

# **A Function Based Thinking Approach to Behavioral Response to Intervention**

2016 Conference on Behavior Issues  
for School Leaders

## **My Viewpoint. . .**

- Believe strongly in closing the research to practice gap
- Not a researcher-focus on practical application
- 25 years “in the trenches”-have the general education, special education, “severe” behavior, and districtwide perspective
- Embrace imperfections-we learn a lot from our “mistakes” or “shortcomings”
- You have to build the plane while you fly it!
- Build positive and collaborative relationships with anyone who shares your goals/vision-we are all in this together!
- I don’t have all the answers but can share my journey/experiences



Evidence-based practice attempts to not only answer the question “what treatments work?” but also the question of for whom and under which conditions?

## Implementation Science

- Identify core components (framework)
- Autonomy to design within that framework
- Each school must do what work for them



## Color Charts

### **Our Country has a SERIOUS Punishment Addiction Problem!!!**

- U.S. and Russia world leaders in incarceration
- US 4.4% of world population but houses 22% of the world's prisoners
- 6 to 10 times that of most industrialized nations
- 82% school dropouts
- 70% read below fourth grade level
- Corrections cost \$74 billion annually
- About half of federal prisoners are incarcerated for drug related offenses
- 85% of juvenile offenders have reading problems
- Average age of juvenile offenders is 15

8

## Problems with a Punitive/Reactive Approach

- May temporarily stop or suppress problem behavior for 80-90% of students without chronic behavior problems but fails to teach replacement behavior, life skills, or develop personal responsibility
- Child identifies the punishment with the punishers and setting where it happens-may start disliking educator and school in general
- May adversely effect the physical and emotional health of the child
- Often appeals to educators because they are reinforced by short term effect-”works” quickly
- Educators that rely on it do not develop skills in using other more effective interventions.
- Some individuals are rewarded by the reaction that often accompanies this approach

Became very interested in behavior management and tried some more “positive” systems-token economy, “catch them being good”, group contingencies with some success.



## Back to the Good Life!

- Moved back to Nebraska
- Got “emergency certificate” in SPED
- Started subbing and quickly got reputation as someone who would take jobs with behavior problem students
- Subbed in a in patient psychiatric facility
- Started realizing that problem behavior serves a purpose for students and that they need to be TAUGHT other ways to express themselves and meet their needs-not just rewarded and punished



- 7 years co-teaching in a self-contained program for students with “severe” behavior disorders
- Pursued masters degree in behavior disorders with John Maag and Reece Peterson
- Had a pretty good handle on “function based thinking” with lots of success
- 1997 IDEA amendments went into effect which caused practical difficulty with meeting the mandate



## FBA Research Problems

- The 1997 public policy exceeded the research base-required FBA's for SPED eligible students in certain situations
- Techniques traditionally researched originally designed for students with severe developmental disabilities in clinical settings
- Relationship between empirical rigor and practical application to some extent inverse

(Nelson, Roberts, Mathur, & Rutherford, 1999)

### Always More to Learn!

- Realized I didn't know enough about the function of behavior common to students on the autism spectrum
- Moved to Kansas City to pursue doctorate at the University of Kansas advised by Rich Simpson
- Realized quickly that function based programs like the one I came from were the exception and not the rule!
- Taught me about the importance of evidence and not "The almighty word of Kaye!"
- Became my passion to help develop such programs-it CAN happen-I've experienced it!



## **FBA Research to Practice Goals in Educational Settings**

- Develop more efficient and effective ways of delivering staff training on implementing FBA methodologies in school settings
- Develop and validate more efficient, user-friendly methods

(Scott et al, 2004)

“Intervention is not based on behavior- it is based on the function of the behavior. Anything less is literally no better than pulling an intervention out of a hat, or choosing one because it is familiar or simple. “

