Functional Assessment-Based Interventions

David James Royer, PhD, BCBA University of Louisville

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Greater Louisville Educational Cooperative Diverse Learners Institute University of Louisville ShelbyHurst Campus

Ci3T | Comprehensive, Integrated, Three-Tiered Model of Prevention

BCBA CEUHelper Availat

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Agenda

- Ci3T model of prevention
- · Overview of functional assessment-based interventions (FABI)

 - What are FABIs?
 Why are FABIs effective?
 - What does the supporting research for FABIs say?
 What are the benefits and challenges?
- How do I implement FABIs in my classroom?

 - Step 1: Identifying students who need a FABI
 Step 2: Conducting the functional behavior assessment
 Step 3: Collecting baseline data

 - Step 4: Designing the intervention Step 5: Testing the intervention

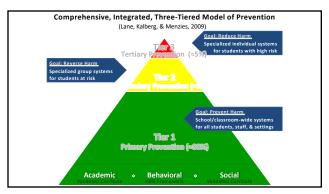
• Resources

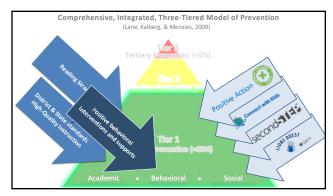
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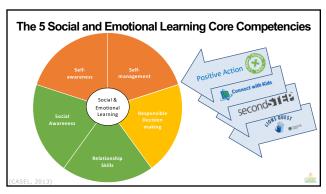


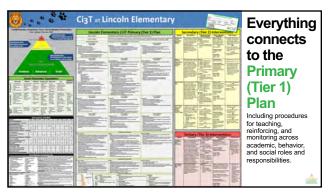
Prevention!

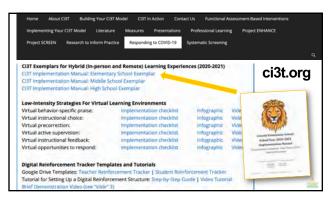
A respectful, educational approach to behavior

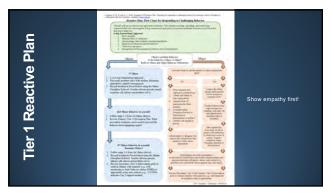


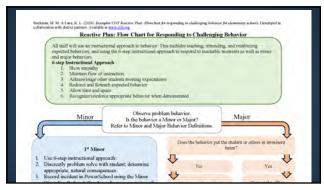












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A Consistent Reactive Plan is Essential



When students don't meet expectations

- · Educators respond similarly and consistently
- Students learn what happens when they don't meet expectations is procedural, not personal
- Teachers have competence (know what to do)
- Teachers have confidence (colleagues do the same and respect it)
- Builds trust

Inconsistent responding =

Broken promises, non-assertive behaviors, students distrust, invites further rule infraction

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A Consistent Reactive Plan is Essential

- Teach what to do and when to do it
- Teach standard consequences

6-step instructional approach:

- 1. Maintain the flow of instruction
- 2. Recognize on-task students, making no response to off-task students
- 3. Show empathy first
- 4. Redirect (focus on task, brief language/gestures, prompt procedures for asking for help)
- 5. Give time and space
- 6. Acknowledge appropriate behavior when demonstrated

Teach a Standard Consequence

- Can teach a standard consequence for specific types of behavior

Easy Clear

Consistent

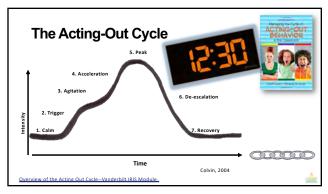
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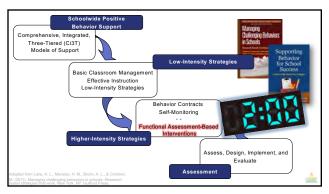


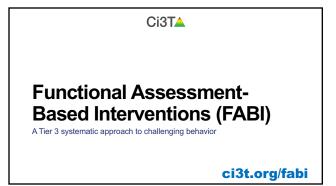
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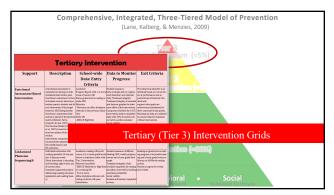


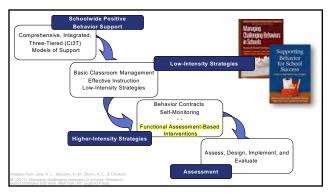












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What are functional assessment-based interventions (FABI)?

