What is ABA?

Dr. Christopher R. Colasurdo, Ph. D., BCBA
Behavior Analyst, Bergen County Special Services

Introduction and Goals

- Dispel myths about ABA
- Provide examples of ABA across a variety of skills/settings
- Provide strategies that you can use in the classroom

Let’s Talk about what ABA is NOT

- Only for students with special needs!

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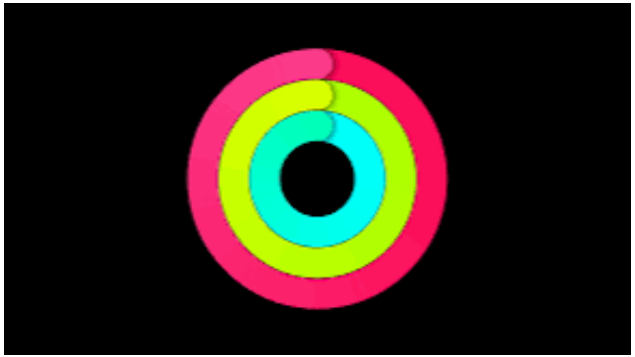
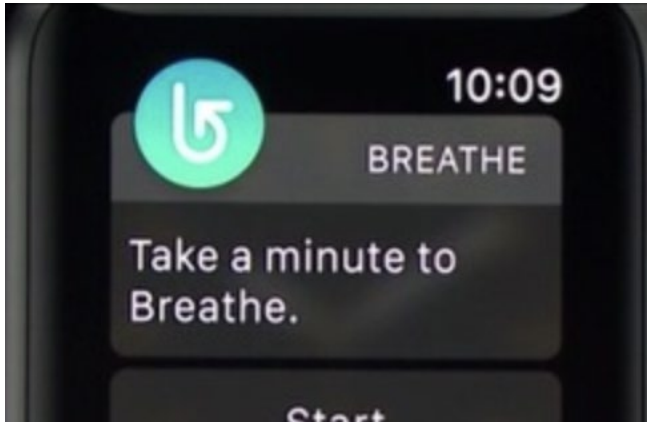


duolingo



Journal of Applied Behavior Analysis

Replication

Training medical students to teach safe infant sleep environments using pyramidal behavioral skills training

Jacqueline N. Mery ✉, Jason C. Vladescu, Jessica Day-Watkins, Tina M. Sidener, Kenneth F. Reeve, Lauren K. Schnell

First published: 19 July 2022 | https://doi.org/10.1002/jaba.942

This study was conducted in partial fulfillment of a Ph.D. in Applied Behavior Analysis from Caldwell University by the first author, under the supervision of the second author.

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PMID: 25292399

EMPLOYMENT-BASED ABSTINENCE REINFORCEMENT PROMOTES OPIATE AND COCAINE ABSTINENCE IN OUT-OF-TREATMENT INJECTION DRUG USERS

August F. Holtyn, Mikhail N. Koffarnus, Anthony DeFulio, Sigurdur O. Sigurdsson, Eric C. Strain, Robert P. Schwartz, and Kenneth Silverman

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JOURNAL OF APPLIED BEHAVIOR ANALYSIS 2005, **38,** 395–398 NUMBER 3 (FALL 2005)

TEACHING SAFETY SKILLS TO CHILDREN TO PREVENT GUN PLAY: AN EVALUATION OF IN SITU TRAINING

RAYMOND G. MILTENBERGER, BRIAN J. GATHERIDGE, MELISA SATTERLUND, KRISTIN R. EGEMO-HELM, BRIGITTE M. JOHNSON, CANDICE JOSTAD, PAMELA KELSO, AND CHRISTOPHER A. FLESSNER

NORTH DAKOTA STATE UNIVERSITY

This study evaluated behavioral skills training with added in situ training for teaching safety skills to prevent gun play. Following baseline, each child received two sessions of behavioral skills training and one in situ training session. Additional in situ training sessions were conducted until the child exhibited the safety skills (don't touch the gun, get away, and tell an adult). All children acquired and maintained the safety skills at a 3-month follow-up. In addition, of the 7 children assessed in a dyad situation, all exhibited the correct skills in the presence of another child.

