

# Practical Applications for Behavior Analytic Strategies

M. Garrett Yeager, M.S., BCBA, LBA

Clinical Director of ABA Services, Autism Center of North Mississippi



AUTISM CENTER

OF NORTH MISSISSIPPI

# What Is Applied Behavior Analysis (ABA)?

...

# Applied Behavior Analysis Is...

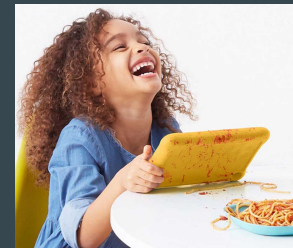
- A research proven methodology for meaningful behavior change.
  - What do we mean by “meaningful”?
- Used for both teaching skills (skill acquisition) and reducing undesired behaviors (behavior reduction.)
  - What do we focus on, and when?
- Primarily uses consequence driven methods to generate desired behavior change (We will talk more about this later!)
  - “Consequences” doesn’t mean negative consequences!

# Applied Behavior Analysis Is...

- Typically takes place in controlled, clinical settings with dedicated one-on-one behavior technicians.
- Many ABA strategies are difficult or unrealistic to deliver in natural community or academic settings.
  - Can be especially challenging to implement in the home or education settings
- However, ABA does have strategies that are very effective in these natural environments!



*Why do kids do the things that they do?*



# Well, luckily all behavior occurs for 4 reasons...

- To Get Something (Toys, Food, an iPad, Playtime, etc...)
  - Tangible
- To Get Out Of Something (Working, Cleaning up, etc...)
  - Escape
- To Get Attention (Social Recognition, Approval, etc...)
  - Attention
- ...Or Just Because We Like Doing It (Watching TV, Playing Games, etc...)
  - Automatic Reinforcement

# What is a reinforcer?

## **Reinforcer:**

- An item, person, or event (we call it a stimulus) that increases the frequency of a behavior when that behavior is followed by an increase or introduction of that stimulus.

# Reinforcers

- “Things that someone likes”
- We wish it was that simple.
- Remember the definition!
- What does it mean “increases a behavior that the stimulus follows”?



# con·tin·gent

[kən'tɪnjənt] 

ADJECTIVE



*(contingent on/upon)*

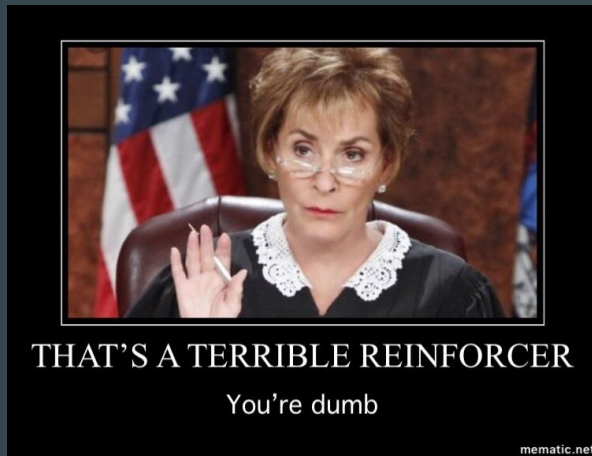
occurring or existing only if (certain circumstances) are the case; dependent on.  
"resolution of the conflict was contingent on the signing of a ceasefire agreement"  
*synonyms:* **dependent** · **conditional** · subject to · based on · [\[more\]](#)

# What is a Behavioral Contingency?

- Behavioral Contingency:
- The opportunity for a behavior to occur (Antecedent Conditions)
- the behavior itself, and
- the outcome of the response. (The Consequence)
- Consequences don't have to be negative!

# Important!

- Don't make assumptions:
  - Just because you “like” something doesn't mean it's a reinforcer
  - Just because something is a reinforcer for you doesn't mean it's a reinforcer for anyone else.
- Don't **judge** someone's reinforcers
- What might your child work to get?



*Something could be a reinforcer now...*

*...but not may not be in 5 minutes!*

*And there are other factors...*

*Let's talk about pizza.*

# Quality



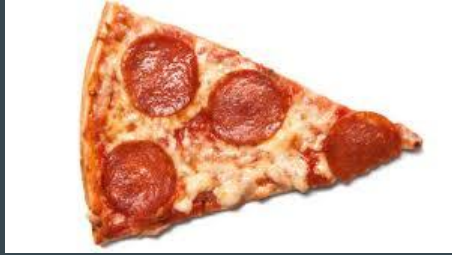
- Tastes pretty good
- Six slices
- 15 minute delivery
- Friendly staff
- \$12



- Tastes delicious!
- Six slices
- 15 minute delivery
- Friendly staff
- \$12

**Better is  
Better**

# Magnitude



- Tastes delicious!
- One Slice
- 15 minute delivery
- Friendly staff
- \$5



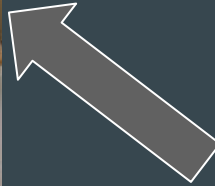
- Tastes delicious!
- Six slices
- 15 minute delivery
- Friendly staff
- \$5

**More is  
Better**

# Delay



- Tastes delicious!
- Six Slices
- 15 minute delivery
- Friendly staff
- \$12



- Tastes delicious!
- Six slices
- 30 minute delivery
- Friendly staff
- \$12

**Now is  
Better**



# Response Effort



- Tastes delicious!
- Six Slices
- No delivery, must pick up (and you live 30 minutes away)
- Friendly staff
- \$12



- Tastes delicious!
- Six slices
- 20 minute delivery
- Friendly staff
- \$12

**Easy is  
Better**

# And other factors



- Tastes delicious!
- Six Slices
- 20 minute delivery
- Rude and angry staff
- \$12



- Tastes delicious!
- Six slices
- 20 minute delivery
- Friendly staff
- \$12

**Nice is  
Better**

**Better is Better**

**More is Better**

**Now is Better**

**Easy is Better**

**Nice is Better**

**Does every option actually  
work?**

# These variables interact!



- Tastes pretty good
- Six Slices
- 20 minute delivery
- Friendly staff
- \$12



- Tastes delicious!
- Six slices
- 30 minute delivery
- Friendly staff but often gets order wrong
- \$15

# And even more!!!



- Tastes pretty good
- Six Slices
- 15 minute delivery
- Friendly staff
- \$12



- Tastes delicious!
- Six slices
- 30-45 minute delivery
- Friendly staff
- \$12

You haven't eaten in five hours

# So Basically...

- Environmental conditions provide an opportunity for a behavior.
- Then that behavior occurs.
- Then a consequence occurs in response to that behavior.
- If that consequence is the addition or increase of a reinforcer, that behavior will increase.

