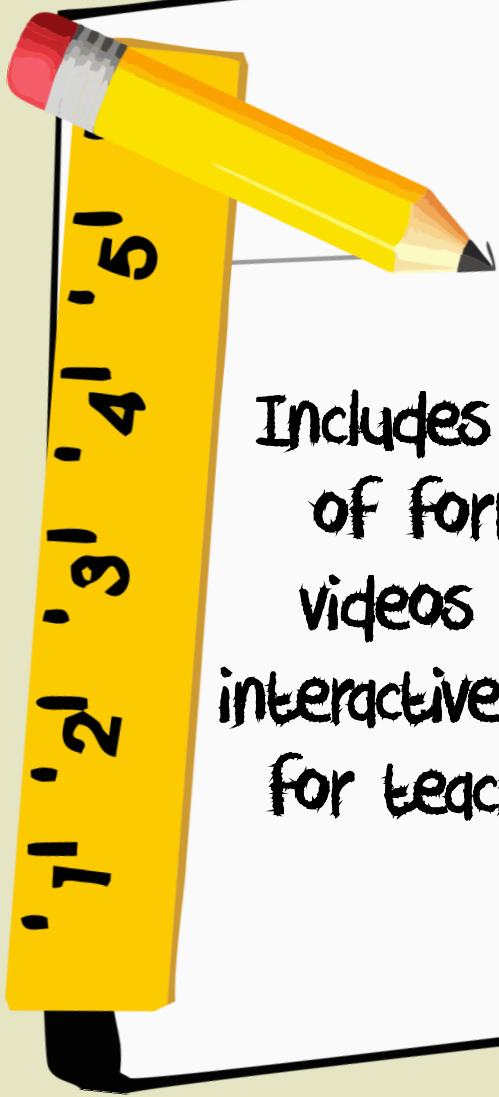




Includes links
of forms,
videos and
interactive stuff
for teachers!

A classroom scene with a green chalkboard, a yellow sign, and three cartoon children. The chalkboard has the title 'ABA and DTT INSTRUCTIONAL TOOLKIT' and the subtitle 'FOR SPECIAL EDUCATION TEACHERS'. The sign says 'Review your class rules every single day!'. The children are a boy, a girl, and a teacher figure.

**ABA and DTT
INSTRUCTIONAL
TOOLKIT**

FOR SPECIAL EDUCATION TEACHERS

By: Osana, Angeline Marie G.

Review
your
class
rules
every
single
day!

Introduction

This Instructional Toolkit provides user-friendly ABA and DTT strategy guide, which includes definition, function and step-by-step process for the use of the Sped teacher. Integration of technology is also present in this toolkit which includes PowerPoint presentations, audiovisual materials, and videos.

Sample lessons and technology based materials are also included.

It is designed
to provide
better
understanding
of Applied
Behavior
Analysis (ABA)
and Discrete
Trial Training
(DTT)

Rationale

The Instructional Toolkit is developed to help special education teachers implement ABA and DTT strategy properly. It will give them a clear understanding of the behavior modification strategies, how it should be done, and when they can use it.

About the Toolkit

The Instructional Toolkit is composed of information about ABA and DTT, its definition, purpose and process of implementation.

This toolkit is created to help the Special education teachers in Antipolo City Sped Center (ASCS) in their encountered problems regarding behavior modification.

About the Toolkit

It is a technology-based toolkit that uses PowerPoint software and hyperlinks of videos, printable forms and printable ABA and DTT tools.

Objectives

This is set to help the Sped teachers to:

1. Easily comprehend the ABA and DTT strategies through a step-by-step process and procedure
2. Manipulate the materials following the ABA and DTT strategy
3. Utilize the lessons effectively and efficiently using this toolkit