DESCRIPTORS: safety skills, behavioral skills training, in situ training, children, firearm injury protection

ABA Is Not…

- Only for problem behavior
- Only meant to reduce behavior

Behavioral Interventions

RESEARCH ARTICLE

A blueprint for general-case procedures illustrated by teaching adolescents with autism spectrum disorder to use a chip-debit card

Eileen M. Milata, Sharon A. Reeve ✉, Kenneth F. Reeve, Chata A. Dickson

First published: 27 May 2020 | https://doi.org/10.1002/bin.1719 | Citations: 4

This study is based on a thesis submitted by the first author, under the supervision of the second author, for the Master of Arts in Applied Behavior Analysis at Caldwell University.

EDUCATION AND TREATMENT OF CHILDREN Vol. 33, No. 3, 2010

Two Variations of Video Modeling Interventions for Teaching Play Skills to Children with Autism

Kimberly Sancho, Tina M. Sidener, Sharon A. Reeve
Caldwell College

David W. Sidener
Garden Academy

Abstract

The current study employed an adapted alternating treatments design with reversal and multiple probe across participants components to compare the effects of traditional video priming and simultaneous video modeling on the acquisition of play skills in two children diagnosed with autism. Generalization was programmed across play sets, instructors, and settings. Overall, both video modeling procedures proved to be effective in teaching and producing maintenance of play skills. For one participant, these procedures appeared to be equally effective in terms of acquisition of the main dependent variable, scripted play actions. For another participant, scripted play actions were acquired more quickly in the simultaneous condition.

KEYWORDS: autism, play skills, scripts, simultaneous video modeling, video priming

Journal of Behavioral Education (2021) 30:664–683
https://doi.org/10.1007/s10864-020-09389-z

ORIGINAL PAPER

Using Behavioral Skills Training to Teach Interview Skills to Young Adults with Autism

Katrina Roberts[1] · Jaime A. DeQuinzio[1] · Bridget A. Taylor[1] · Jenna Petroski[1]

Published online: 22 April 2020

ABA is Not…

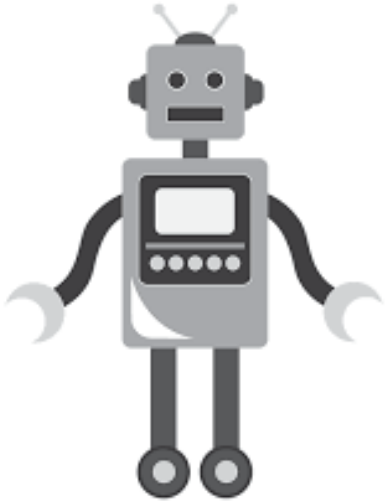
- Bribing students into doing what you want!
- Spoiling students
- Destroying motivation

ABA Is…

- Using reinforcement
- Taking advantage of motivation
- Shifting to natural reinforcers

ABA Is Not…

- Turning students into robots
- ONLY Discrete Trial Teaching

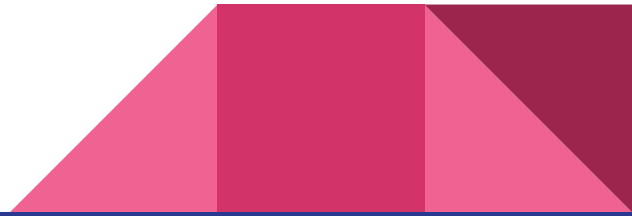


ABA is not…

- Cold and Rigid
- Ignoring emotions and thoughts

ABA is…

- Focused on observable and measurable behavior
- Why???