## An Example...

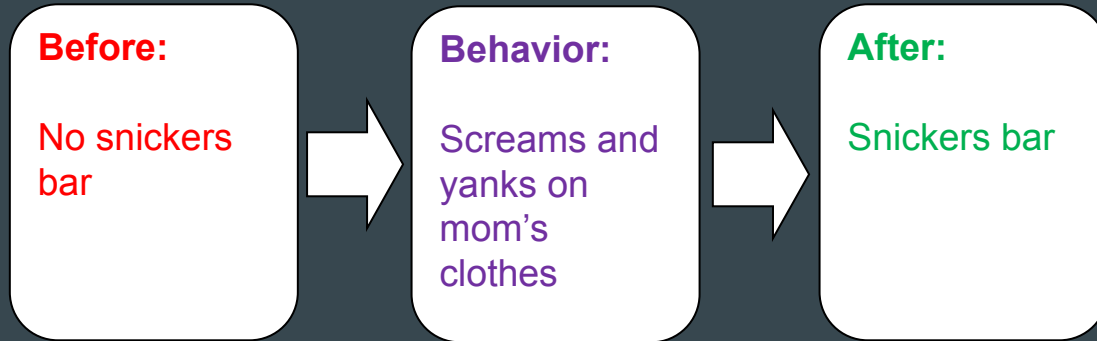
Jimmy loves Snickers bars, but his mother doesn't like him to eat such a sugary treat. When they check out at Walmart, Jimmy first asks for a Snickers, but once his mom says, "no," a meltdown into the worst tantrum imaginable happens. As she feels the heat of everyone's stares, she finally says, "Fine, but this is the LAST TIME MISTER."

- What was learned?
- Why did the mom respond the way she did?
  - We'll talk more about this in a bit



# Reinforcing Jimmy's Bad Behaviors

- The presentation of the snickers was always contingent on Jimmy's bad behavior
- This contingency was reinforcing that behavior, causing it to occur more often



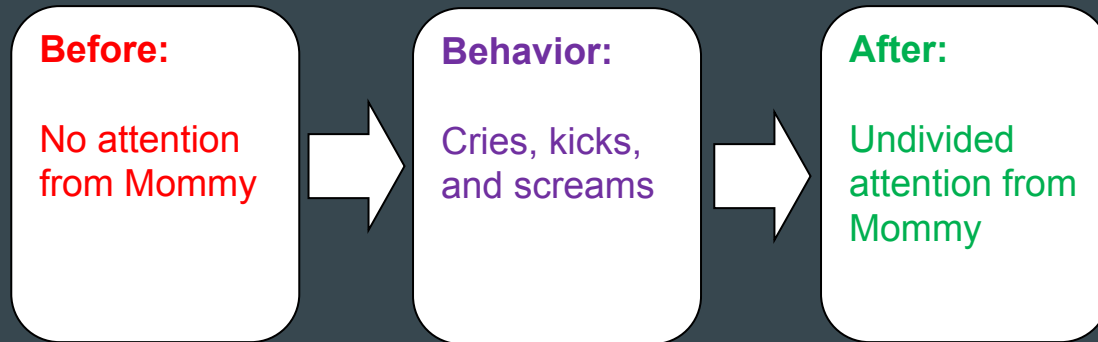
## What about this one?

Sarah spends around 7 hours per day at preschool while her mother, Joan, works. Joan, a single mother, is exhausted when she gets home and often overwhelmed at everything she must do to get ready for the next day. Everyday, Sarah asks her mom to play with her the moment they get home. Joan tries to say, “first let mommy do somethings,” but this leads to Sarah crying, kicking, and screaming. Joan always tells her that “good girls don’t act like that,” but these attempts actually seem to make the behavior worse.

- What was learned?
- Is there a reinforcer in this scenario?
  
- Why did the mom respond the way she did?
  - We'll talk more about this in a bit

# Reinforcing Sarah's Bad Behaviors

- The presentation Mom's attention was always contingent on Sarah's bad behavior
- This contingency was reinforcing that behavior, causing it to occur more often



# What is an Aversive Stimulus?

## **Aversive:**

- A thing (called a stimulus) that decreases the frequency of a behavior that it follows (as a consequence.)

# What is the Escape Principle?

Escape – The removal of an aversive stimulus as a consequence to a behavior.  
(This will increase that behavior in the future)

The Escape Principle:

- A behavior becomes more likely if it has removed or reduced an aversive stimulus in the past.

# Jimmy

- Mr. Lewis' son, Jimmy, was diagnosed with autism.
- Mr. Lewis went to Dr. Mae Robinson for help.

# Jimmy

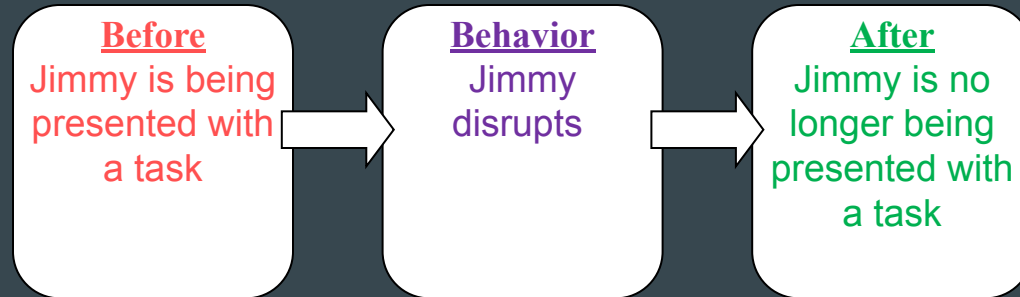
- Dr. Mae's RBT, Sue, used behavioral procedures to try to teach Jimmy some new skills.
- But what did Jimmy do?
  - He got upset and tantrummed.
- So what did Sue do when he got upset?
  - She cleaned up the materials and removed the task



# What did Mae conclude?

- Sue was reinforcing Jimmy's inappropriate behaviors.