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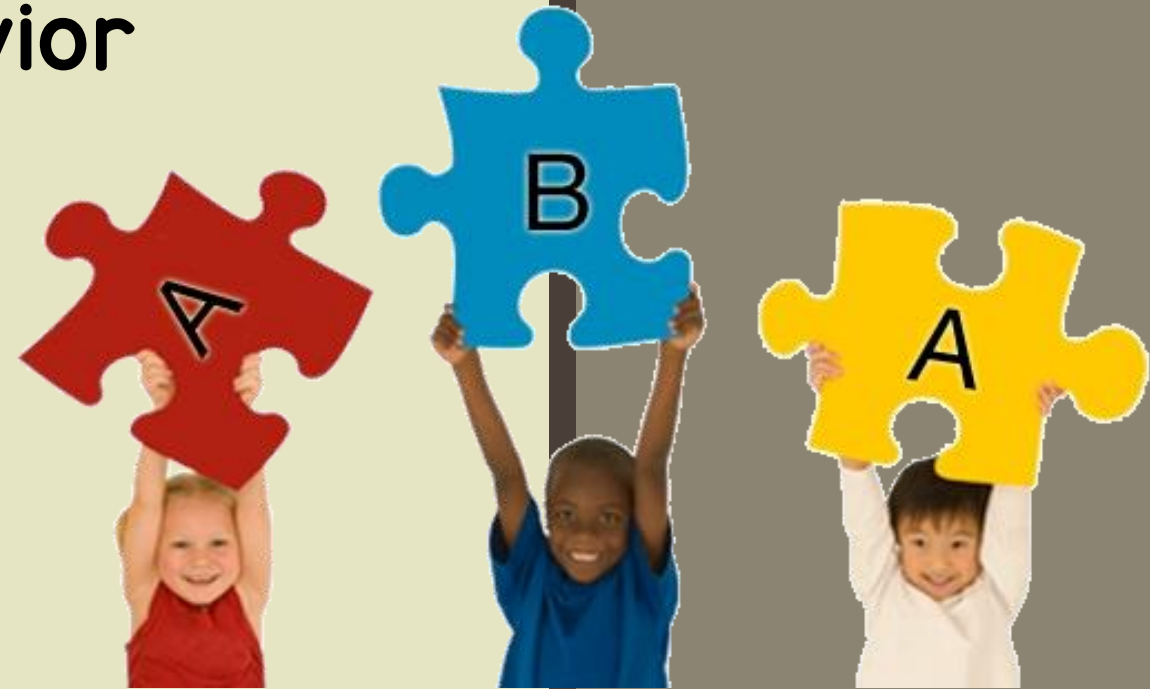


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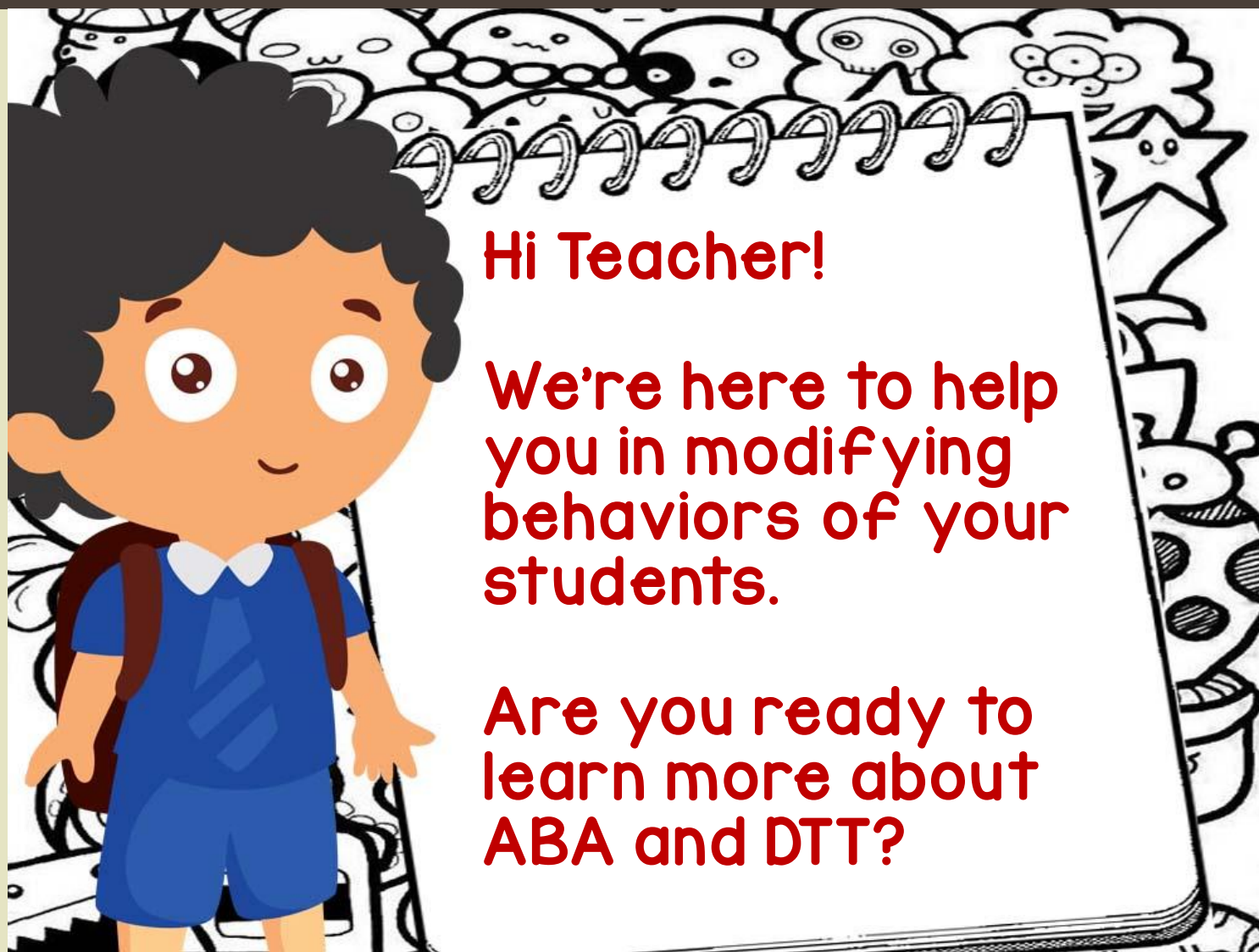
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Hi Teacher!