ABA is Not…

is…

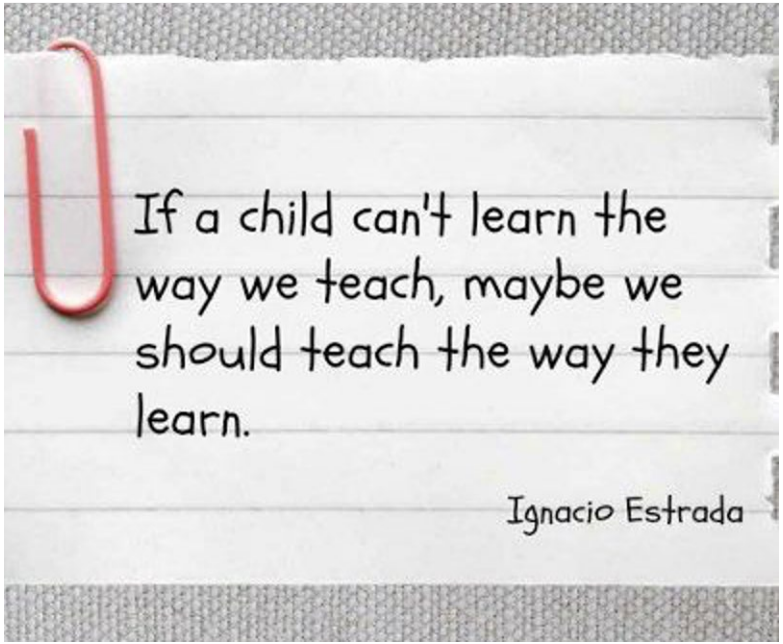
- A cure for Autism

ABA

- Helps increase skills and reduce disruptive behaviors
- Helping individuals with ASD
  - Become more independent
  - Acquire necessary life skills
  - To be safe
  - Interact with others

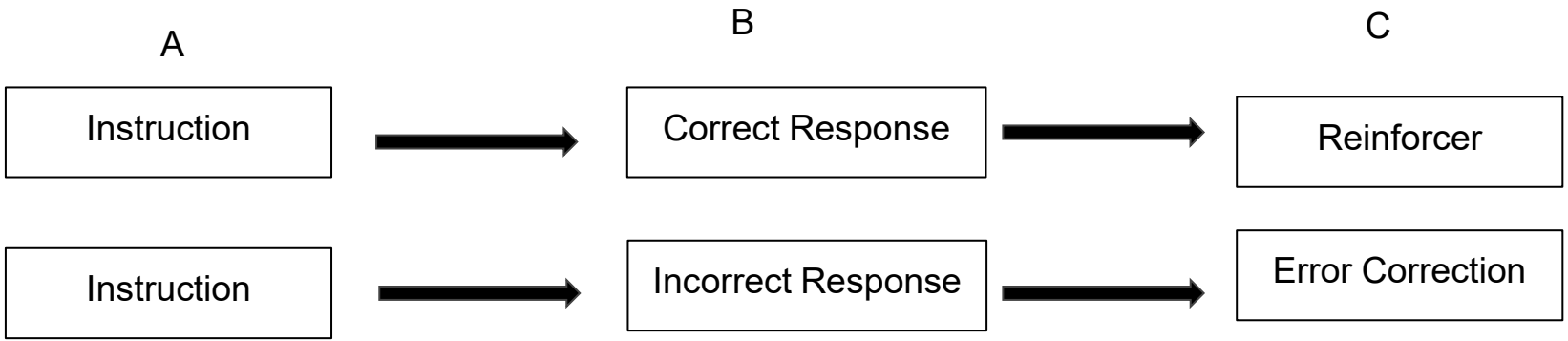
ABA Is....

- Individualized
- Socially Significant
- Systematic
- Data Driven
- FUN!!!



Discrete Trial Teaching

- Method of teaching a skill in simplified and structured steps.
- Breaks down learning opportunities into well-controlled, discrete teacher-student interactions
- Structure and lots of learning opportunities

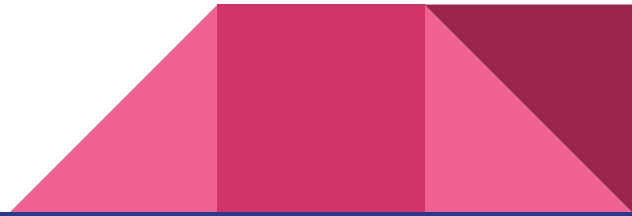


Natural Environment Teaching

- Teach in the natural environment under natural conditions
- Set up situations where the kiddo will be motivated to respond
- Wait for child to initiate and prompt correct response
- More natural, less structured
- Great for verbal behavior, play, social skills****
- Establish generalization of skills taught in DTT