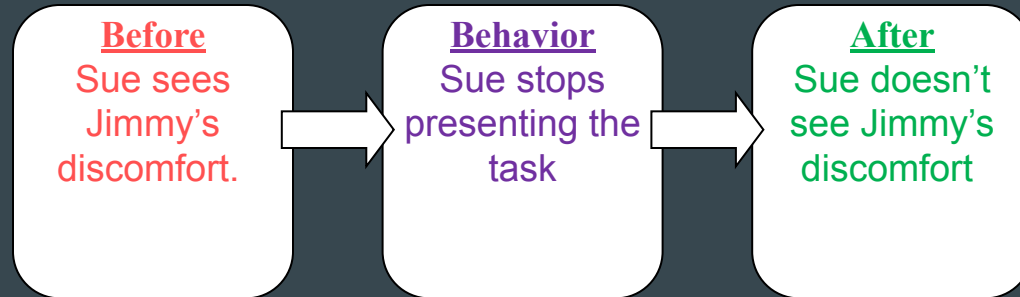
## Inappropriate Natural Contingency



# What did Sue say?

- “It’s so hard to sit there while the poor little guy feels so bad.”

## Inappropriate Natural Contingency

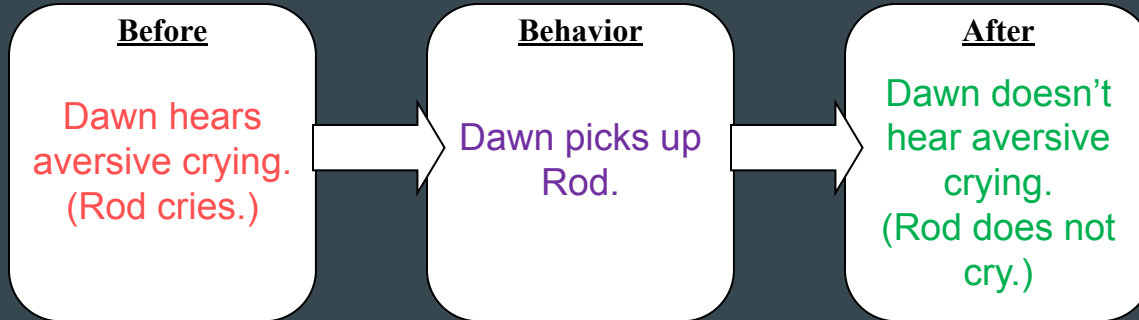
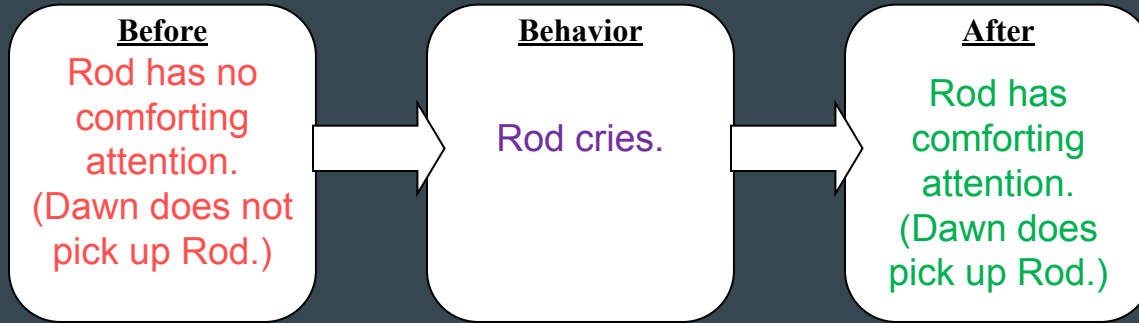


What did Jimmy learn?

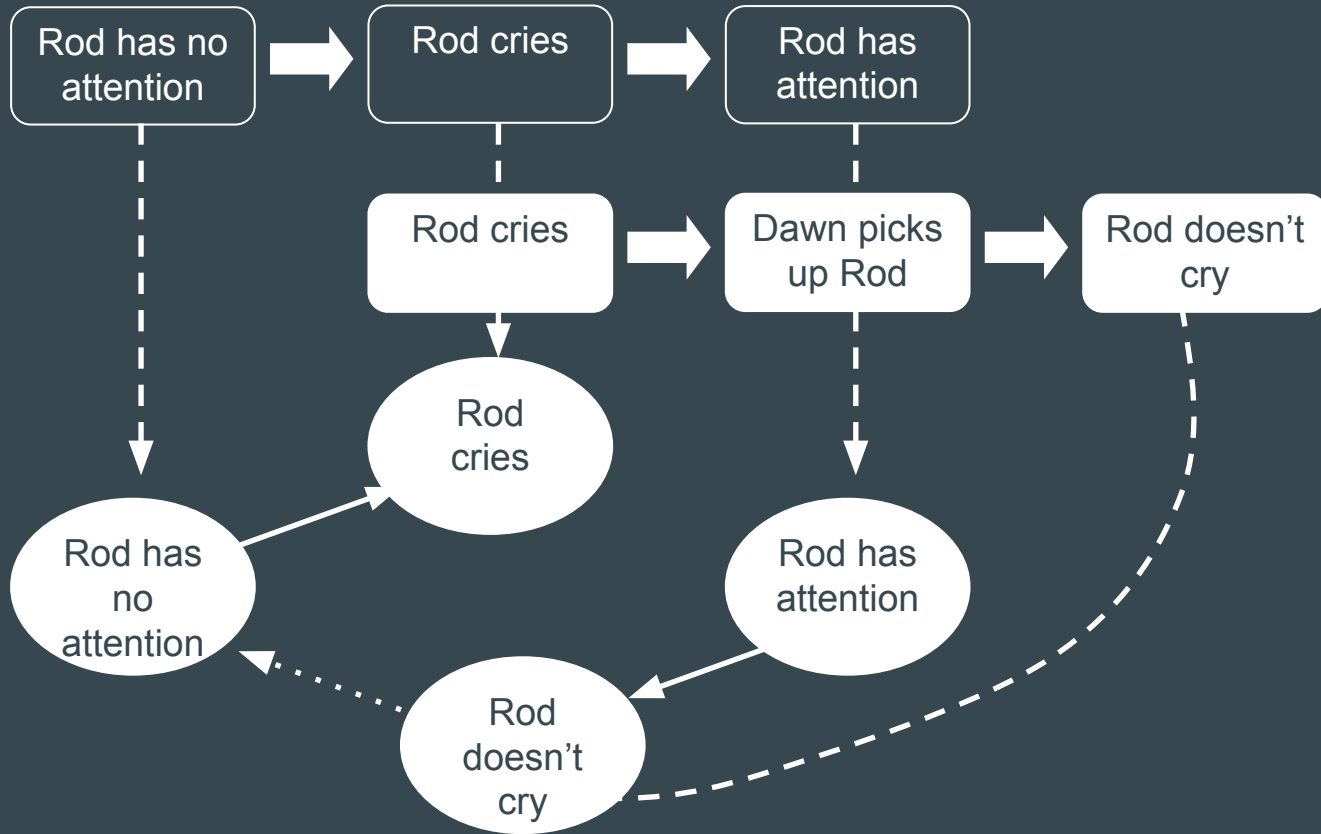
What did Sue learn?