**We're here to help
you in modifying
behaviors of your
students.**

**Are you ready to
learn more about
ABA and DTT?**

What is ABA?

“ABA”
stands for
Appplied
Behavior
Analysis

What is Applied Behavior Analysis (ABA)?

ABA is a set of principles that form the basis for many behavioral treatments. It is based on the science of learning and behavior. This science includes general “laws” about how behavior works and how learning takes place.

(Autism Speaks Autism Treatment Network, 2018)

ABA IN A NUTSHELL

“Behavior” refers to all kinds of actions and skills (not just misbehavior).

“Environment” includes all sorts of physical and social events that might change or be changed by one's behavior.

What is Applied Behavior Analysis (ABA)?

ABA strategy applies laws to behavior treatments in a way that helps to increase desired behaviors. It also help reduce behaviors that may interfere with learning or behaviors that may be harmful. It's also used to improve focus, social skills, attention, memory, and academics.

ABA can
be used to
help
decrease
problem
behaviors.

Benefits of ABA to Children with Autism Spectrum Disorder



ABA-based approach to behavior intervention is useful to concerning behaviors such as learning difficulty, skill acquisition, communication problems and behavior problems. (Autism Speaks Autism Treatment Network, 2018)

Will ABA Benefit a child?

Is the child..

- ☐ having difficulty in learning?
- ☐ having problems acquiring new skills?
- ☐ Having difficulty in communicating?
- ☐ experiencing behavior problems?

ABA Method Support Person with ASD in Variety of Ways:

- ✓ Teach skills to replace problem behaviors
- ✓ Increase positive behavior and reduce interfering behavior
- ✓ Maintain good behavior
- ✓ Change response to the child's behavior
- ✓ Generalize or transfer behavior from one situation to another

The child
should learn
what "to do,"
not just what
"to stop
doing."

Learning



What Will I Learn?

- Basic knowledge about applied behavior analysis (ABA)
- Applying ABA in activity based scenarios that promote real-world application

ABA

- ✓ These behaviors must be socially significant in order to cause effective long-term change

ABA is a method of introducing systemic interventions on learners to cause change to problematic behavior

Applied Behavioural Analysis!