DTT vs NET

- Use DTT when:
  - You want to focus on specific skills one at a time
  - You want to provide MANY learning opportunities
  - The child needs clear expectations to succeed
  - Younger and/or lower “functioning” children
- Use NET when:
  - You want the child to lead learning (greater motivation)
  - You want to focus on generalization/maintenance
  - You are working on social skills/communication



Reinforcement

- Any consequence that produces an INCREASE in future behavior
- **Positive Reinforcement:** Something is ADDED to the environment immediately after a behavior resulting in that behavior INCREASING in the future
- **Negative Reinforcement:** Something is REMOVED from the environment immediately after a behavior resulting in that behavior INCREASING in the future

Rules of Reinforcement

- **Timing:** New skills should be reinforced IMMEDIATELY
  - Eliminates incidental reinforcement of other behavior
- **Consistency:** The more reliable/consistent you are, the faster you will see behavior change
  - Reinforcement schedules: Fixed vs Variable
- **Amount:** Should reflect the “work” the student puts in
  - Too little= Student won’t respond
  - Too much= Reinforcer not effective
- **Quality:** How MUCH does the student like the reinforcer
  - Preference vs. Reinforcement
- **Novelty:** Using the same reinforcer can kill motivation
  - Satiation vs. Deprivation

How Do We Use This Info?

- The rules are not individual concepts, they all play a part in making behavior change
- All of these COMBINE to make an item or activity reinforcing
- Balance ALL of these factors and fit them to the skill/student
- For example:
  - You may LOVE pizza (high quality) but if I gave you one bite of pizza (amount), would you run a mile for me?
  - What if I gave you an entire pie of pizza to eat (amount), but you could ONLY eat that for lunch all year (novelty)
  - Would you come to work if you were paid $80,000 (amount, quality), but you only got paid once a year (timing, consistency)

Tips and Tricks

- Don’t give it away for free
  - Higher preferred reinforcers should be saved and delivered upon appropriate behavior occurring
  - The same reinforcers should NOT be provided outside of ‘earning’ (e.g. supervised rec, leisure, lunch, downtime etc.)
- What else can our learners do during these times of day?
  - Engage in structured independent tasks
    - Examples: leisure activity schedules
  - If not enough independent skills then teach them (within their goals and objectives)
  - Expose them to novel activities, tangibles, etc.
- If you don’t use it, you lose it
  - If you fade reinforcement too fast or inconsistently, the behavior will stop VERY quickly
  - Remember the vending machine…
    - Esp. if on a fixed schedule
- Exceptions:
  - Maintenance
  - Goal to thin reinforcement
  - Teaching Delayed Gratification

Differential Reinforcement

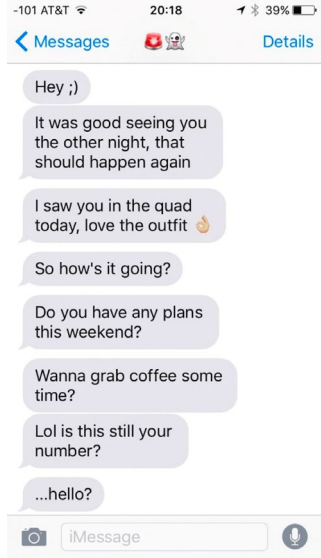
- Continuous Reinforcement: Give reinforcement for EVERY occurrence of behavior/correct response
- Intermittent/Variable Reinforcement: Give reinforcement after an average number of behaviors of correct responses
- Differential Reinforcement: Give reinforcement for one type of response and NOT for others
    - For Skills: Independent vs Prompted responses
    - For Behaviors
        - DRO
        - DRA
        - DRL