# Example of the Sick Social Cycle (Victim's Escape Model)

- Dawn puts Rod in his crib and tiptoes out of the room.
- Rod cries.
- Dawn walks back in and picks him up.
- Rod stops crying.



# Rod & Dawn's Sick Social Cycle (Victim's Escape Model)



# What is the Sick Social Cycle (Victim's Escape Model)?

The Sick Social Cycle (Victim's Escape Model):

- In escaping
- the perpetrator's aversive behavior,
- the victim unintentionally reinforces
- that aversive behavior.

# Sick social cycle (victims escape model)

- Remember Jimmy and the Snicker's bar?
- Every time Jimmy yelled and climbed on Amy, she would give him a Snickers to quiet him down.
- Why did Amy give Jimmy the Snickers bar?
- In escaping Jimmy's aversive behavior, Amy was unintentionally reinforcing that aversive behavior.



# This is not “bad” parenting or teaching

- Parents and educators are motivated to escape child problem behavior for many reasons:
  - It’s aversive
  - Guilt-control
  - Judgement of others
  - Exhaustion
  - Other life stressors
  - Other reasons?



# Case Example

- Student exhibiting high rates of severe problem behavior.
- Averaged 81 instances of verbal aggression per day.
- Averaged 16 instances of physical aggression per day.
- Completed 5 tasks, on average, per day.
- Grade scores ranged 35-65

# School Used Negative Consequence Based Interventions

1. Used suspension and other forms of negative consequences to deal with problem behavior.
2. Sick Social Cycle! The school and teacher escaped this student's behavior.
3. Student's problem behavior increased in both rate and severity.

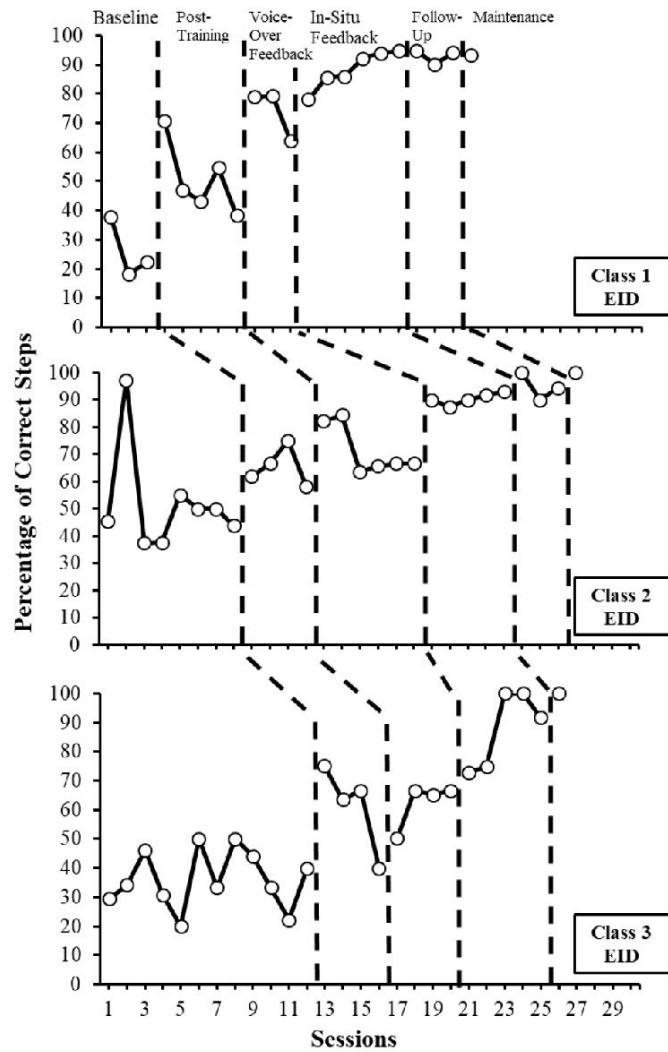
**We Tried Using Reinforcement**

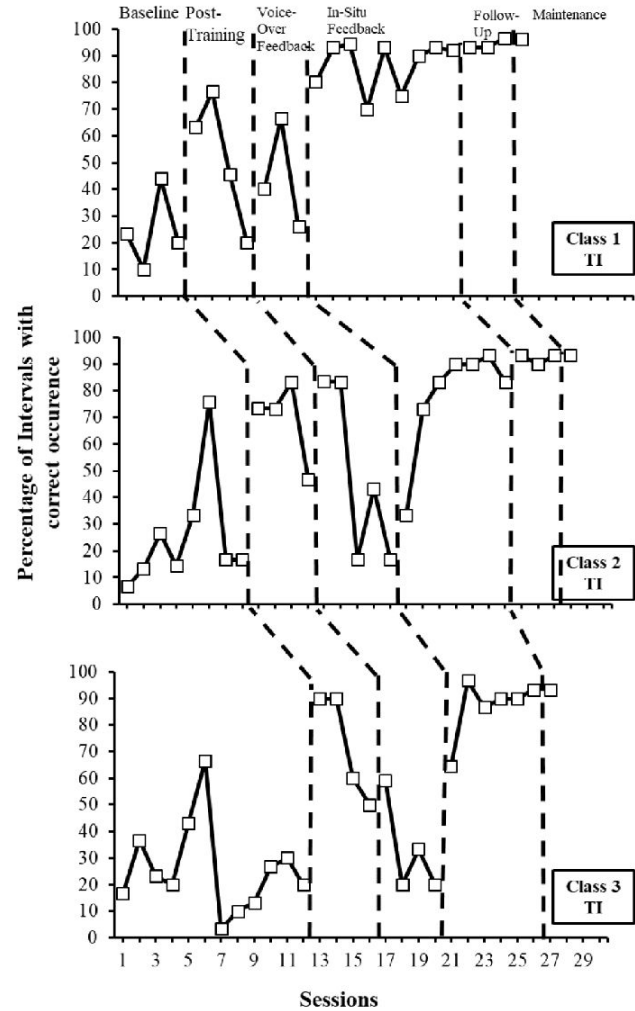
# That Same Student 9 Months Later

1. Student showed a 95% decrease in verbal aggression.
2. Student showed a 98% decrease in physical aggression.
3. Now completes an average of 16 tasks per day.
4. Grade scores now range 80-100

# Teachers and Parents can do this!

- We know because we did a study.
- We taught 6 teachers how to do this effectively!
  - How to have effective time-in
  - How to effectively deliver instructions







# We Shouldn't Make Assumptions About Problems

- Instead, we should be taking data so we can understand the problem fully.
- It probably isn't feasible to take detailed data sometimes in the home or education settings.
- Momentary Time Sampling
  - How does it work?
  - Is it feasible in the classroom?
  - How do we use the data?

