Effective Data Collection The Opposite of Insanity

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The Opposite of Insanity

- The Urban Dictionary defines insanity as doing the exact same thing over and over again and expecting it to change.

- When data is collected effectively and used in decision making – we can prevent ourselves from going insane!

First Step in Changing Behavior – Data Collection

- Select the behavior that is the most likely to occur and that has the most severe impact on the student and those around him/her
  - Behavior is anything that a person does – positive or negative
  - What are some student behaviors that you would like to see change in your classrooms?
  - Use the 5 + 5 behavior checklist to narrow it down

5 + 5 Behavior Checklist (Cooper, Heron, Heward, 2007)

The 5 + 5 Behavior List (Cooper, Heron & Heward, 2007)

Child's Name: _____

Person Completing this List: _____

Listmaker's relationship to child: _____

5 good things _____ does now	5 things I'd like to see _____ learn to do more (or less) often
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____

Create a Behavioral Definition

- Choose 1-2 behaviors to define
- Behavioral definitions make communication clearer and produce more consistent observations (Miller, 2006)
- Different people have different definitions of challenging behavior
  - Behavioral definitions specify the included behavior and the excluded behavior
  - Let's try it out with "fighting"
    - What are some observable behaviors included in the definition of "fighting"?
    - Observable behaviors excluded?

DIY Behavioral Definition

- In your teams take one challenging behavior and come up with a behavioral definition that you all can agree on
- Choose one person to share it out to the group
- Remember:
  - Observable
  - Behaviors that are included
  - Behaviors that are excluded

How Many of Us LOVE to take data that is Never Used??

Mountains of Data

- Teachers are collecting data all the time
  - Using the data to inform their teaching and make academic change
    - Which math lesson should I move to next? What type of reading instruction would benefit this child most?

Improving Behavior Requires Data

- Just as you use different assessments to inform your teaching of Math, Reading, Science
- Assessment is needed to inform the implementation of behavioral strategies and interventions

Making Sure We've Got Useful Data

- Determine which type of data collection will give you the information needed for decision making
  - Frequency
  - Duration
  - Time Sampling
  - ABC Recording
  - Permanent Product
- It's ok to collect data on more than one dimension of behavior!

Frequency

- What is it?
  - Frequency is defined as the number of responses per unit of time
  - Example the student read 36 words per minute or the student hit his head 20 times in 30 minutes.
- What types of behaviors can I use it for?
  - behaviors that have discrete beginning and ending
  - can be done at any point in time
  - do not take much time to complete
- What examples come to mind?

Duration Recording

- What is it?
  - Duration is the amount of time in which behavior occurs, how long did the behavior last?
- What types of behavior can I use it for?
  - Behaviors that occur at very high rates
  - Task-oriented continuous behaviors that occur for an extended time
- Examples?

Time Sampling

- What is it?
  - Observing and recording behavior at specific moments in time
    - Whole-interval, partial-interval, momentary time sample
- What types of behavior can I use it for?
  - Behaviors that would be too difficult for the observer to measure continuously
- Examples

ABC Recording

- What is it?
  - Antecedent (what happened immediately before the target behavior)
  - Behavior (what was the behavior that occurred)
  - Consequence (what happened immediately after the target behavior)
- When should I use it?
  - Gather information around the function of behavior
  - Gather information around triggers for the behavior
  - Gather information around strategies that could be implemented to decrease or increase the behavior
- Examples?

Permanent Product

- Measuring behavior after it has occurred by measuring the effects the behavior produced on the environment
- Examples?

Let's Practice

- Which type(s) of data collection method would you use to measure
  - On task behavior during math class
  - Hitting others
  - Leaving class
  - Swearing
  - Refusal

I Know Which Behavior to Measure and How to Measure it – Now What?

- Collecting Baseline Data
- I need the behavior to change now – why do I need to collect baseline data?
  - Baseline data will give you the information you need to determine which intervention to implement for behavior change
  - Tells you whether the intervention you choose is effective or not
- When can I start the intervention?
  - 3-5 data points should be collected during baseline
  - The median (middle point) or average can be used for reference

Collecting Baseline Data – Selecting a Measurement Tool

- Collecting data doesn't have to be impossible!
  - Easy to use data collection forms
    - Scatterplot
    - Google Forms
    - Direct Behavior Ratings (DBR)
    - ABC Recording
    - Interval recording

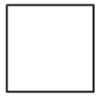
Take a Closer Look

- Scatterplot Example

Behavioral Data Sheet: Scatter Plot Assessment

Student:

Target Behavior:

 None  1-5  5 +

Date										
8:00-8:30										
8:31-9:00										
9:01-9:30										
9:31-10:00										
10:01-10:30										
10:31-11:00										
11:01-11:30										
11:31-12:00										