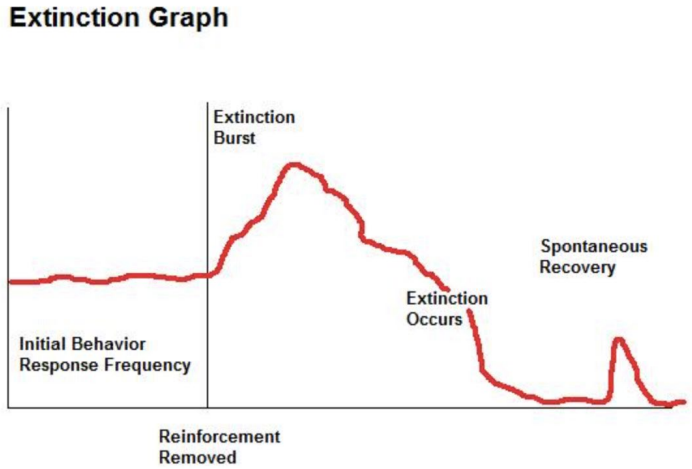
A Note About Punishment…

- An event or stimulus that decreases the chances of the behavior occurring in the future
- Used ONLY after all attempts at reinforcement-based intervention has failed
- MUST be supplemented with an alternative behavior
- Last resort

Extinction

- Removing the consequence of a previously reinforced behavior
- DOING NOTHING AFTER A BEHAVIOR
- Sometimes called planned ignoring (if the reinforcer is attention)
- You should always be teaching an alternative behavior
- Not appropriate for all behaviors/kiddos





Prompts

- Supplementary stimuli used to increase the likelihood of a correct response.
- Response Prompts: Add behavior on the part of the instructor
  - Verbal
  - Gesture
  - Model
  - Physical
- Stimulus Prompts: Add something directly to the stimuli to cue correct response
  - Movement: Point, tap, gesture, look
  - Positional: Move one of the stimuli closer
  - Redundancy: Highlight critical features (size, color, shape, etc)
- THE GOAL IS TO START WITH PROMPTS AND TRANSFER TO NATURAL STIMULI

Prompt Fading

- Prompts: Supplementary stimuli used to increase the likelihood of a correct response.
- Prompt Fading: Method of gradually removing prompt so behavior begins to occur without them
- **Most-To-Least:** Gradually reduce amount of physical assistance; best used when learner has NONE of the skill
  - Advantages: Prevents errors, tasks completed quickly in session
  - Disadvantages: Takes longer to master, need to assess prompts daily
- **Least-To-Most:** Gradually increase assistance with each successive error; best used if learner has some of the skill and/or learns quickly
  - Advantages: Most opportunity for independence, most “natural” for instructors
  - Disadvantages: Opportunities for errors, time consuming
- **Graduated Guidance:** Provide physical prompt ONLY when needed and fade immediately within session