- Interventions based on the function of the behavior
 - $_{\circ}\mbox{Function}$ is determined by a functional assessment
 - _o Function refers to the purpose the behavior serves:
 - to get (access) something or
 - to get out of (avoid) something

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Unique Features: FABI Model

Function Matrix to determine hypothesis

Access (positive reinforcement) or avoid (negative reinforcement)
 attention; activity or tangible; sensory

- Function-Based Intervention Decision Model
- Method 1: Teach the replacement behavior • Method 2: Improve the environment
- o Method 1 & 2
- Method 3: Adjust the contingencies

A-R-E Components

- Antecedent adjustments
- Reinforcement



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Why are FABIs effective?

- Emphasis on skill building and supporting pro-social behavior (replacement behavior) that serve the same function(s) as the target behavior (problem behavior)
- · Serves the communicative intent of the target behavior
 - o what the student is trying to access or avoid:

 - tangibles / activitiessensory

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What does the research for FABIs say?

Student Populations

- Autism spectrum disorder
- Attention-related difficulties
 Nonparticipation
 Nonparticipation

- Elementary settings
- Secondary settings

Target Behavior

- Noncompliance
- Off-task
 Gann et al., 2004; Lane et al., 2007
- s Stahr et al., 2006
 With or at Irisk for emotional/behavioral disorders
 Jamery et al., 2013; Lane et al., 2004; Wood et al., 2007, Iurton et al., 2016, Algust the contingencies
 Challenging behaviors
 Lane et al., 2007, Turton et al., 2007, Iurton et al., 20
 - interactions

 Lane et al., 2007; Turton et al., 2007
 - Disruptive behaviors
 Lane et al., 2007; Turton et al., 2011

- · Method 1: Teach the
- replacement behavior Method 2: Improve the
- environment

 Germer et al., 2011; Majeika et
- Method 1 & 2: Teach the replacement behavior and improve the environment

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What are the benefits and challenges?

Benefits

- Systematic
- Proactive rather than reactive Requires training and practice
- Yield desired outcomes
- 。variety of students
 - o range of target behaviors
 - 。variety of environments
- · Team-based approach
 - opportunities for parent and student voice

Challenges

- Can be resource intensive
- Time for teams to work together and collect data

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Functional Assessment-Based Intervention (FABI) Steps

SYSTEMATIC PROCESS





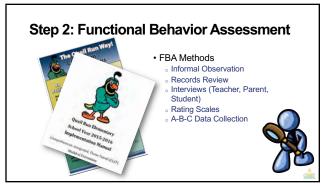






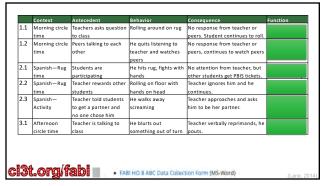
Support	Description	School-wide Data: Entry Criteria	Data to Monitor Progress	Exit Criteria
Functional Assessment- based Intervention	FABIs are interventions based on the function of the target behavior, as determined by the behavior, as determined by the determined with the aid of the Function Matrix. The Function Matrix The Function Matrix are said to determine the Based Intervention Decision Model is used to determine the properties of the replacement behavior, Method 1 and Method 2. A package conditionation of Method I and Method 2. A package intervention is designed and intervention in the designed and intervention in	One or more of the following: Behavior: Bright Strain Str	Student behavior targeted for improvement (e.g., target or replacement exhibitions of the control of the contro	The FABI will be faded once a functional relation as demonstrated using a validated using a validated using a validated using a validated using e-case research design (e.g., withdrawal) and: • Behavior of the student is met (See Behavior Intervention Plan [BIP]).