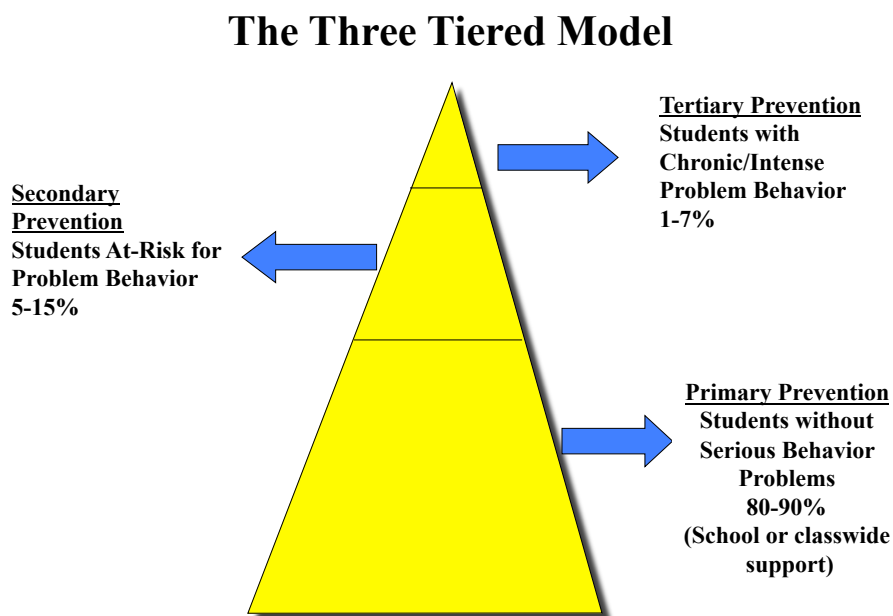
(Scott & Kamps, 2007)



## FBA-A Three Tiered Model

“Contextually, we see FBA not as a separate process but as an integral component of a systemic multilevel model for prevention and intervention. That is, FBA is a tool within a triage model, to be used in determining the most logical, probable, and efficient course of action.”

(Scott & Kamps, 2007, p. 147)



## **Functional Behavioral Assessment**

- This is not just a special education thing!
- A process for understanding problem behavior and factors that contribute to its occurrence and maintenance-  
What does behavior mean? What does the student need?  
What skills are missing?
- Main purpose to guide the development of effective, efficient, and relevant responses-what should we do?
- Responses based on knowledge of why students are having problem behavior is more effective.
- Helps determine if traditional responses to behavior are appropriate (timeout, office referral suspension)

## **New Term: Function Based Thinking (FBT)**

(Hershfeldt, et al, 2010)

- Empowers all educators (not just SPED) to respond more effectively by considering why the student is having the problem behavior and what they need
- Guides more effective proactive and preventative
- The earlier the intervention the more effective the behavioral change efforts
- You should always think functionally and respond accordingly even at tier one

## The ABC's of FBT

<u>A</u> ntecedent (Happens Before)	<u>B</u> ehavior	<u>C</u> onsequences (Happen After)
Setting Events Triggering Antecedents		Maintaining Consequences= Reinforcement

### Setting Events

Happens before the problem behavior and exaggerates the likelihood of the problem behaviors but usually doesn't happen *immediately* before.

(You know it is going to be a bad day when. . .)

Examples

- Hunger
- Lack of sleep
- Lack of medication
- Weather
- Illness

What “shakes up the coke can”?

## Triggering Antecedents

“Trigger” the problem behavior

What happens *immediately* before?

(Straw that broke the camel’s back)

Examples

- Change in routine
- Demand/request
- Sensory stimulation
- Conflict with a peer

## Maintaining Consequences

What happens after (both positive and negative) that *reinforces* the behavior

What do they get out of it?

“The pay off”

Examples

- Attention from peers (laughter)
- Attention from adults (lecture)
- Escape from task/demand (remove worksheet)
- Escape from environment (sent to the office)

***Maintaining Consequence=Reinforcement***

***We need to understand and use reinforcement to increase desired and not (accidentally) undesired student behavior***

25

**Key Things to Understand About Reinforcement**

- Reinforcement is something that happens *after* the behavior resulting in the behavior to *increase* or *maintain*
- Often things adults think will reduce a student's behavior, actually reinforces it making it worse
- There is no such thing as a universal reinforcer-all individuals are unique and reinforced by different things
- Behavior does NOT continue or increase if there is not some type of reinforcer present! There IS a pay off! Find out what it is!
- Reinforcement can be positive (something added) or negative (something removed)

A behavior is *positively reinforced* if something that the person values or desires is added after the behavior making the situation better from their perspective.