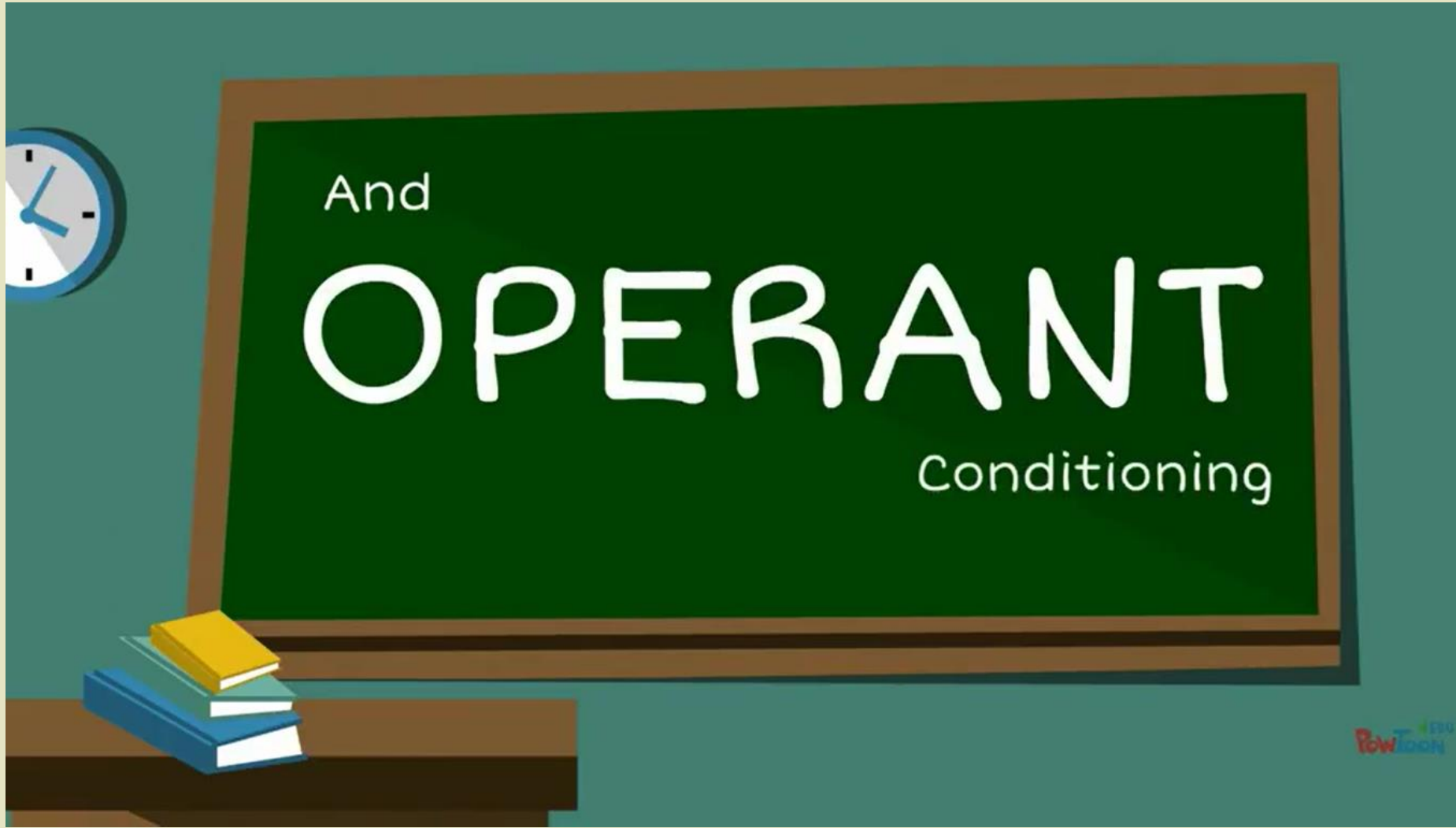
BY: Lucas Miller, Shelby Karas,
Jordana Hudak & Kara Tarnava





Have
strong roots in
classical and operant
conditioning

The reinforcement
and
Punishment



Principles of operant conditioning, positive & negative reinforcement are principles of operant conditioning which is a learning process whereby the consequence of a behavioral response

AUTISM

Children with autism often become fixated on specific interests.

We can use these interests to modify behaviour.



Affects the likelihood that an individual will produce the behavior again these reinforcement procedures can be used with both typical and atypical developing children as well as students with psychological disorders



Principles:

- ☐ Positive
- and
- ☐ Negative



Positive reinforcement is a very powerful and effective tool to help mold and change behavior it works by praising and rewarding desired behavior which in turn makes the behavior more likely to happen in the future.

