams when sitting at her desk. Mr. Green uses RIR by telling Suzy to stop and telling her to "Stand Up."	After Suzy has stood up, Mr. Green prompts her to engage in her work at her desk.





### Video

# Video from AFIRM RIR Module: Select Appropriate Alternative Behavior

**AFIRM** 

Autism Focused Intervention Resources and Modules





### **Practice with Feedback**







Mark's interfering behavior is making repetition of nonfunctional speech sounds ("ne, ne, ne") during play activities with peers.

Which is an appropriate RIR procedure for Mark?

- State Mark's name and ask Mark, "What color is your pencil"?
  - Touch Mark's shoulder and provide Mark with his iPad?





Mark's interfering behavior is making repetition of nonfunctional speech sounds ("ne, ne, ne") during play activities with peers.

What is an appropriate alternative behavior for Mark?

- Prompt Mark to engage in a turn-taking activity with peers?
  - Have Mark complete a puzzle by himself at his desk?





#### Provide Reinforcement

- Providing reinforcement after the learner demonstrates the alternative behavior will increase the likelihood that the learner will engage in the alternative behavior again in the future
- Reinforcers should be selected based on the learner's interests and motivations





#### Provide Reinforcement

Type of Reinforcer	Examples
Verbal praise	"I like the way you tried on that math problem."  "Great job completing your science activity!"
Preferred activities	IPad access, drawing, play activities
Edible, tangible reinforcers	Candy, snacks
Non-edible, tangible reinforcers	Toys (e.g., action figures, cars, balls)





#### Example:

#### **Example: Using a Reinforcer**

Johnny recites phrases repeatedly (e.g., "Blue cat") during independent reading time in class. Mr. Palm incorporates Johnny's interest of trains into the RIR procedures by interrupting him with a social question about trains (e.g., "What is the last car of a train called?"). He prompts Johnny back to his book. After Johnny completes the required reading time for the day, Johnny can take a break and play with his toy train.



Image Credit:
Creative Commmons





#### Reinforce Use of the Alternative Behavior

- When first beginning to use RIR, it is important to use continuous reinforcement
  - Provide the learner the identified reinforcer(s) each time the learner uses the alternative behavior
  - The reinforcer should be delivered immediately and consistently (e.g., within 3 seconds each time the learner uses the alternative behavior)
  - Continuous reinforcement will help the learner associate the alternative behavior with the selected reinforcer(s)
- When delivering the reinforcer, be sure to describe the alternative behavior after the learner has used it correctly
  - For example, "You have finished your vocabulary worksheet, now you can draw."





### Reinforce Use of the Alternative Behavior

- Once the learner is successful, thin the schedule of reinforcement
  - Reinforcer is delivered after some instances of the learner using the alternative behavior (but not after every instance)
  - Variable-ratio schedule (e.g., on average every fourth time)
  - Fixed-ratio schedule (e.g., every fourth time)





## **Practice with Feedback**







### Case Study: Courtney

Interfering behavior—reciting movie lines repeatedly during independent work time

The team identified RIR procedures as:

- Interruption—verbal blocking
- Redirection—asking a personal information question (e.g. how old are you?)
- Alternative Behavior—completing independent work
- Reinforcer—computer time

### What should the teacher do first?

- A. State Courtney's name and ask a question "Where do you live?"
- B. Prompt Courtney to complete her math sheet?





### Case Study: Courtney

What should the teacher do after Courtney stops reciting movie lines and answers the question "Where do you live"?

- A. Allow Courtney time on the computer?
- B. Prompt Courtney to complete her math sheet?

# What should the teacher do after Courtney completes her math sheet?

- A. Wait until the end of the class period to allow Courtney time on the computer?
- B. Immediately reinforce Courtney by allowing her to spend time on the computer?





### **Train Team Members**

- To ensure consistent implementation of RIR across settings, it is helpful that the entire team be trained
- If only one team member is using RIR, effectiveness may be limited, as this one person may not always be the person working directly with the learner when they engage in the interfering behavior
- To increase appropriate behaviors and decrease interfering behaviors, it will be important that RIR be conducted consistently across settings





### Train Team Members

- Train team members by providing the following information about the selected RIR procedures:
  - Well-defined interfering behavior
  - Selected RIR procedures
  - Type of alternative behavior or replacement behavior
  - Type of reinforcer





### Train Team Members

	whom it is time to some late an evan inde-andeath, in the
Interfering	when it is time to complete an exam independently in the
	general education setting, Lexi repeatedly taps her pencil to
Behavior	gain sensory stimulation, preventing her from completing her
	exam.
Selected RIR Procedures	Physically stop the pencil from moving and verbally prompt Lexi
	to softly tap her foot.
Replacement	1/2 of 211
Behavior	verbally prompt Lexi to complete her exam.
Reinforcer	
	After completing her exam, Lexi will color a picture.





# Monitoring RIR





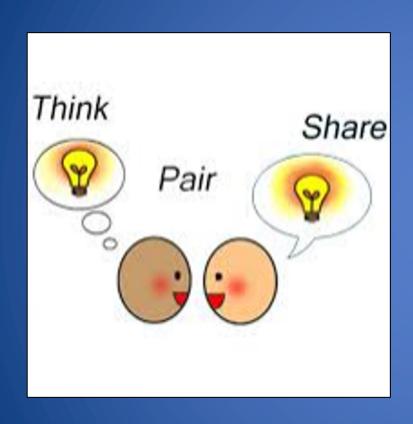
# Collect and Analyze Data on the Interfering Behavior

- Collecting data will help determine if a learner is making progress in reducing interfering behaviors or increasing use of appropriate behaviors
- If the learner is making progress based on data collected, team members should continue using response interruption and redirection and consider using response interruption and redirection to address additional interfering behaviors or appropriate behaviors





## Think - Pair — Share:



Share with the person next to you:

Why is it important to collect data?





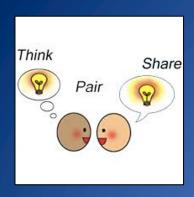
## **Troubleshooting Tips:**

If the learner with ASD is not showing progress with response interruption and redirection, ask yourself the following questions:

- Is the behavior well defined?
- Is the behavior measurable and observable?
- Did a functional behavior assessment (FBA) indicate the function of the behavior?
- Was response interruption/redirection used with fidelity? (Use the Implementation Checklist to determine fidelity.)
- Does the prompt ensure the learner uses the alternative behavior?
- Are reinforcers used that are motivating to the learner?
- Are all team members using response interruption and redirection consistently?







# My Takeaways

- 1. What are 4 things you remember from today's training?
- 1. What are 2 things you see yourself doing?
- 1. What is the 1 thing you can implement tomorrow?





# **Next Steps**

### Response Interruption/Redirection (RIR) ---Implementation Checklist---

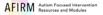
### Before you start:

#### 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.

Observation	1	2	3	4
Date Observer's Initials				
Step 1: Planning				
1.1 Conduct a functional behavior assessment				
1.2 Identify RIR procedures				
1.3 Select an appropriate alternative behavior				
1.4 Identify reinforcers				
1.5 Train team members				
Step 2: Using				
2.1 Praise learner's independent use of appropriate behaviors				
2.2 Use identified procedure				
2.3 Prompt for the alternative behavior				
2.4 Reinforce use of the alternative behavior				
Step 3: Monitoring				
3.1 Collect and analyze data on interfering behavior				
3.2 Determine next steps based on learner progress				



Response Interruption/Redirection

National Professional Development Center on ASD

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# After the Training...

Please complete the **Post Training Survey** that will be sent to your email



















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