Example: A student gets extra free time when he or she finishes an assignment therefore making the situation better from their perspective.

A behavior is *negatively reinforced* if something that the person does not like goes away after the behavior therefore making the situation better from their perspective.

Example: A student is given an writing assignment. He or she starts behaving in a way that disrupts the class and is sent to the office. The writing assignment goes away therefore making the situation better from the their perspective.

## What's the Reinforcer?

Every day that Ellen finishes her reading assignment on time, Mrs. Farmer allows her to take sports equipment out to recess. Ellen finishes her work on time much more often.

Mr. White sends Darrin out of the room because of disruptive behavior in class. Darrin talks to other students and teachers who see him, in addition to avoiding his work. Mr. White finds that Darrin is disruptive again soon after he is permitted to return to class.

## Function Category #1

- Students engage in problem behavior in an attempt to ***PROTEST/ESCAPE/AVOID*** (Negative Reinforcement)
- Either they don't have the skills needed to be successful or they have difficulty using the skill to appropriately manage the situation.
- The intervention needs to provide direct instruction of needed skills and prevention strategies that provide more structure and support.
- A common function is to escape academic demands.
- Considering what happens before the behavior, day of the week, and/or time of day can be an indicator of what they are trying to protest/escape/avoid.

29

## Function Category #2

- Students engage in problem behavior in an attempt to ***SEEK/GET/OBTAIN*** (Positive Reinforcement)
- Therefore, educators need to understand how they respond after the behavior (maintaining consequences) can either make the behavior better or worse
- Don't allow them to get what they want or need with problem behavior-teach them a better way!
- A common function is to gain attention

30

## **Core Components of Tier One**

- 1) Common purpose and approach
- 2) Administrative leadership
- 3) Positively stated agreements, procedures, and routines
- 4) Explicitly taught agreements, procedures and routines
- 5) Environmental design
- 6) Instructional design
- 7) Frequent acknowledgment of positive behavior
- 8) Consistent instructional response to problem behavior
- 9) Ongoing monitoring and evaluating effectiveness

31

## **FBT Guiding Principle #1: Explicitly Teach Students Appropriate Behavior**

- What YOU want them to do at school and why it's important-not just so they don't get in "trouble"
- How to get their wants/needs met (replacement behavior)
  - Appropriate ways to get attention
  - What to do instead of protesting/avoiding/escaping (ask for help, take a break, use appropriate words to express themselves)



“If a child doesn’ t know how to read, *we teach*”  
 “If a child doesn’ t’ know how to swim, *we teach*”  
 “If a child doesn’ t’ know how to multiply, *we teach*”  
 “If a child doesn’ t’ know how to drive, *we teach*”

“If a child doesn’ t’ know how to behave,  
*we . . . teach? . . . punish?*”

“Why can’ t we finish the last sentence as automatically  
 as we do the others?”

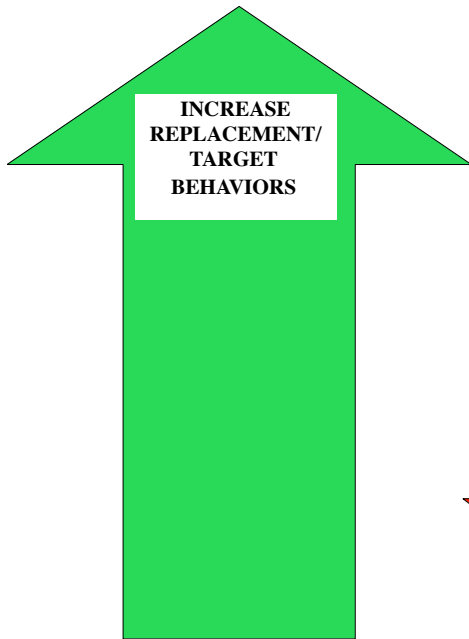
John Herner

33

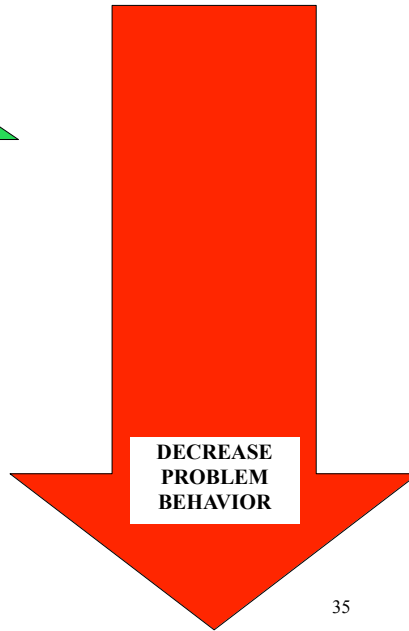
### **The *science* of behavior tells us. . .**