POSITIVE REINFORCEMENT IN SCHOOL

EDU
TOON

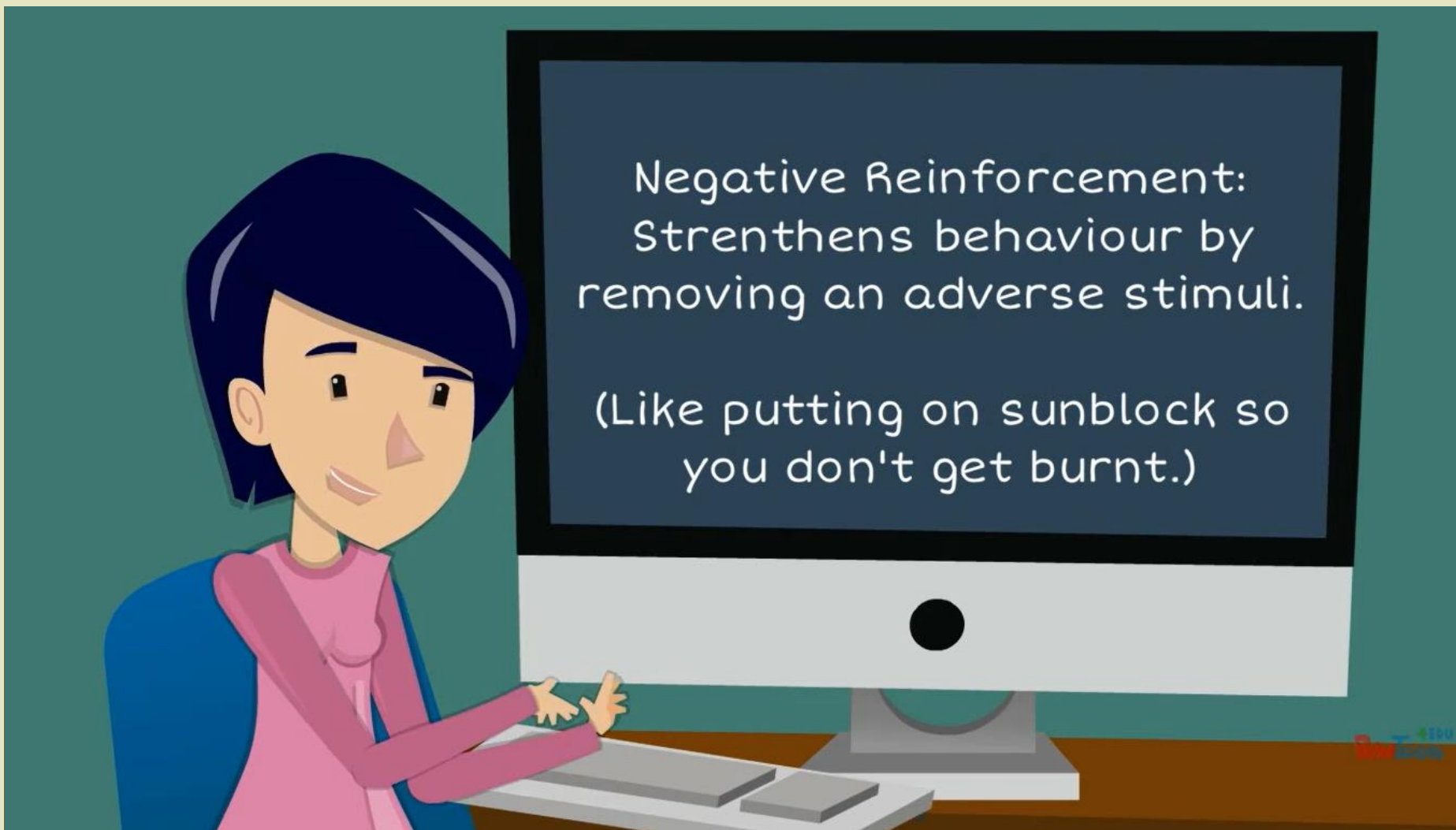
One way to make positive reinforcement available to all students is to use a behavior chart.

A behavior chart would include every student's name and places for them to put stickers whenever they are following the rules