# Rule Governed Behavior

**Why Do You Stop At Red Lights?**

**Why Do You Go To Work?**

**Or... Why Do You Try Your Best At Work?**

**Or Maybe Even... Why Do You Not Try Your Best?**

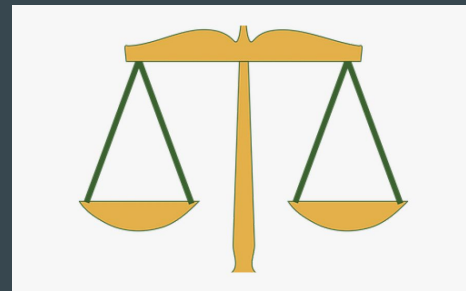
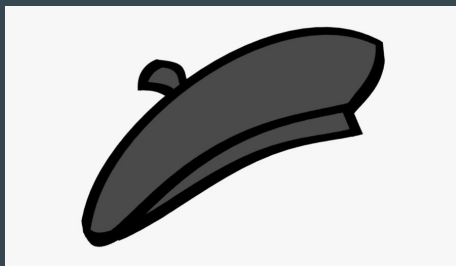
# Rule Governed Behavior

- Some behavior isn't controlled by direct acting contingencies
- Instead, these behaviors are controlled by "rules"
- The more the individual is capable of complex verbal behavior, the higher the percentage of their behavior is controlled by rules, rather than direct contingencies (this is a general rule, there are exceptions.)
- Rule governed behavior allows us to be capable of things that would otherwise be impossible.
- We can't teach every possible skill or every possible scenario for the application of every skill
  - Derived Relational Responding

**Let's Take a Break**

## **Rule Governed Behavior - Continued**

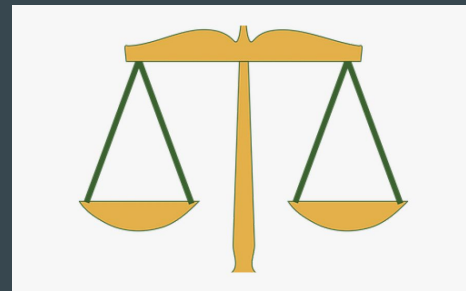
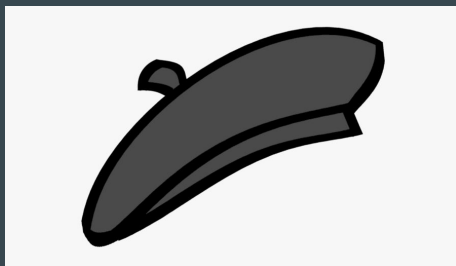
**What Does Derived Relational Responding Let Us  
Do?**

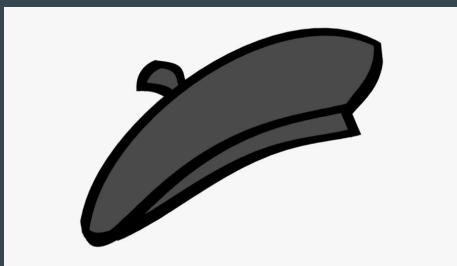
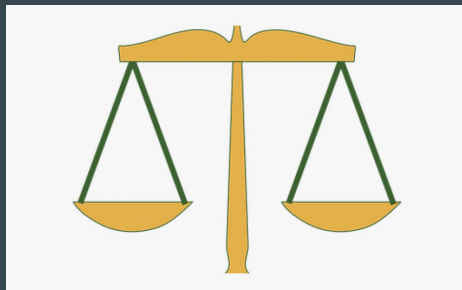


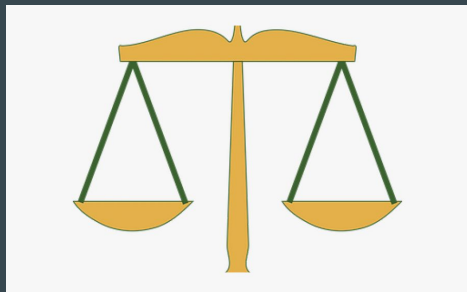
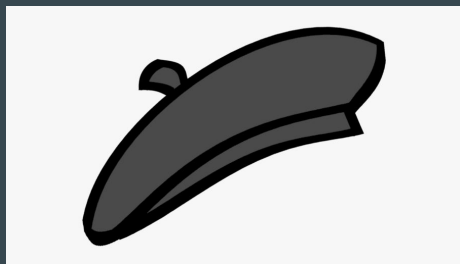




**Axolotl**







# Derived Relational Responding (or just DRR)

Our Ability to relate and respond to things without having to be taught how to do so by applying our learning history to new concepts