- Students do not learn better ways of behaving when only given aversive consequences
- To learn better ways of behaving, students must be directly taught
- To retain new behaviors students must be given specific, positive feedback and opportunities to practice in a variety of settings

34



35



35

***Never Say No without a Go!***

36

**FBT Guiding Principle #2: Prevent Protest/  
Avoidance/Escape By Providing an Engaging  
Learning Environment**

- Students working at appropriate level of difficulty
- Students working on a variety of activities across different learning modalities
- Students are actively engaged and not just passively receiving instruction
- Modeling (I Do), Guided Practice (We Do) and Independent Practice (You Do) scaffolded approach to instruction is used
- Failure is not an option
- Escape from the classroom and work tasks is a very common function of problem behavior. Our goal is to make teaching and learning fun and engaging!

**Failure is NOT an Option**

- Many students content with low achievement as long as the work is “off their plates”
- Allowing incorrect work gives permission and practice doing tasks incorrectly
- Require students to correct work to at least 80% correct (errorless learning concept)
- Ensures that tasks given are truly at instructional level
- Holds educators and students accountable

### **FBT Guiding Principle #3: Pay Attention to Attention!**

- Behavior science has proven that attention is a generalized reinforcer-everyone is reinforced by it and we do not satiate (money is the other)
- ANY attention can be reinforcing-negative attention is better than being ignored
- Give as much attention as possible to appropriate behavior
- Give as little attention as possible to inappropriate *behavior*-but don't ignore the student-look for positives to reinforce!

*“What’s worse than being hated is being ignored, because it is like you don’t exist at all and your presence is nothing.”*

*-Anurag Prakash Ray*

## **More on Attention**

- Behavior science proves that noncontingent attention (given regardless) reduces problem behavior
- A 4:1 positive/negative ratio provides the most productive environment-also true across business, sports, and relationships
- Need to make enough deposits before you can take a “withdrawal”
- Builds positive relationships
- Simple intervention that is free and requires no time or preparation
- Prevents common escape/avoid function of problem behavior
- How motivated would you be if you mostly received negatives from your supervisor?

## **The Power of the Positive!**

- Positive psychology studies overachieving outliers versus the average (to tailor to most students) or below average (to determine interventions to help them)
- More than a decade of research in positive psychology and neuroscience has proven that optimistic conditions fuel performance and achievement
- Results in students being more motivated, efficient, resilient, creative, and productive
- Confirmed by research on 1,600 Harvard students and dozens of Fortune 500 companies worldwide (The Happiness Advantage, 2010)

### **FBT Guiding Principle #4: Acknowledge Positives in Public and Redirect as Privately as Possible**

- Remember the power of attention
- Negative attention controlled by another is “public shaming”
- How would you feel if your supervisor redirected you in public?



### **FBT Guiding Principle #5: Respond to Problem Behavior in a Way that Teaches Missing Skills**

- Pre-correct before times that are typically difficult-review positive expectations
- Overall focus not punitive-no one is in “trouble”-what skill(s) need to be learned?
- “I care too much about you to not teach you skills you will need to be successful”
- Be careful not to reinforce the problem behavior with too much attention
- Three “reactive” interventions signal you need to put on a “tier 2” proactive intervention-frontload the instruction and attention (three strikes and you are in)

## **Two Teaching Responses**

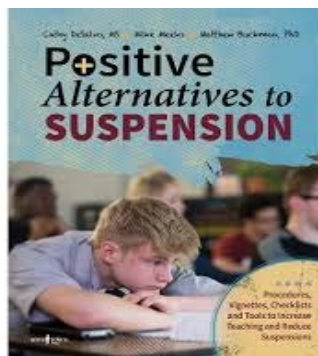
### **Error Correction**

- An informative statement given to a student after an undesired behavior that informs the student of what he or she should do in the future in a brief concise manner.