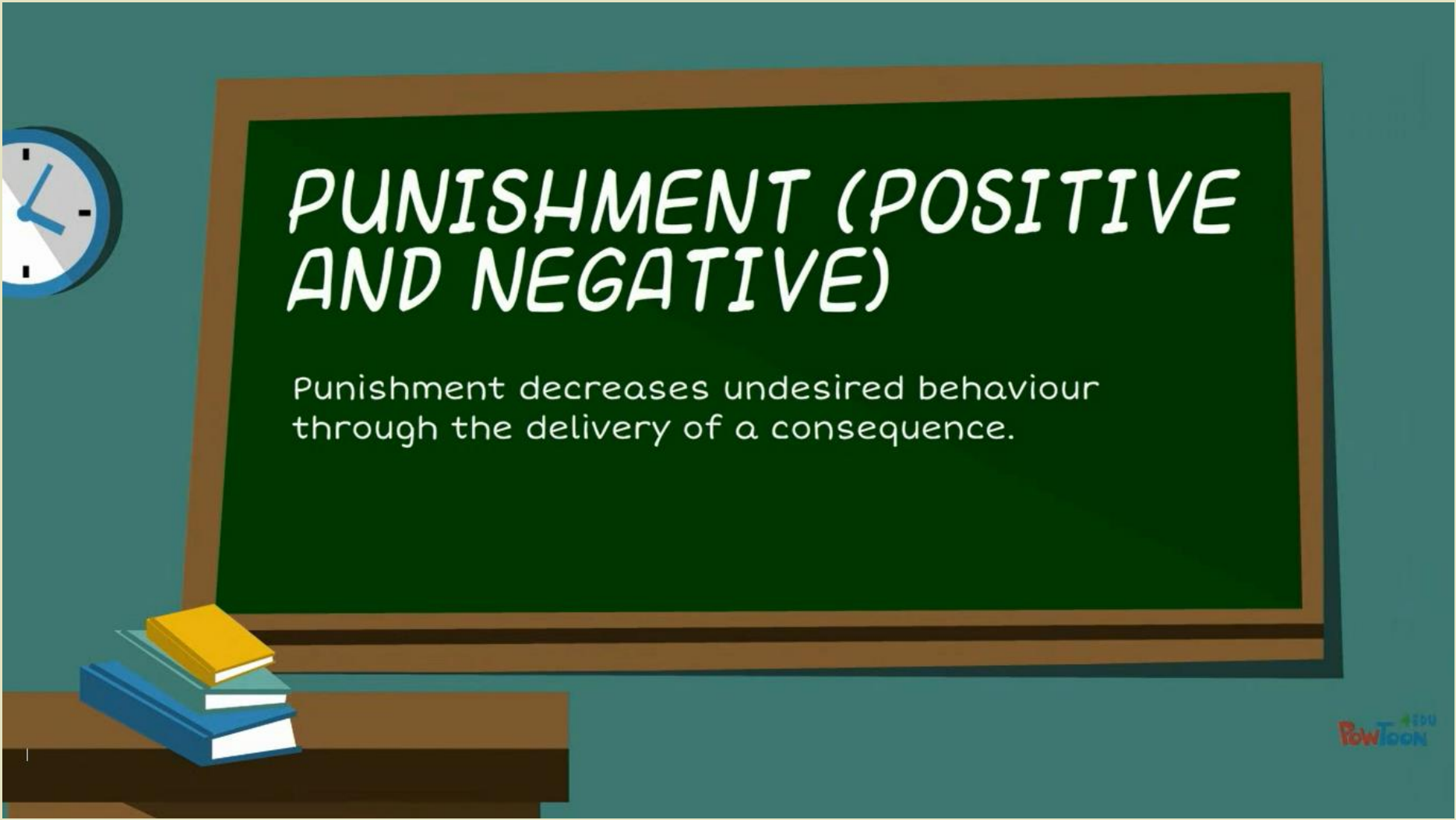
When using positive reinforcement on children with autism it is important to use tangible reinforcement such as edibles or time to play with their toys.

By using a behavior chart students can always see who is following the classroom rules which then positively reinforces good behavior.



In negative reinforcement a response or behavior is strengthened by stopping, removing or avoiding a negative outcome or aversive stimulus