Take a Closer Look

- Google Forms

Work Completion Evaluation

Enter a 1 if the student completed no work during the class period
Enter a 2 if the student completed 25%-50% of the work during the period
Enter a 3 if the student completed 75% of the work during the period
Enter a 4 if the student completed 100% of the work during the period

Disruptive Behavior

I have engaged in disruptive behavior if I did something during learning time that took attention away from the teacher, causing other students to look at me or talk with me instead of atte

Disruptive Rating Scale - Enter the # that corresponds with the student's behavior

1- Engaged in disruptive behavior for more than 50% of the period
2- Engaged in disruptive behavior for 25-49% of the period
3- Engaged in disruptive behavior for 10-24% of the period
4- Engaged in disruptive behavior for less than 10% of the period

	Tuesday 4/23/19				Competing Behaviors - X any that occurred			Work Completion	Rating
Subject	Student Rating	Teacher Rating	Talking to others	Shouting Out	Out of seat	Objects in other's space	Off topic Questions		
Science	3	2	X					Science	
Math	4	3	X					Math	N/A

	Wed. 4/24/19				Competing Behaviors - X any that occurred			Work Completion	Rating
Subject	Student Rating	Teacher Rating	Talking to others	Shouting Out	Out of seat	Objects in other's space	Off topic Questions		
Science	3	3	X	X		X		Science	
Math	3	4	X		X	X		Math	

Take a Closer Look

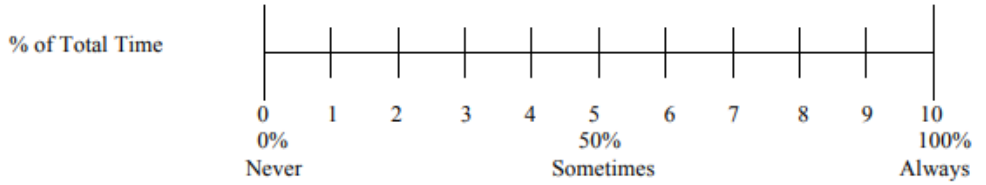
- Direct Behavior Ratings

Direct Behavior Rating (DBR) Form: 3 Standard Behaviors

Date: M T W Th F	Student: Rater:	Activity Description:
Observation Time: Start:_____ End: _____ Check if no observation today	Behavior Descriptions: **Academically engaged** is actively or passively participating in the classroom activity. For example: writing, raising hand, answering a question, talking about a lesson, listening to the teacher, reading silently, or looking at instructional materials. **Respectful** is defined as compliant and polite behavior in response to adult direction and/or interactions with peers and adults. For example: follows teacher direction, pro-social interaction with peers, positive response to adult request, verbal or physical disruption without a negative tone/connotation. **Disruptive** is student action that interrupts regular school or classroom activity. For example: out of seat, fidgeting, playing with objects, acting aggressively, talking/yelling about things that are unrelated to classroom instruction.	

Directions: Place a mark along the line that best reflects the percentage of total time the student exhibited each target behavior. Note that the percentages do not need to total 100% across behaviors since some behaviors may co-occur.

Academically Engaged



Take a Closer Look

- ABC Recording

Student Initials: Month/Year:

Challenging Behavior Definition:

**Complete after each occurrence of the challenging behavior(s) defined above.

				How long did it last?	What happened before?	What did the student do	What happened after?
Date	**Who's Present?**	**Start Time**	**Location**	**Duration**	**Antecedent**	**Behavior**	**Consequence**

Interval Recording

Partial Interval Recording Form

Student's Name: _____ **Teacher:** _____

Subject/Period: _____ **Date(s):** _____

Behavior Definition (in specific, observable, measurable terms):

_____

_____

Total Observation Time: _____ **Length of each interval:** _____

Date	Interval #										Total times behavior occurred (X)
	1	2	3	4	5	6	7	8	9	10	
O or X											

Graph It!

- Taking raw data and putting it into a visual representation makes it easier to determine whether
  - Intervention is needed
  - The intervention chosen is working
  - The intervention chosen is not working
  - A change in treatment is necessary