### **Behavior Tutoring**

- When student is exhibiting an inappropriate behavior, he or she is given the choice of demonstrating they have learned the appropriate behavior
- If they do not, it is assumed that they have forgotten how to do it and need extra practice
- An extra practice session is scheduled, logically during a more preferred activity.
- Similar to a traditional detention or stay after school consequence but with instructional focus

## **FBT Guiding Principle #6: Develop Alternatives to Suspension That Again Teach Missing Skills**



### **Problems with Suspension**

- Produces immediate but short-lived relief for the school, but may not be a meaningful consequence for the student—some students are actually reinforced by going home!
- Does not facilitate the progress of the at-risk students who is often already disengaged from school and/or learning
- Merely displaces the problem elsewhere (home or community)
- Schools using only punishment strategies tend to have increased rates of vandalism, aggression, truancy and school drop up
- Actually promotes antisocial behavior



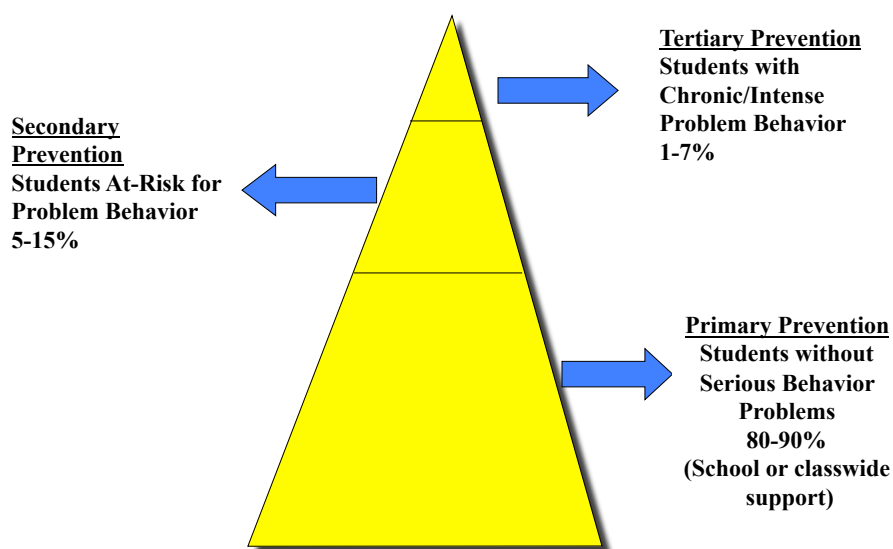
**Suspension and Expulsion Generally  
Does Not Work with Students with  
Chronic Behavior Problems!!!**

““ . . .there is currently no evidence that suggests suspension or expulsion changes the behavior of difficult students. Rather, for troublesome or at-risk students, the most well-documented outcome of suspension appears to be further suspension and eventually school drop-out.”

(Skiba, 2002)

49

### The Three Tiered Model



## **Identifying Students That Need Tier 2**

- Universal screener
- Should triangulate with other data sources for behavior (attendance, teacher nomination, frequency of reactive behavior interventions)
- Reactive behavior interventions more than 3 times a month conservative rule

## **Behavior Universal Screeners (Catch)**

- Provide consistent windows for grade level teams
- For behavior screenings, wait four to six weeks to screen to ensure adequate familiarity with students
- Non-exhaustive list of screening tools that have been scientifically evaluated- this list does not constitute an endorsement or recommendation
  - Social, Academic and Emotional Behavior Risk Screener (SAEBRS)
  - Strengths and Difficulties Questionnaire (SDQ)
  - Student Risk Screening Scale Internalizing-Externalizing (SRSS-IE)

## **Behavior Tiered Interventions**

- Work in grade level teams (data consult team)
- Reflect on tier one core components- does anything need to be strengthened?
- Focus on analyzing and supporting rather than the teacher or student being “in trouble”
- Sort “at risk” students into categories

## **Behavior Diagnostics (Match)**

Five categories for data sort:

- 1) False positive
- 2) Academic
- 3) Internalizing
- 4) Grade level team intervention
- 5) Problem solving team

## **Grade Level or Problem Solving Team**

- Problem solving team typically meets once a month and have higher level of behavior expertise
- Need a problem statement, measurable goal, evidence based behavioral intervention, and progress monitoring data system that can be graphed
- Possible tools/resources: FBT guiding questions, Student Intervention Matching Form (SIM), PBISworld.com, intensiveintervention.com

## **Top Evidence Based Programs** **[intensiveintervention.org](http://intensiveintervention.org)**

- Structured Mentored Based Support (Check In/Check Out, Check and Connect, The Behavior Education Program, Daily Report Card)
  - Provides instruction, attention, and reinforcement
- Structured Break Systems (Breaks are Better, Class Pass)
  - Provides appropriate escape
- Social/Behavior Skills Training (Coping Power )
  - Teaches replacement and missing skills
- Prevention (Antecedent) Strategies
  - Choice
- Reinforcement Strategies

## Student Intervention Matching Form-Evidence Based Tier 2 Interventions (Clayton Cook)

Teacher managed:

- School-home note system
  - Behavior contract
  - Self-monitoring
  - Positive peer reporting
  - Class pass
- Google SIM and Clayton Cook and it will lead you to a pdf of the SIM Form**
- More information on all interventions can be found at [www.pent.ca.gov](http://www.pent.ca.gov)**

Needs Additional Support:

- Structured mentoring
- Small group social-emotional training

## Small Group Training

- Many schools do 20-30 minutes of RTI intervention daily
- Perfect time for social/behavioral intervention groups
  - Organization
  - Problem solving
  - Emotional regulation
  - Conflict resolution
  - Flexibility
  - How does your engine run (self-regulation)
- Could combine with some type of structuring mentoring system
- Can use curriculum that special educators currently have
- Go Fund Me  
<https://www.gofundme.com/Education-Schools-Learning/>

## **Tier 2: Function Based Thinking**

- “A quick systematic way of thinking that informs the selection of effective function-based supports
- A preliminary step prior to an extensive FBA
- Only requires the teacher and an individual knowledgeable of behavior management to facilitate the learning process for teachers
- Draws from the research-based components of FBA
- Designed to be used as an early intervention strategy with mild to moderate behavior problems
- Designed to be used prior to involving the student support team or outside supports”

(Hershfeldt, et al, 2010, p. 14)

## **Steps of FBT**

( Hershfeldt, et al, 2010, p. 16)

- Gather information
- Develop a plan
- Measure the success of the plan

Link to the article:

[http://nyspbis.org/RF1415/Research Articles/Function Based Thinking - A Systematic Way to Think.pdf](http://nyspbis.org/RF1415/Research%20Articles/Function%20Based%20Thinking%20-%20A%20Systematic%20Way%20to%20Think.pdf)

Link to additional FBT information:

<http://www.ttacnews.vcu.edu/2014/11/think-function-using-function-based-thinking-to-change-problem-behaviors/>

## **Gather Information**

- Operationally define the problem behavior
- Collect information about the conditions under which the behavior occurs
- Review and summarize data
- Develop a hypothesis about why the problem behavior is occurring

## **Function Based Thinking Guiding Questions**

- When, where and with who does the behavior occur?
- What happened before the problem behavior?
- Is the student trying to avoid/escape it and if so why?
- What skills do they need?
- What prevention strategies can be put in place?  
Remove the trigger? Provide more structure and/or support?

## **Function Based Thinking Guiding Questions**

- What happened after the problem behavior?
- Did it reinforce or “pay off” the student’s behavior.
- How do the adults need to respond differently?
- What do you need to teach the student to do instead to get that “pay off” (take a break, ask for help, get attention appropriately, emotional regulation)
- How are you going to reinforce the new behaviors?