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A-B-C Data: Example A teacher hands out math computation worksheet, starts the timer, and tells students they will be timed in completing the math worksheet. The student then tears up the worksheet. The teacher scolds the student and has the student clean up the mess without completing the worksheet. A The teacher hands out a math computation worksheet, starts the timer, and tells students that they will be timed in completing the worksheet The teacher racids the student clean up the mess (without completing the worksheet)



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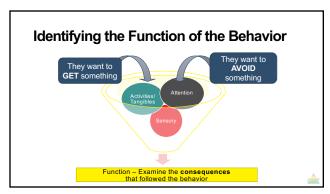
Function Matrix

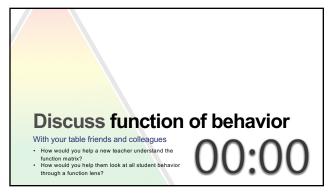
- · Visually identifies the function of the behavior
- Enter data from records review, interviews, and A-B-C data
- Visually analyze, then create a hypothesis statement

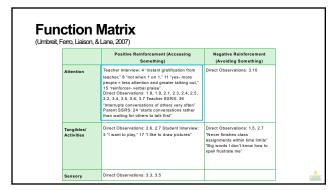
	Positive Reinforcement (Access something)	Negative Reinforcement (Avoid something)
Attention		
Tangibles/ Activities		
Sensory		

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Obs. No.	Context	Antecedent	Behavior	Consequence	Function
1	Class instruction beginning	T asks S to please have a seat	S refuses, "Not doing any of this crap today"	T reminds S of consequence (no grade)	
2		T reminds S of consequence (no grade)	S silently mocks T	T ignores mocking, says "I want you to"	
3		T says "I want you to have"	S interrupts, "I heard what you said."	T ignores	
4	End of lesson	T asks S if she did the HW	S sarcastic, "No, did you?"	T says need you to do it now	
5		T says need you to do it now	S says "I need you to get away from me"	T ignores	
6	Indep. work	T roams, tells S might want to check answers	S replies, "I don't need your help. Go away."	T says to check b/c 2 are wrong	
7		T says to check b/c 2 are wrong	S replies "Well it looks to me like blah blah blah"	T ignores	







		(Germer et al., 2011)			
	Positive Reinforcement	Negative Reinforcement			
Attention	PBC date 97 recidences during musting seek times. 11, 21, 31, 61, 51, 115, 51, 55, 116, 117, 118, 120, 121, 122, 122, 124, 125, 126, 127, 139, 131, 319, 137, 139, 149, 149, 149, 142, 143, 149, 149, 150, 151, 151, 159, 150, 159, 150, 159, 150, 159, 150, 150, 150, 150, 150, 150, 150, 150				
	attention"				
Activities/ Tangibles	ABC data: 3 incidences during morning work lime. 1.4°, 2.8, 3.6° - Reacher inheriver. - Molivated to finish morning math work, but does not complete during assigned lime: finishes by copying during review of work, likes to turn it in.	AGC data: 84 incidences during menning work into 1.4°, 1.5, 1.7, 1.9, 1.11 1.27, 1.13, 1.14, 1.19, 1.25, 1.23, 1.23, 1.23, 1.24, 1.23, 1.24, 1.25, 1.24, 1.25, 1.24, 1.			
Sensory	ABC data: 2 incidences during morning work time. 3.15°, 3.21° Teacher interview: "He's not an unreasonable child he intends to behave, but can't. He's not physically able to sit still." Student interview: Tends to be off-task "when I feel ticklish"	The 2 rd -grade level-work might be too hard but has average-math as reading ability compared to class. There's "nothing that interests him enough."			

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Illustration: Hypothesized Function

- When presented with an instructional task, David engages in off-task behavior (such as leaving instructional areas, inappropriately making comments, and engaging in unassigned tasks) to access attention and/or to escape tasks.
- In other words, when David is off-task he gets attention from his teacher and peers and does not have to complete assignments (positive reinforcement: attention and negative reinforcement: activity).