**Why Teach It?**

**How do we teach it?**



xem

qev

zer





zer

xem

qev



qev

zer

xem



xem

qev

zer

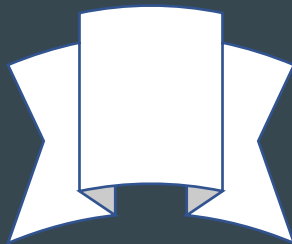


zer

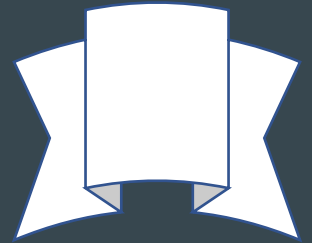
xem

qev

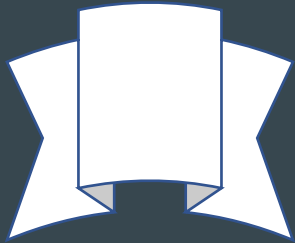
zer

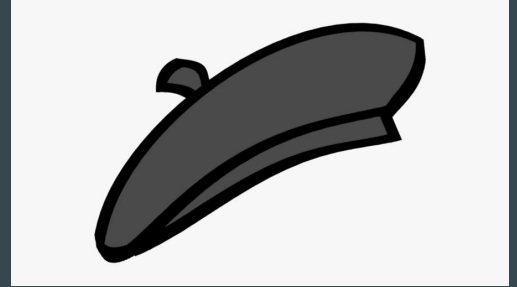


zer

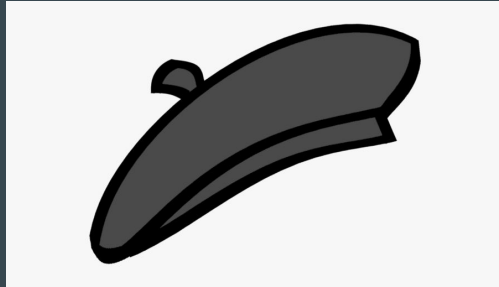


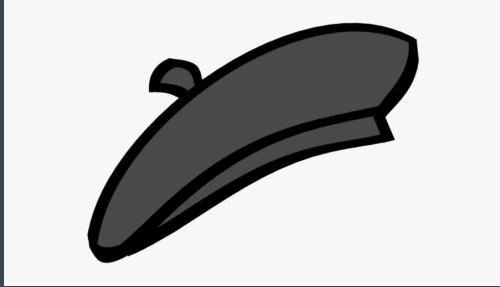
zer

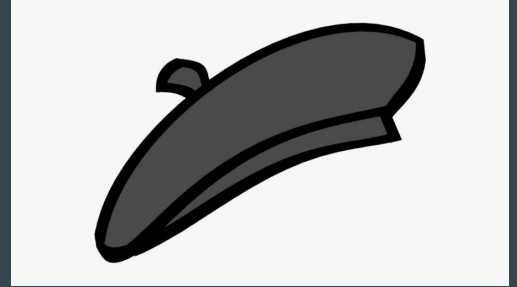














zer

xem

qev



qev

zer

xem

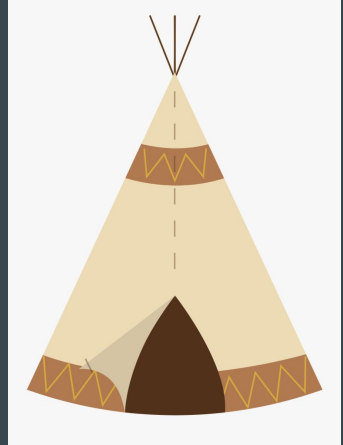
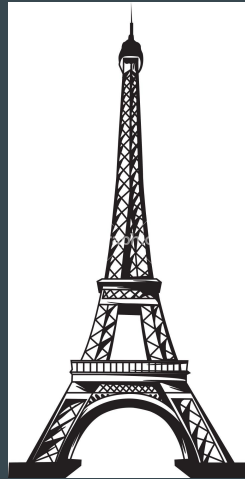


xem

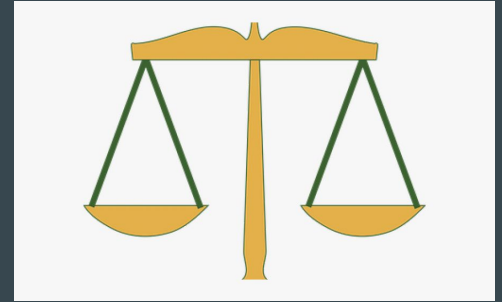
qev

zer

zer



zer





zer



# Derived Relational Responding

- This is a skill that can be taught, just like reading or writing
- This can often be the source of academic problems
  - Things not being taught the way they are tested
- Can the kid hold a real conversation?
  - If not, consider they may not be deriving relations
  - This is just a general rule, and there will always be exceptions

**Happy, Relaxed, Engaged**

# Happy, Relaxed, Engaged (HRE)

- Kids learn best when they are happy, relaxed, and engaged.
- Think of every child you're working with as having a gas gauge that measures their motivation (a motivation gauge!)
  - Some kids will get to you with a full tank, or maybe half-a-tank
  - But some kids will get to you already on E
  - Doing fun things/things they enjoy puts motivation in the tank!
  - Demands/working uses up the gas/motivation.
  - Make sure you fill their tank before giving demands!

# Happy, Relaxed, Engaged (HRE)

- What do we mean by Happy, Relaxed, Engaged (HRE)?
- Happy
  - Smiling
  - Laughing
  - Definitely not crying!
  - No avoidant behavior (wanting to leave/move away)

# Happy, Relaxed, Engaged (HRE)

- Relaxed
  - Not showing behaviors consistent with anxiety
    - Looking around / frantic or fidgety
  - Calm
  - Non-escalated stereotypy
  - No pre-cursors to undesired behavior

# Happy, Relaxed, Engaged (HRE)

- Engaged
  - Interaction
    - Not having to force interaction, child is seeking it
  - Doesn't always mean social engagement!
    - May mean engagement with toys, items, or activities.
    - If you also engage with those toys, items, or activities, you will become paired with them.

# Happy, Relaxed, Engaged (HRE)

- This doesn't mean that the expectation is that a child should be happy, relaxed, and engaged at all times, 100% of their day.
- There will be challenges, because learning can be hard.
- We should enter into challenges from a state of being HRE
  - Kids will face challenges better
  - Kids will learn from challenges, rather than just having a bad experience and not understanding why



# Happy, Relaxed, Engaged (HRE)

- Push for work/teaching/learning
- If kids are upset/anxious/avoidant they aren't absorbing information or processing information as well
  - Yes, they may still learn somewhat
  - They won't learn as well when compared to if they were HRE
  - Being upset/angry/etc. Can cause a lot of confusion, with kids being unsure of why things did or didn't work for them

# Happy, Relaxed, Engaged (HRE)

- Tips!
- Happy is usually the easiest.
  - With fun stuff around and no demands, kids tend to be happy.
- Relaxed can be challenging
  - Especially with kids with high rates of stereotypy
  - Relaxing activities/songs/videos
- Engaged
  - Focus on fun to get engagement
  - Slowly mix in demands/work

**Slow and Steady**

# Slow and Steady

- Introduce challenges in small and slow ways that are more manageable for our kids.
- If a kid isn't used to having to sit at a table, suddenly spending 30 minutes at a time at a table will be very difficult!
  - Try starting out at just 1 minute at the table.
  - Slowly increase the amount of time the child is expected to sit at the table, until they are sitting for a duration of time that is acceptable.