Functional Communication Training

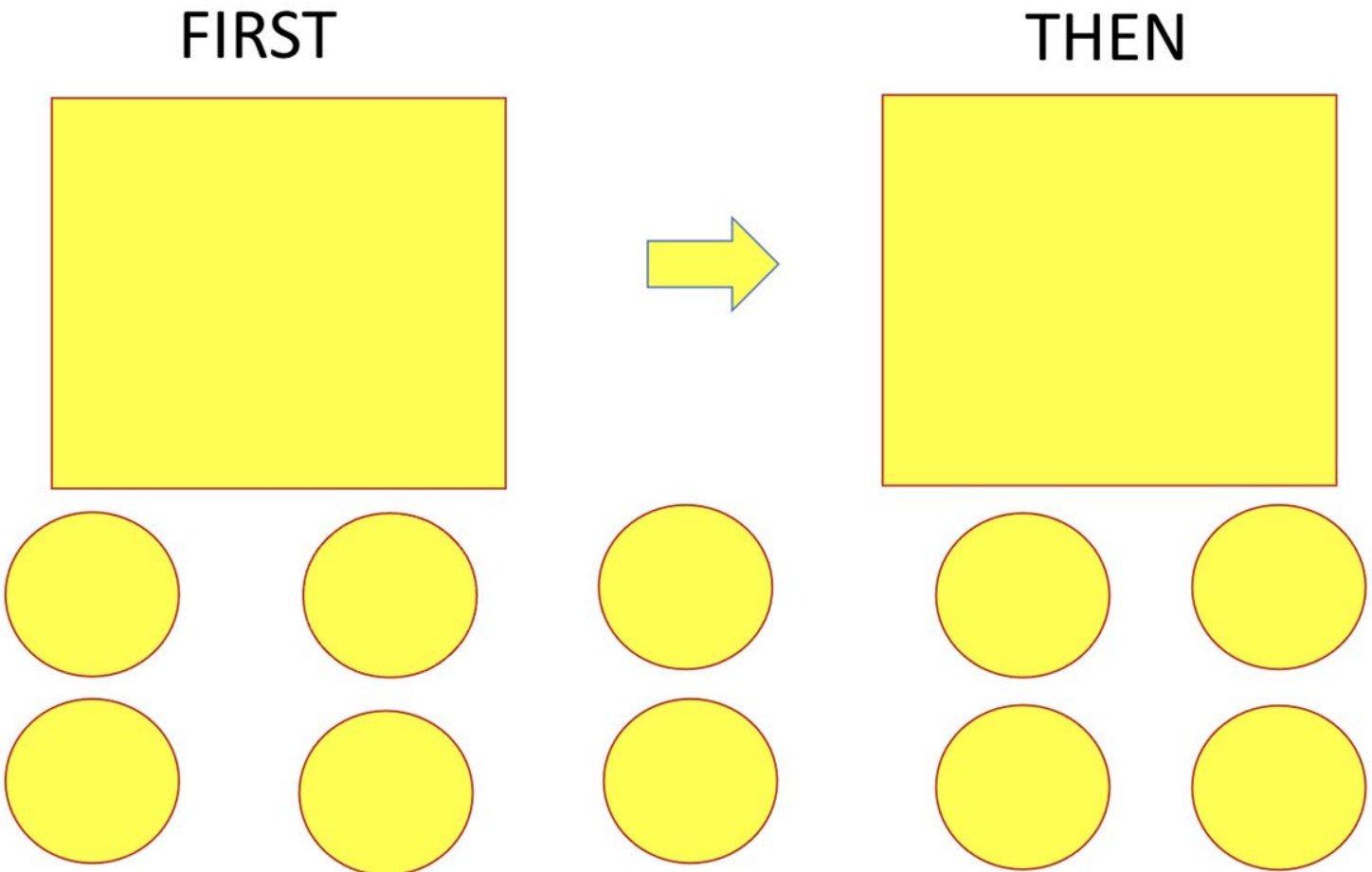
- Aims to replace challenging behaviour with new ways of communicating that achieve the same thing.
- The therapy might focus on verbal communication, or it might include signing, pictures or speech generating devices (AAC)
- Often used in combination with other strategies
- MUST BE EASIER AND LESS EFFORTFUL THAN PROBLEM BEHAVIOR

Preference Assessments

- Visual Choice Boards
- Way to increase motivation
- Allow choice in the kiddo's day
- Preference vs Reinforcer
  - **Preference**- Identify items that MIGHT be reinforcers
    - What the person likes
  - **Reinforcer**- Item or activity that is KNOWN to increase behavior
    - What the person will work for
- Once you find a reinforcer USE IT!
- If you have a really important skill you want to teach…isolate it!

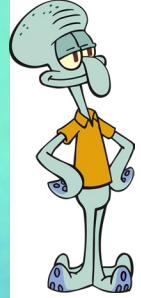
Token Economies

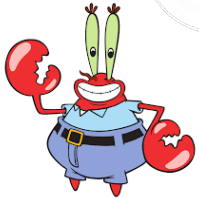
- Stickers, Marbles, Tallies, Electronic
- Reinforce following classroom rules or specific behaviors
- List of backup reinforcers (what you are exchanging for)
- Use of Levels
  - 1. Good Consequence
  - 2. Great Consequence
  - 3. Awesome Consequence
- Layering allows you to teach additional skills like SAVING (aka delaying reinforcement)
- Specify what happens when and how Tokens can be exchanged
- A note about tokens….