## **Develop a Plan**

- Identify acceptable replacement behavior and/or other target behaviors to teach
- Direct instruction plan of replacement behaviors
- Prevention strategies
- Positive reinforcement of replacement behavior(s)
- Remove/reduce reinforcement of problem behavior (extinction)
- Natural and logical teaching consequences



## Extinction Bursts

- If you are going to put a demand on a student that you know may trigger a problem behavior, have the resources, manpower and environmental engineering needed to not “give in” or intermittently reinforce the problem behavior
- This will make the problem behavior worse-the science of applied behavioral analysis has lots of data that proves that intermittent reinforcement (alternatively starting and stopping) is very powerful
- Need to account for this when looking at the data-it will get worse before it gets better but that means it IS working

### Silly Example: VENDING MACHINE



- **Behavior:** putting money into slot and pressing a button
- What is the **Function** of this behavior??

ALMOND JOY CANDY BARS!!!!!!!



## Example continued

If you wanted me to stop my vending machine behavior, what is *most likely* to work ...

- Lecture me about the link between sugar intake and adult-onset diabetes?
- Sternly tell me to stop, while wagging your finger at me?
- Punish me--Charge me an extra dollar?
- Jam the machine so candy bars stop coming out!

## Extinction Bursts!

- When you implement an intervention that *withholds the function*, Behavior often **increases** briefly as the student “tries harder” to get the function.
  - Vending Machine Example: What do YOU do when your “button pushing” behavior doesn't yield a soda?
  - Elevator Example: What do you do when the elevator door doesn't open when you expect it to open?
    - Try harder...you don't **immediately** stop pressing the button. You push it faster and harder.
- Lesson: Behavior often gets worse before it gets better!

## Measure the Success of the Plan

- Reactive interventions (frequency, duration)
- Target behavior and/or self-monitoring sheet graphs
- Data probes

## Probe Progress Monitoring Data

- Use a scatterplot to determine when identified problem behavior is most likely to occur
- Take baseline
- Do weekly probes during the same time-may need to use others (team teachers, administrators, SPED staff, counselors, etc.)



### Scatter Plot



	Monday	Tues	Wed	Thurs	Fri
8:30			/		
9:00	////	///	////////	////	////
9:30		/	/		
10:00			////		
10:30	/				
11:00			////		/
so on...	/		//		

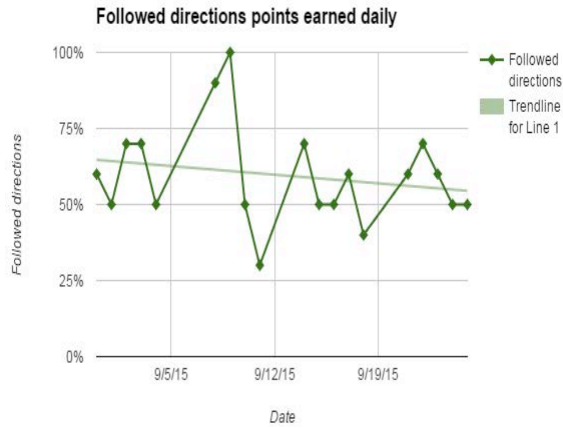
## Direct Behavior Ratings

### Behavior Data Based Decision



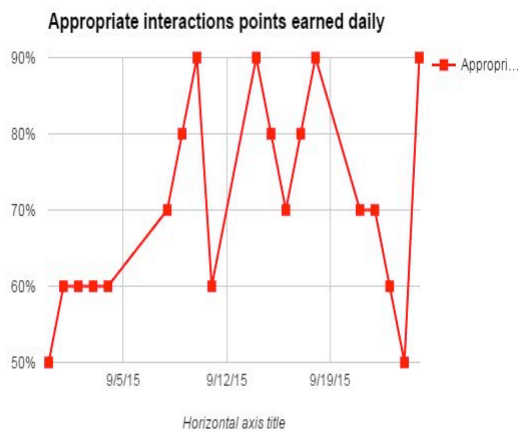
Is this student making progress with following directions?

Slide created by Kelly Moore, 2017



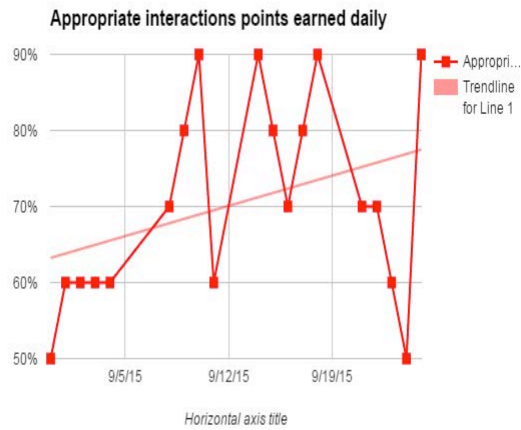
Is this student making progress with following directions?