# Slow and Steady

- This strategy can be used in all sorts of situations!
  - Difficult classwork
  - Transitions
  - Challenging environments
  - Engagement with adults/peers
  - Denied access to preferred items or activities

# The 7 Steps to Instructional Control

# What is Instructional Control?

- A positive working relationship
- Pairing yourself with reinforcement (playing with your learner)
- A very broad concept
- Use of rules/instructions



## Step 1 – You Are The Gatekeeper

Show your learner that you are the one in control of the items he or she wants to have and/or play with and that you will decide when he or she can have them



# You're in Charge!

- So much potential reinforcement
  - We simply must take control of the contingencies
- Being in charge of these items is vital to your overall success
- With consistent action, your learner will learn to earn those items with positive behaviors and by following simple instructions.
- Take control with actions more than words!



# Where to begin?

- Take inventory of your space
  - Permanently remove anything you do not want your learner to have.
  - Decide what he or she can have access to
  - What are you not willing to restrict and why?
  - What must he or she do to earn those things?
  - What must he or she do to lose those things?



# How do you control highly preferred items?

- Take your learner's preferred items and put these things in a place that is:
  - Clearly visible to your learner
  - Inaccessible by your learner.
- If this is not possible, you can use a locked cabinet or closet as long as your learner knows where the items are now being kept
- A clear container often works great for younger learner



## **Step 2 – Be FUN!**

**Show your learner that you are FUN!**

**Make an intentional effort to have fun with your learner.**



*In other words, try to make most of the interactions you have with your learner's enjoyable experiences so that he or she will want to follow your directions to earn more time sharing experiences with you.*

***GOAL:*** Making your attention your learner's most valued reinforcer

# Time-In

- General attention, verbal praise, and contingent touch for appropriate behavior
- So, time-in is the establishment of the context and/or your attention as a reinforcer
- Pairing with known reinforcers
- Also part of having fun with your learner



# Take **PRIDE** in what you do!

- **P**raise
- Verbal **R**eflections (**R**epeat)
- Physical **I**mitations
- Verbal **D**escriptions
- **E**njoyment (therapist, teacher, parent laughs or smiles)

# Ways to spot a phony

- Your learner is an expert in detecting insincere praise
- Red flag words/phrases that are often overused:
  - Awesome!
  - Great Job!
- Praising something that really doesn't deserve praise
  - Praise your learner's behavior, not your learner
- General attention, verbal praise, and contingent touch for appropriate behavior

# Things to ponder

- Is your learner “all that into” your attention
  - Don’t pre-judge what type of attention your learner likes
- You might have to try various forms of attention to get a good response.
- Look for
  - Smiles
  - Eye contact
  - Approach rather than avoidance behaviors.
- Try not to take this personally (though I know its hard)



## Step 3 – Consistency is King

- Be Consistent



# Mean what you say and say what you mean.

Think very carefully before delivering a demand, because once you have, you must see it through to completion. If you set a rule for reinforcement, make sure you honor the rule every time. Consistent procedures leads to consistent behavior from the learner.

Never deliver “empty threats”

Effective Instruction Delivery

# Effective Instruction Delivery

- Say the learner's name
- Say, "look at me" if needed
- In close proximity
- With eye contact
- Quiet toned voice
- Delivered as a directive
- In a descriptive manner
- 5-second wait period for response



- No empty threats
- Little to no explanation in the moment
- Delivered with maximum calm
- Compliance always followed by praise
- Don't change expectations (e.g., "how do you ask nicely?")
- Be consistent

## Step 4 – Compliance = Rewards

Show your learner that following your directions gets them what they want most!

## Step 5 – Increase Demands Over Time

Use continuous reinforcement at first and then expand the ratio.



# Like learning to ride a bike...



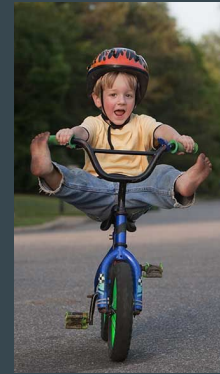
When learning a new behavior, at first, you need a lot of support to learn it.



Over time you need less...



And less support.



Before you can soar



And sometimes you fall.

Learning any new behavior is like this.

It is *fragile* at first

It requires tremendous support to develop.

And that's true whether or not you have autism!

## Step 6 – Think About What Really Matters

Have the right priorities in the right order.



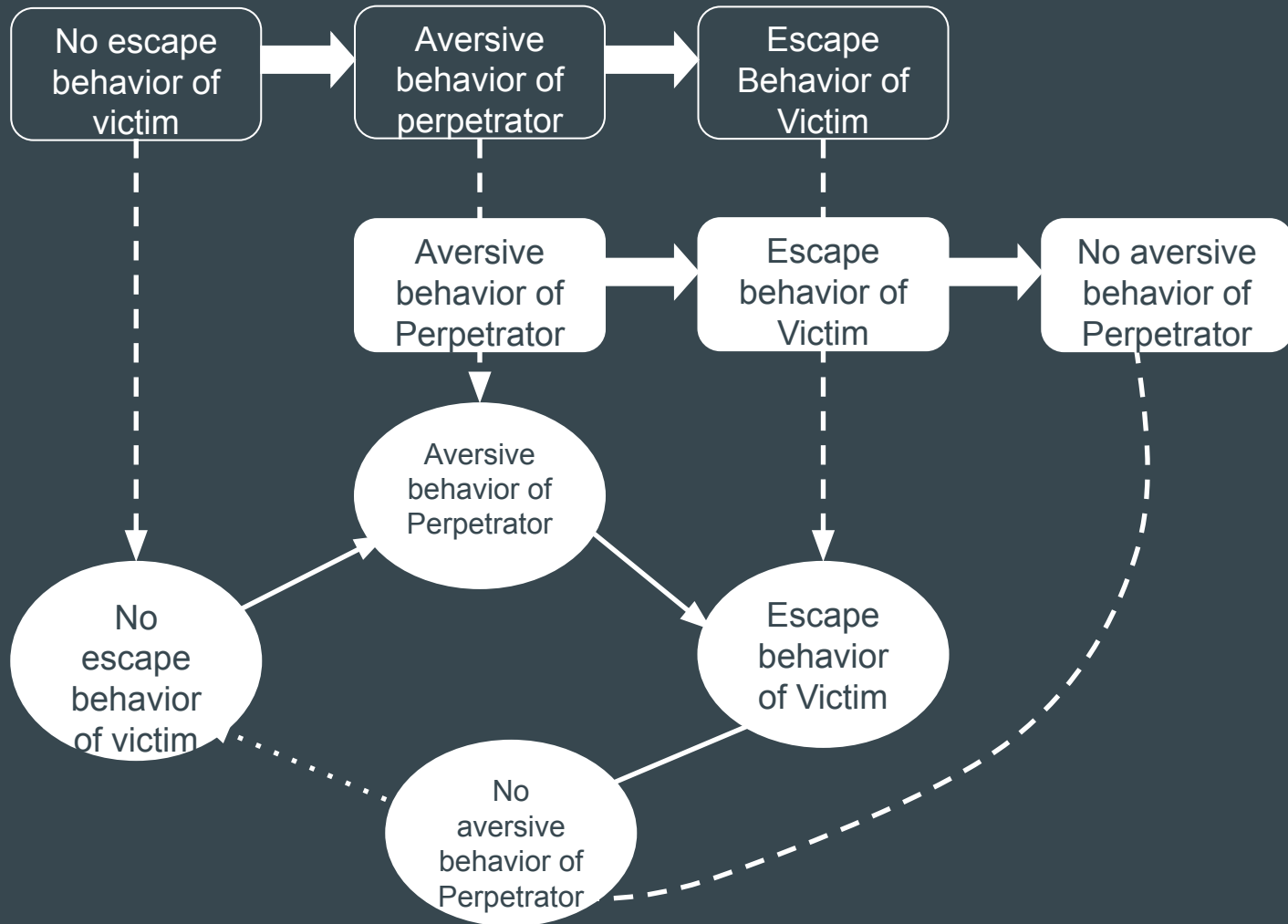
*In other words, know  
what are the most  
important things for  
your learner across  
time and space.*