FIRST
THEN

I am working for:


Chris's
KRUSTY KRAB





Behavior Contract

- Have the class or learner help make it
- WHAT behavior
- WHEN does the contract apply
- WHO is involved
- HOW are consequences earned and delivered
- Have the Contract in full display
- https://docs.google.com/document/d/1U62fuY-bbRV9CjRuZ2FaSyvs1fnIdxzjF8vM6rquO7E/edit

Multiple Schedule

- Signal for when a behavior should and should not occur
- A stimulus is used to signal “should” and “shouldn’t” (Colored pieces of paper, hat, bracelet)
- Rule for each signal
- “My turn” “Your Turn”
- Work/Break
- Red side/Green side

Behavioral Skills Training

- Can be used to teach a WIDE range of skills
- Evidence-Based Practice
- **1) Instruction-**
  - Clear and concise explanation of WHY
  - Verbal and written/visual
- **2) Modeling-**
  - SHOW THEM what the behavior looks like
  - Video modeling
- **3) Rehearsal-**
  - Have the student practice the behavior in a CALM/CONTROLLED setting
- **4) Feedback-**
  - Immediate
  - Positive for correct responses
  - Error correction for incorrect responses
- **REPEAT!**

Shaping

- Reinforcing closer and closer approximations until you get to the behavior you want
- In English…Teaching a new skill by taking baby steps gradually working towards an end goal
- Once you move to the next step, STOP reinforcing previous steps

1) Identify the Target Behavior
    a) Want child to say “Truck”
2) Break Down the Behavior
    a) “T”, “Tr”, “Tru”, “Truck”
3) Use Reinforcement and Prompts
    a) Model behavior and reward
4) Increase with Gradual Progression
    a) Move to next step once previous occurs
5) Reinforce Closer Approximation
    a) Provide a reward for each step as it happens (and stop for older steps)

Shaping

- **Topography:** Modifying how a behavior looks, such as refining handwriting or improving speech clarity.
- **Frequency/Rate:** Increasing the number of responses per unit of time, such as increasing the speed of completing math problems.
- **Latency:** Reducing the response time after receiving an instruction, for example, responding quickly to a teacher's question.
- **Duration:** Extending the length of engagement in an activity, such as maintaining attention during independent reading sessions.

Chaining

- **Forward Chaining-**
  - Reinforcement is provided for completing the first step and the trainer completes or manually guides the remaining steps.
  - The individual is then required to complete the first two steps to get reinforcement and so on
- **Backward Chaining-**
  - Trainer completes or manually guides all steps, except the last one. Reinforcement is provided for completing the last step.
  - Next, the trainer completes all but the last two steps.
  - The individual completes those, earns reinforcement, and so on
- **Total Task Presentation-**
  - The individual receives training on each step of the task at every training session.
  - The chain is trained until the individual can do all steps independently

General Rules for Demands

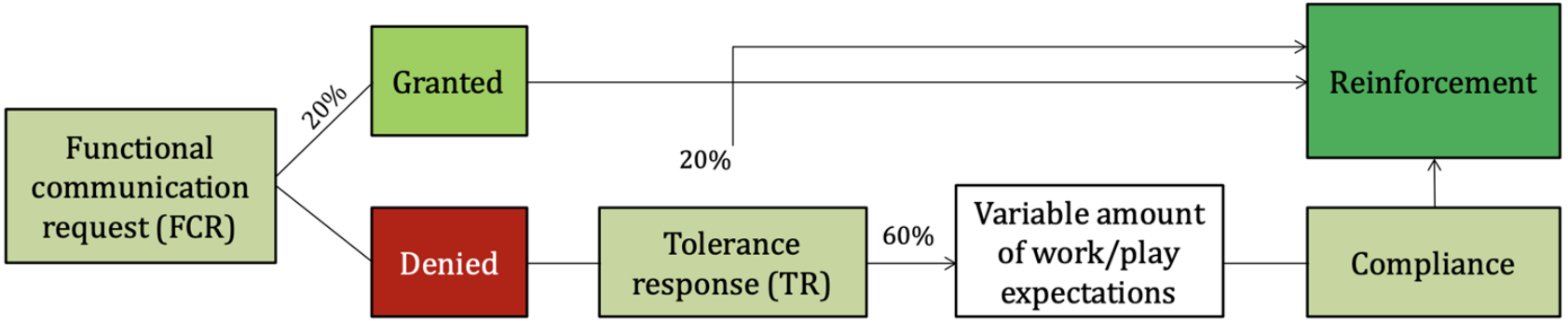
- Demands are stated, not asked.
- Get in close proximity and gain eye contact, if possible.
- Wait until you have the individual's attention.
- Using clear language, present your demand