Collecting Baseline Data – Creating a Plan

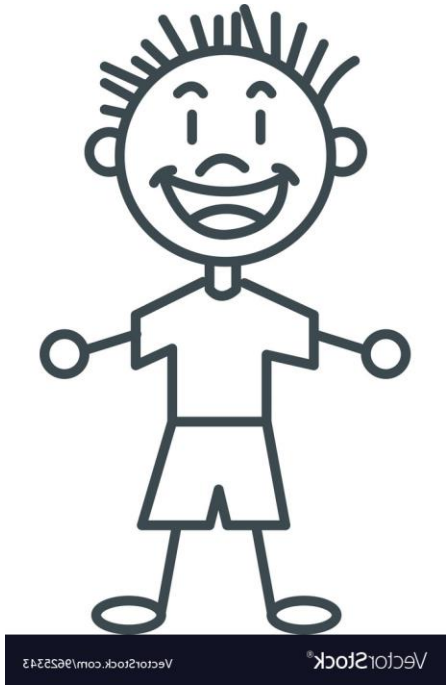
- Set it up for Success!
  - Include your behavioral definition of the behavior on the data collection form
  - Determine how often and when the data will be collected
  - Who will collect the data?
  - How will the data be collected?
  - When will the data be reviewed for decision making?

Choosing an Intervention – All Behavior is Communication

- What need is the student meeting by engaging in the undesirable behavior?
  - Escape or avoid a task?
  - Gain sensory reinforcement?
  - Gain access to an item or activity?
  - Gain attention?
- The Intervention should help the student meet that need by engaging in a replacement behavior

Choosing an Intervention – Meet Fred

- Use the handout and what we have learned so far to come up with a plan for Fred
  - Fred is a student in your class who you have observed throwing objects during reading instruction and independent work time. You've defined throwing objects as picking up objects found on his or other students' desks and throwing them in the direction of the teacher. When Fred throws objects the other students laugh and Fred is sent out of the classroom until the principal is able to meet with him.



Creating a Plan for Fred

- Select the behavior that you'd like to see change
  - Throwing items during reading instruction and independent work time
- Create a Behavioral Definition for that behavior
  - Picking up objects found on his or other students' desks and throwing them in the direction of the teacher

Creating a Plan for Fred

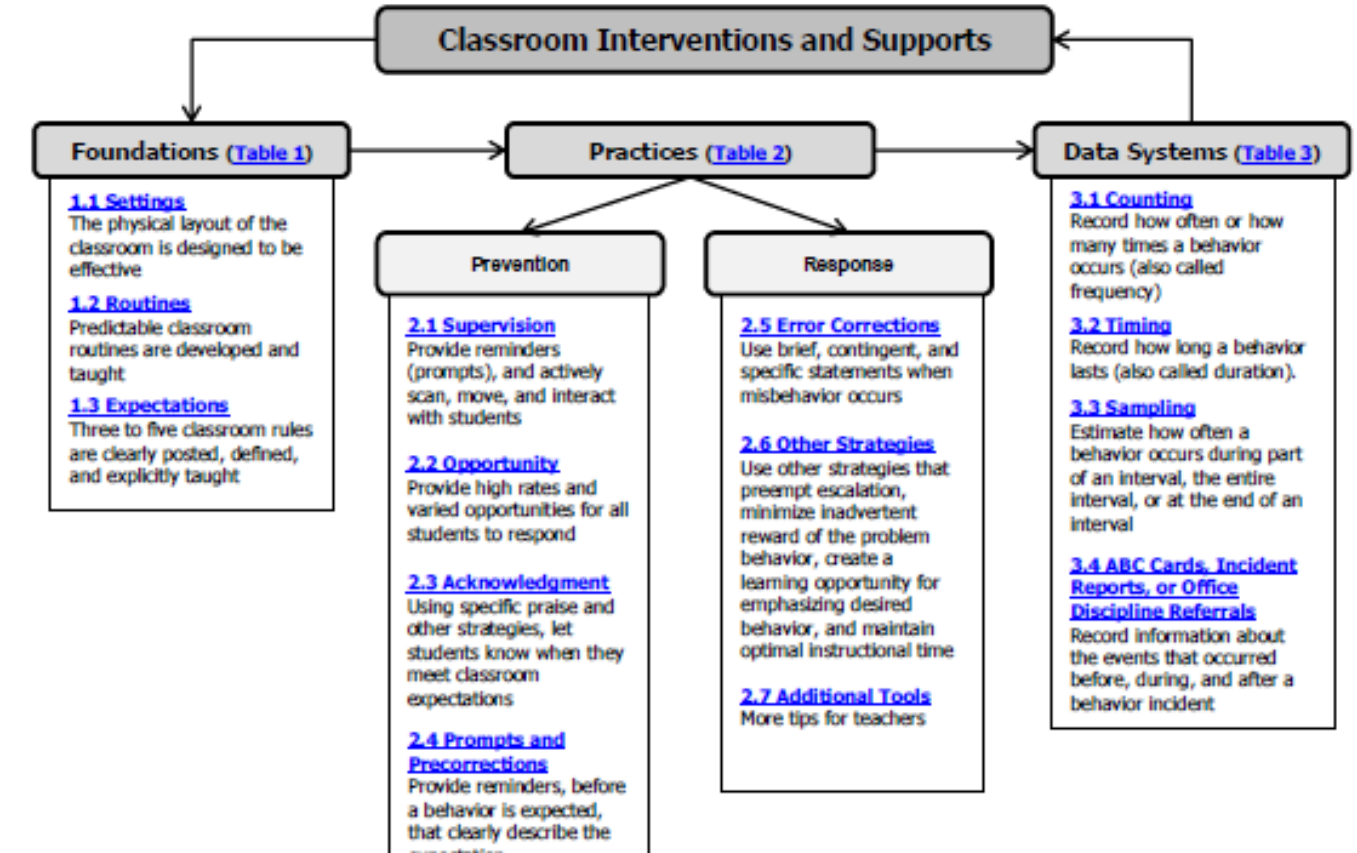
- Select the type of data that you will collect
  - How often will data be collected, when, where, and who?
- Select the form that you will use
  - What is the student doing now and what would you like them to be doing instead?
  - Be sure the form will give you the information needed to determine whether the intervention is working