# Keeping Priorities and Perspective

- Your priorities are similar to the values you have related to your learner.
- The setting can throw many things at you that demand flexibility and the ability to quickly adjust
- There is no such thing as being perfect

## Step 7 – Extinguish Challenging Behaviors

Do not give challenging behavior one single drop of fuel.



# What is Extinction?

- Extinction is the withholding of reinforcement for a behavior that has historically produced that reinforcement





# Some points about Extinction

- Extinction can cause:
  - Momentary increase in the amount and intensity of behavior
  - May make your learner very emotional
  - Could be followed by new behaviors you've never seen before, like aggression
  - Will eventually subside with consistent use
  - Giving in every now and then will render this entire process useless.
    - DON'T GIVE IN!

- Hang in there!
- The more consistently you use Steps 1, 2, and 3 with this step, the better things will go.
- Just keep swimming. Consistency is the key!

**THINGS GET  
WORSE BEFORE  
THEY GET BETTER.  
JUST KEEP GOING.**

# Review

- Step 1: All good things come through you
- Step 2: Have FUN!
- Step 3: Be consistent
- Step 4: Compliance = Rewards
- Step 5: Reinforce every instance of behavior at first
- Step 6: Remember your priorities
- Step 7: Appropriate behavior gets them what they want

# Remember...

- These steps can be used anywhere! At home, at school, or in the community!
- The most important thing to remember is to have fun and enjoy your learner!

**Let's Take another Break**

**So How Do We Do This at Home or  
in the Classroom?**

...

# Example

Mrs. Jefferson is constantly having to remind Leroy to go back to his seat. She feels like it takes up most of her day! If Leroy would stay in his seat, she could get way more done. She tries to come up with strategies to increase how much time Leroy stays in his seat, but it doesn't seem to work or make her day any easier.

What should she do?





# It's All About Data!

- Another teacher or assistant also took data on two other students:
  - Their data:
    - Kid A
      - # of Ys: 24
      - # of Ns: 9
    - Kid B
      - # of Ys: 21
      - # of Ns: 12

# It's All About Data!

- What about Leroy's data?
  - Leroy's Data:
    - # of Ys: 22
    - # of Ns: 11
- What did we learn?
- What do you think the problem is?
- What should the next question be?

**Let's break into groups**

# Example

Audrey really likes to play with the kitchen toys in the classroom. Transitioning away from them always causes undesired behavior which typically includes screaming and crying, and sometimes engaging in aggressive behavior. However, she can't just stay at the kitchen toys all day long.

What strategies could be useful here?

How should the situation initially be handled, and what should the goal be?

# Example

Freddie engages in high rates of moderate to severe self-injurious behavior. He has caused permanent damage to his face engaging in these behaviors. At school, he engages in these behaviors with high frequency.

What's the first question we should be asking?

What are some useful strategies for reducing these behaviors?

# Example

John is on an altered school schedule and leaves for the day after lunch. However, he knows that circle time and reading happens before lunch. Most days, he engages in undesired behaviors such as crying, screaming, and trying to leave the classroom during circle time/reading.

What are some effective strategies we could use to address his behavior?

How should we measure if our strategy is working?

# Example

Eddie is a 6 year old boy who often uses profanity and inappropriate words or comments while he is at school. Sometimes he even says things like “I want to kill you.” Typically this happens while transitioning away from an activity he enjoys, or when given demands he dislikes.

What’s the first question we should be asking?

What do you think would be an effective strategy here?

# Example

Elijah is a 3rd grader in Mrs. Barker's classroom. Mrs. Barker says that some days Elijah is in a great mood and does fantastic. However, she also states that some days he refuses to do any work and on those days may scream and cry and refuse.

What factors do you think may be at play here?

What is a strategy we should look at to help improve this situation?



# Example

Rhonda does not use verbal speech to communicate, but instead uses ASL which she is proficient in. She just started in a new classroom with Mrs. Lenton, who says that she is disruptive and distracts the other students often.

What's the first thing we should check on?

What strategies can we use to help Rhonda and the other students?

# Example

Nash engages in extremely high rates of both physical and verbal stereotypy. This includes jumping up and down, flapping his hands, and making very loud verbalizations. It can be difficult to get him to do much in the classroom.

What is something we should focus on with Nash?

What may be particularly challenging with Nash?

# Example

Max is in kindergarten. He is very compliant, does his school work well, transitions well, and is making great grades. However, he barely speaks at school, and his mom reports he speaks a lot when at home.

What factors should be considered here?

What strategies can we implement to help Max use verbal communication at school?

[garrett@AutismCenterNMS.com](mailto:garrett@AutismCenterNMS.com)