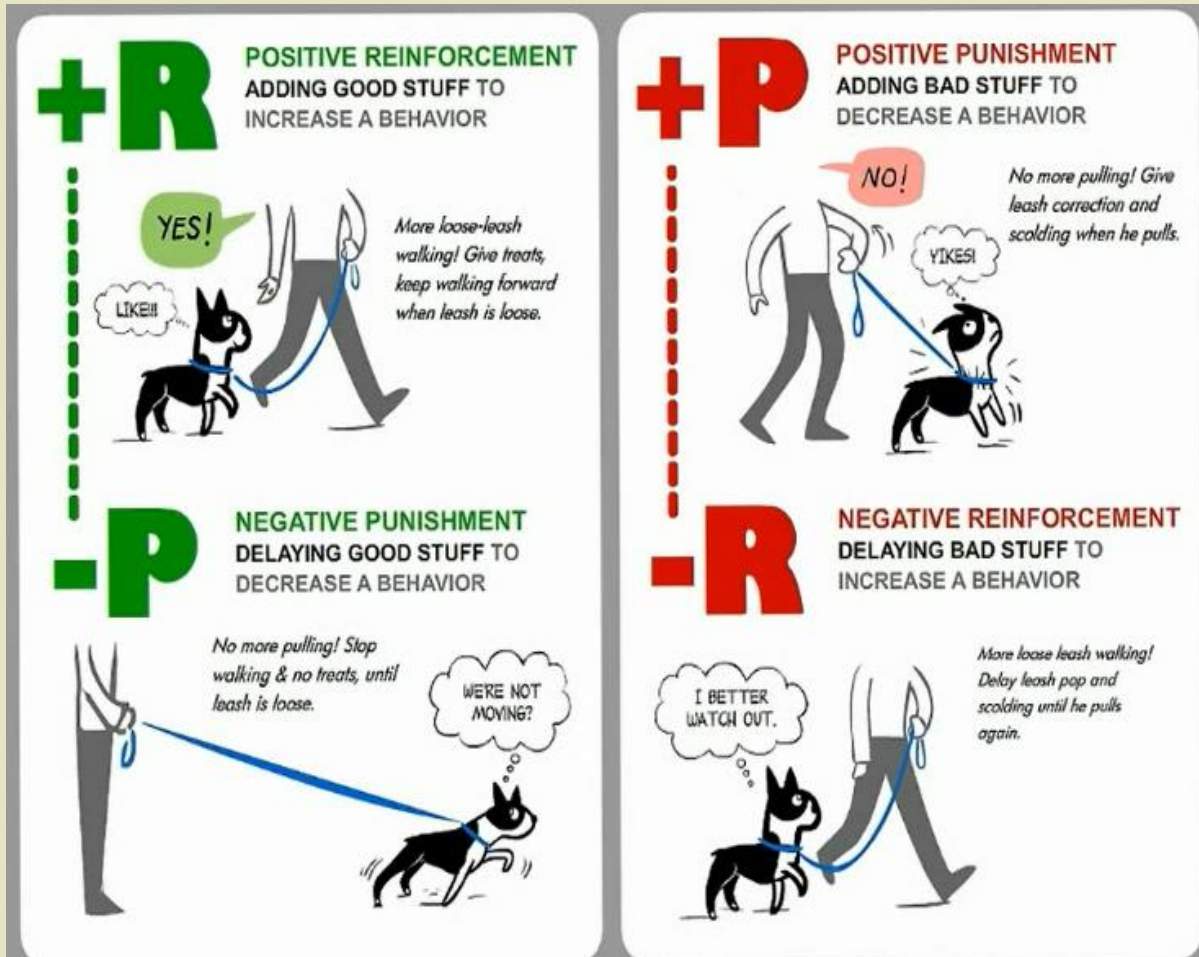


An illustration of a classroom scene. A large green chalkboard with a brown frame is the central focus. To the left of the chalkboard, a round clock with a blue border and white face is mounted on the wall. In the bottom left corner, a stack of three books (yellow, light blue, and dark blue) sits on a brown surface. The background is a solid teal color. The title 'PUNISHMENT (POSITIVE AND NEGATIVE)' is written in white, bold, slightly irregular capital letters on the chalkboard. Below the title, a definition is written in a smaller, plain white font. A small 'Powtoon' logo is visible in the bottom right corner of the illustration area.

PUNISHMENT (POSITIVE AND NEGATIVE)

Punishment decreases undesired behaviour through the delivery of a consequence.