Creating a Plan for Fred

- Choose an Intervention
  - Remember to consider:
    - The need being met by the undesirable behavior
    - The resources available to implement the intervention
    - What the replacement behavior will be
    - The impact that the implementation of the intervention will have on the student and others in the environment

Choosing an Intervention

Interactive Map of Core Features



Choosing an Intervention

Handout #16: Function-Based Intervention Strategies

The following tables provide possible intervention strategies to incorporate into a comprehensive behavior intervention plan based on the function of the problem behavior. Additional resources are listed at this end of this handout.

Negatively Reinforced Behaviors—Escape or Avoid Task or Environment

Intervention Strategy	Example(s)
Adjust the difficulty of the task	• Provide easier work • Decrease the amount of work

Offer choice	• Allow the student to choose
	  ○ Which task to complete
	  ○ The sequence of tasks to be completed
	  ○ Which materials to use
	  ○ Where to complete the task
	  ○ When to complete the task
	  ○ With whom to complete the task

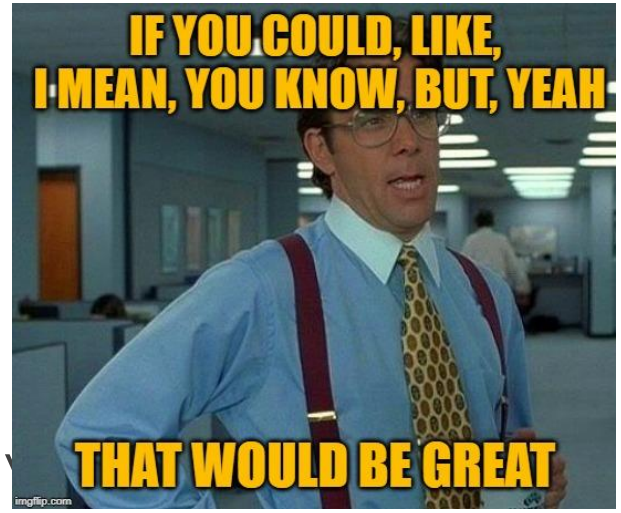
Increase student preference/interest in the activity	• Incorporate student hobbies/interests into activities
Assure that activities are functional or relevant for the student	• Provide a rationale for school tasks or activities that is relevant to the student's everyday life or future goals

Write it Up!

- Put the Plan in Writing
- Schedule the Review Meeting
- Monitor Progress

Communicate!

- Be sure everyone on the team knows
  - When and how often the data will be collected
  - What form will be used to collect the data
  - Who is responsible for collecting the data
  - When and how often the team will meet to anal the data
  - How the data will be shared with parents and other stakeholders



Thank You!

Here's to a Great School Year!!

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Resources

- Ceedar (2013) Handout # 16 – Function Based Intervention Strategies. Retrieved from ceedar.education.ufl.edu/wp
- Chafouleas, S. M., Riley-Tillman, T. C., & Christ, T. J. (2009). Direct Behavior Rating (DBR): An Emerging Method for Assessing Social Behavior Within a Tiered Intervention System. Assessment for Effective Intervention, 34(4), 195–200. https://doi.org/10.1177/1534508409340391
- Cooper J.O, Heron T.E, Heward W.L. Applied behavior analysis (2nd ed.) Upper Saddle River, NJ: Pearson; 2007
- Miller, K.L. Principles of Everyday Behavior Analysis (4th ed.) Belmont, CA: Thomson Wadsworth; 2006
- Simonsen, et. al. (2015) Supporting and Responding to Behavior: Evidence-Based Classroom Strategies for Teachers. Retrieved from www.pbis.org