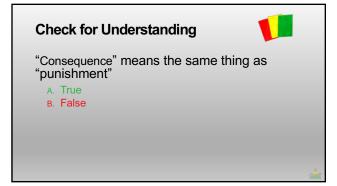
Germer et al., 2011

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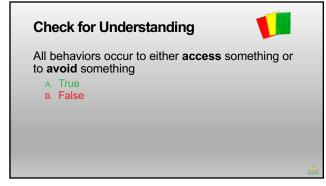


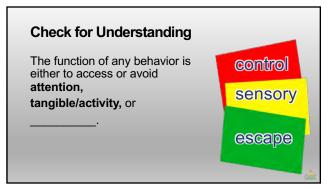
Check for Understanding Both positive reinforcement and negative reinforcement increase the future probability of a behavior. A. True B. False

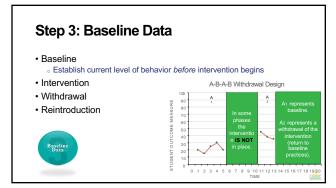
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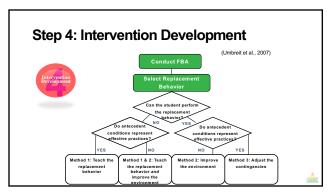


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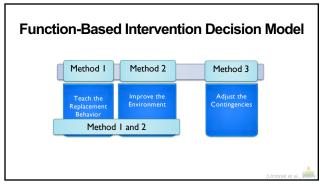








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Selecting a Replacement Behavior

- If a student is not engaging in the target behavior, they must do something in its place
- Teacher and parent interview guides selection
- The replacement behavior must be
- o in the student's repertoire already or
- $_{\circ}$ taught explicitly

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A - R - E Intervention Components

- · Adjust Antecedents
 - Physical room arrangement
 Visual/audio cues

 - o Securing attention
 - Self-monitoring checklists
- Adjust Reinforcement rates
 Tangible or non-tangible

 - Behavior specific praise
 Make it contingent upon performing replacement behavior
- Extinguish what was previously reinforcing target behavior
 - Brief verbal prompt, then ignore
 Removing the student, or removing the class
 - Emergency procedures



		Intervention Tactics
Antecedent	A1	David sat facing the whiteboard.
	A2	Stop Light was affixed to the side of David's desk; David used a clothespin to signal which "light" he was on.
	A3	A copy of David's self-monitoring form was displayed on his desk.
	A4	The teacher reviewed the picture schedule for the morning work period prior to the work period.
	A5	The teacher checked in with David at the beginning of independent tasks to ensure that he understood the assignment.
Reinforcement	R1	The teacher provided behavior-specific praise when David was on task.
	R2	The teacher acknowledged David's need for help when his clothespin was on red and assisted him as quickly as possible.
	R3	The teacher checked David's work upon completion, provided praise, and allowed him to take a short break.
	R4	At the end of the morning independent work period, the teacher helped David complete his self- monitoring form and wrote one specific incidence of good behavior at the bottom.
Extinction		The teacher provided no praise or attention when David was off task, with the exception of one verba or gestural redirect per minute.
	E2	The teacher provided assistance without praise and with minimal interaction when David's clothespin was on red.
(Germer et al., 2011)	E3	When David was off task, the teacher praised other students who were on task.

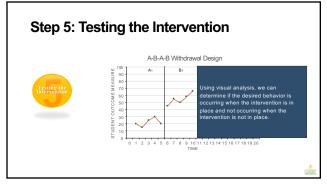
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Ethical Considerations

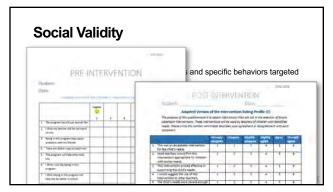
- Provide service only within the scope of your competence
- Recommend and provide scientifically supported, effective treatment
- Maintain detailed, documentation of your work
- Avoid punishment, aversive, or harmful procedures or reinforcers
 - No response cost