Behavior Momentum

- The use of a series of high-probability requests (easy demands) to increase compliance with lower-probability requests (harder demands)
- Essentially means to build up momentum to what you really want the child to do, by giving them easy tasks or demands that they are highly likely to do before presenting them with more difficult tasks.
    - Helps keep you from being an “aversive” stimulus
    - Allows for high rates of reinforcement particularly at the beginning of a session
- **How to:**
    - Deliver 3-5 easy demands rapidly just prior to administering a hard demand
    - Deliver verbal or gestural praise for each easy demand completed
    - Deliver the harder demand within 5 seconds of reinforcing a response to the last easy demand
    - Program to fade out high-p requests slowly

Teaching Waiting/Tolerance to “No”

- Teach to ask for the reinforcer
  - “I want it my way”
- Teach a tolerance response to denials, delays, etc
  - “Okay” “sounds good”
- Progressively increase amount of behavior/time to end the delay
- Allow ending sometimes immediately, sometimes after a short amount of time/behavior, and sometimes after long amounts
- https://www.education.uw.edu/ibestt/wp-content/uploads/2018/02/Tolerance-for-Delayed-Reinforcement.pdf



Promoting Generalization

- Does not occur naturally, should not be an afterthought
- THIS IS WHAT IS MOST IMPORTANT
- Strategies:
  - Teach skills in different environments, with different teachers
  - Teach during different times of the day
  - Train loosely
  - Vary your instructions
  - Multiple examples of stimuli
  - Match to natural environment
  - Use indiscriminable contingencies
  - TEACH TO GENERALIZE!!!
- https://ksdetasn.s3.amazonaws.com/uploads/resource/upload/3323/Generalization.pdf

Promoting Maintenance

- **Maintenance:** is the continued ability of the learner to perform a behavior even after part or all of an intervention has been removed
  - Is the skill maintained over time?
  - Is the skill maintained without intervention
  - Does the skill happen without having to provide contrived reinforcement?
- 1) Withdraw Antecedents/Prompts
  - Task analysis/visuals
  - Fade prompts
  - Fade written instructions
- 2)Thin Schedule of Reinforcement
  - Reinforcement gradually becomes available less often
  - Reinforcement contingent on greater amounts of responding
  - Reinforcement must be gradually & systematically thinned
- 3) Shift to Naturally Occurring Reinforcement
  - Start with contrived reinforcement that does not naturally occur
  - Once the child acquires the skill, use reinforcers that would happen in the natural environment

Suggestions

- ***Pair reinforcers with praise***
- ***The Power of Choice***
- Strategies only as effective as their reinforcers
  - Sometimes, keeping the reinforcer secret is effective
- Set learners up for success, then increase difficulty
- Don’t get caught up in the terminology!!!
- Be exact about rules and consequences
- Be consistent
- BE PATIENT
- Always follow through
- Follow the rules

BEHAVIORAL SERVICES

Educational Enterprises *can bring these services to you through a variety of platforms, including:*

- *Functional Behavioral Assessments*
- *Modifying Instruction*
- *ABA Classroom Start-Up and Oversight*
- *Classroom Management Systems*
- *Positive Behavior Supports*
- *Parent Training*
- *Social Skills Instruction*
- *Behavior Contracts*
- *ABA Home Program Implementation and Coordination*
- *Basic Principals of Behavior*
- *Modifying Instructional Strategies*
- *Overview of Specific Disabilities*
- *Functional Communication and Social Skills*
- *Summer Behavior Institute (4-day Seminar in July)*
- *Implementing Functional Behavior Assessment*
- *Discrete Trial Instruction and Other Evidence-Based Techniques*

If you would like further information, please contact:

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