Slide created by Kelly Moore, 2017



Is this student making progress with appropriate interactions?

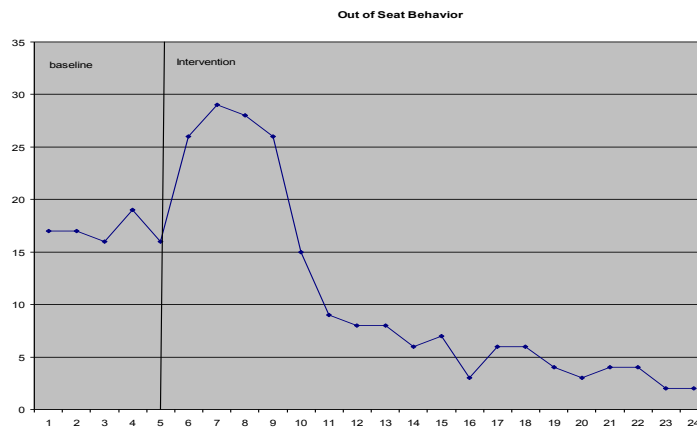
Slide created by Kelly Moore, 2017



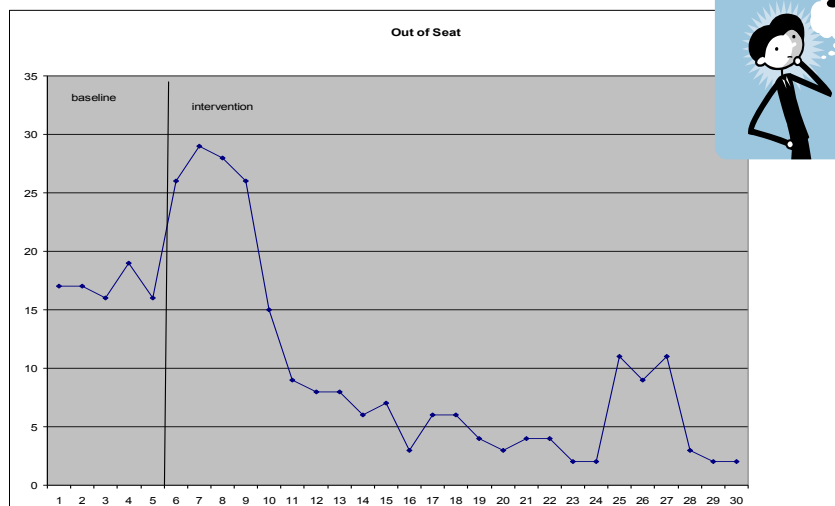
Is this student making progress with appropriate interactions?

Slide created by Kelly Moore, 2017

## Extinction Burst Example



## Spontaneous Recovery Example



## Behavior Data-Based Decisions

### 1. Target Met

- Fade, strategic monitor, and/or create a different goal



### 2. Adequate/Sufficient Progress Made

- Increasing trendline
- **Maintain intervention**, continue PM, status quo...



### 3. Inadequate/Insufficient Progress

- Decreasing trendline
- Begin **problem solving**, change instruction, intensify intervention
- Consider issues of severity and not delaying evaluation





## **Behavior: When To Move to Tier 3?**

- Ideally two rounds of 3-4 week intervention before consider tier three May need MORE-the function may be correct but the student needs more intensive instruction, support, reinforcement and/or structure
- May be DIFFERENT-the function may be wrong or incomplete-back to function based thinking!
- May want to involve a behavior specialist at this stage-this is the tough and stressful stage-objectivity may be needed
- Include a severe behavior clause-not every student needs to move through this process!

## **Controversial Issues**

- Informing parents
- Is this an “assessment’ that needs parental permission-is a disability suspected or is it formative data that guides decision making?
- I would side on the use of most effective practices-if student is improving no one will be upset
- Be transparent and educate entire school community on the process
- Support with peer reviewed articles provided in this presentation