 - No public shaming (e.g., clip up/down charts)
 No embarrassment (e.g., loud kitchen timer on desk)
- Use data to drive decisions

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Intervention Tactics	0 = Not at all; 1 = Partial;	Mon	Tue	Wed	Thur	Fri	Component Total	%
A1. David sat facing the whiteboard.	2 = Complete and Consistent	012	0 1 2	0 1 2	0 1 2	0 1 2		
A2. Stop light affixed to David's desk		0 1 2	0 1 2	0 1 2	0 1 2	012	₹'	
A3. David's self-monitoring form was displa	0 1 2	0 1 2	0 1 2	0 1 2	0 1 2	ea		
A4. Teacher reviewed picture schedule for morning work prior to period.				0 1 2	0 1 2	012	3	
A5. Teacher checked in with David at beginning of independent tasks				0 1 2	0 1 2	0 1 2	<u> </u>	
R1. Teacher provided behavior-specific praise when David was on task.				0 1 2	0 1 2	0 1 2	Ä	
R2. When clothespin on red teacher acknowledged David's need for help and assisted David as quickly as possible.				0 1 2	0 1 2	0 1 2	Inte	
R3. Teacher checked David's work, praised	, and allowed a short break.	0 1 2	0 1 2	0 1 2	0 1 2	0 1 2	eg	
R4. Teacher helped David complete self-mo specific incidence of good behavior at the b		0 1 2	0 1 2	0 1 2	0 1 2	0 1 2	Ţ	
E1. Teacher provided no praise or attention when David was off-task, except one verbal or gestural redirect per minute.				0 1 2	0 1 2	0 1 2	δ	
E2. Teacher provided assistance without praise and with minimal interaction when David's clothespin was on red.				0 1 2	0 1 2	0 1 2	neckli	
E3. When David was off task, the teacher p were on task.	0 1 2	0 1 2	0 1 2	0 1 2	0 1 2	Sis		
	Daily total (column)						74	
	Percent (total ÷ 16 × 100)							





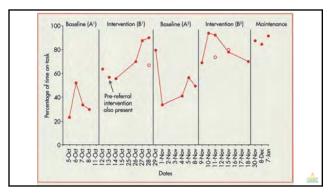
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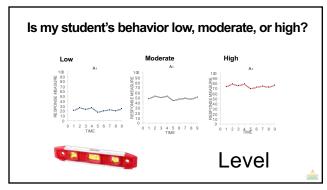
Collecting Data

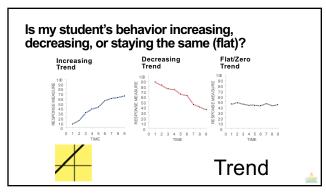
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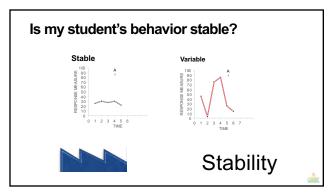


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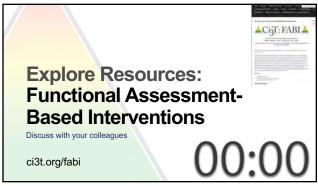




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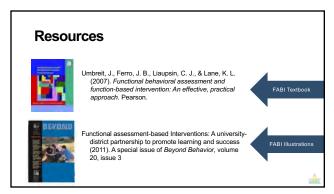
Generalization and Maintenance

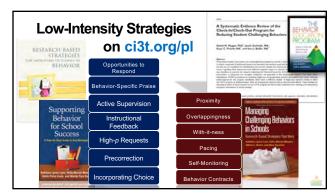
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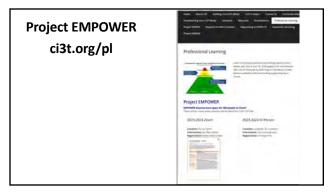


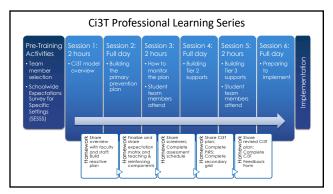
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