THE 4 QUADRANTS OF OPERANT CONDITIONING

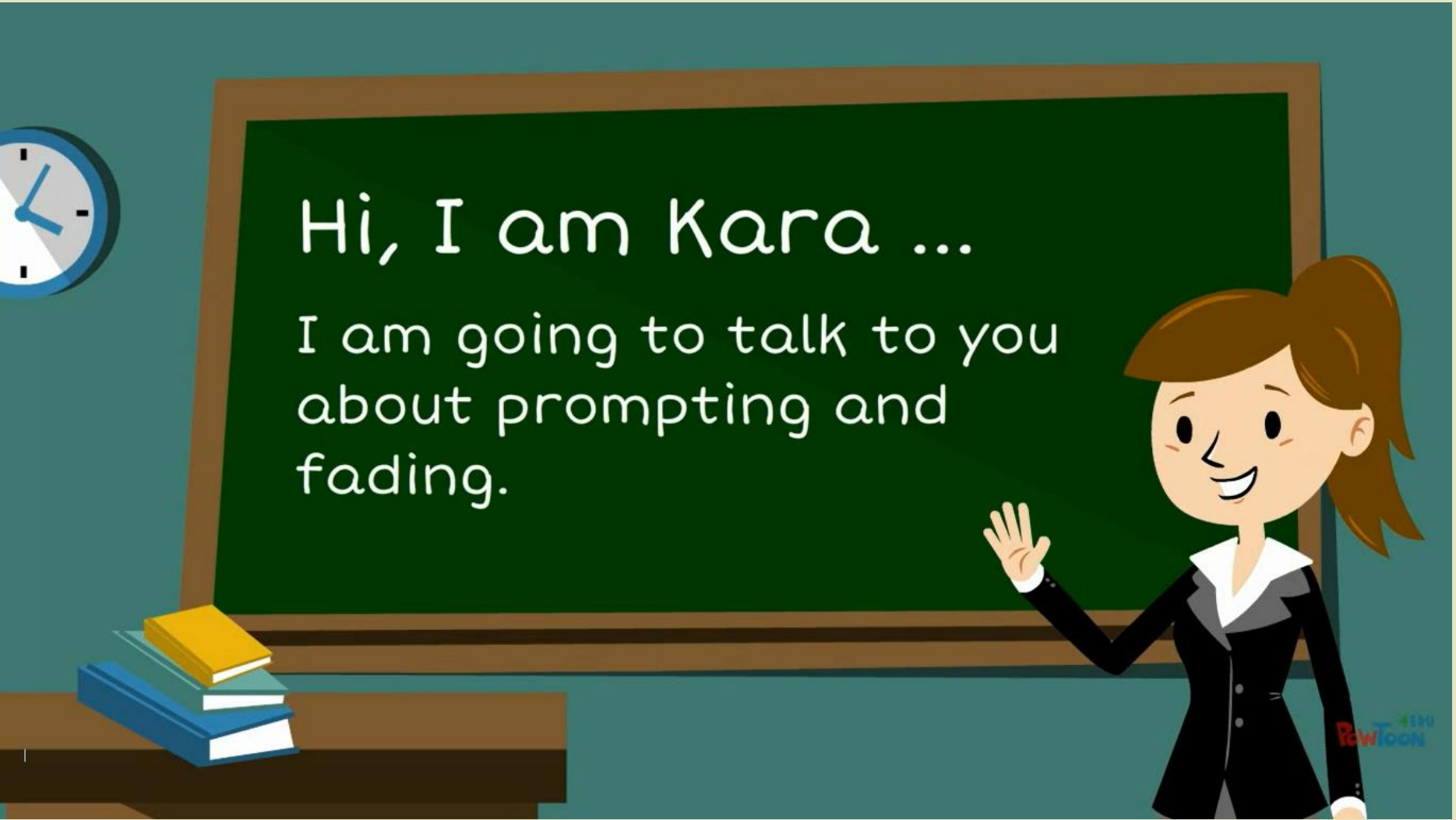


When training an animal, there is one behavior that we want to **reinforce (increase)**, and another behavior that we want to **punish (decrease)**.

We can add something good or bad (-negative) to get the behavior we want.

IN THIS EXAMPLE: The reinforced behavior is LOOSE-LEASH WALKING.

The punished behavior is PULLING ON THE LEASH.

An illustration of a classroom scene. A female teacher with brown hair in a ponytail, wearing a black blazer over a white collared shirt, stands on the right side of a green chalkboard, waving her right hand. The chalkboard has white text on it. To the left of the chalkboard, there is a stack of three books (yellow, light blue, and dark blue) on a wooden desk. On the wall to the left of the chalkboard is a round analog clock with a blue frame and white face, showing the time as approximately 10:10. The background is a teal wall. The entire illustration is framed by a light yellow border.

Hi, I am Kara ...

I am going to talk to you
about prompting and
fading.





FADING

Is the process of weaning the child off of prompts.

Fading is a gradual reduction of the strength and number of prompts.



The Rules of Prompting & Fading.

1. Define target behaviour.
2. Identify suitable prompts.
3. Prompt, Reinforce, Fade.
4. Monitor Results.





Teacher: Hi Alex! Are you excited about Christmas?

Alex gives me no response

Teacher: Are you excited about Christmas?

Alex: Yeah I want to open my yeah I want to open my presents

The teacher would then smile

Teacher: Me too. What presents did you ask for?

Alex: her presents what presents did you ask for

Teacher will say "For Christmas I asked for.."

Alex: I asked for a bike

This is a sample conversation that you would do prompting for a child with Autism

Teacher then responds cool multiples towards Alex

Teacher: Are you excited about Christmas?

Alex: Yeah, I want to bike teacher

Teacher gives a bigger tickle and a bike

Teacher: That's great! I've got my treat all decorated with

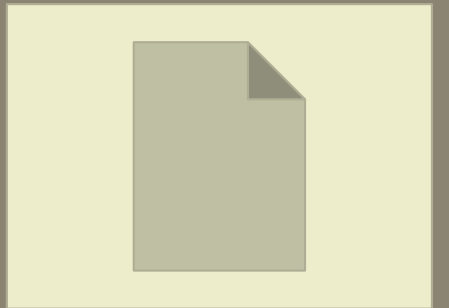
Ornaments. I put ornaments on my tree (Teacher would point to a tree)

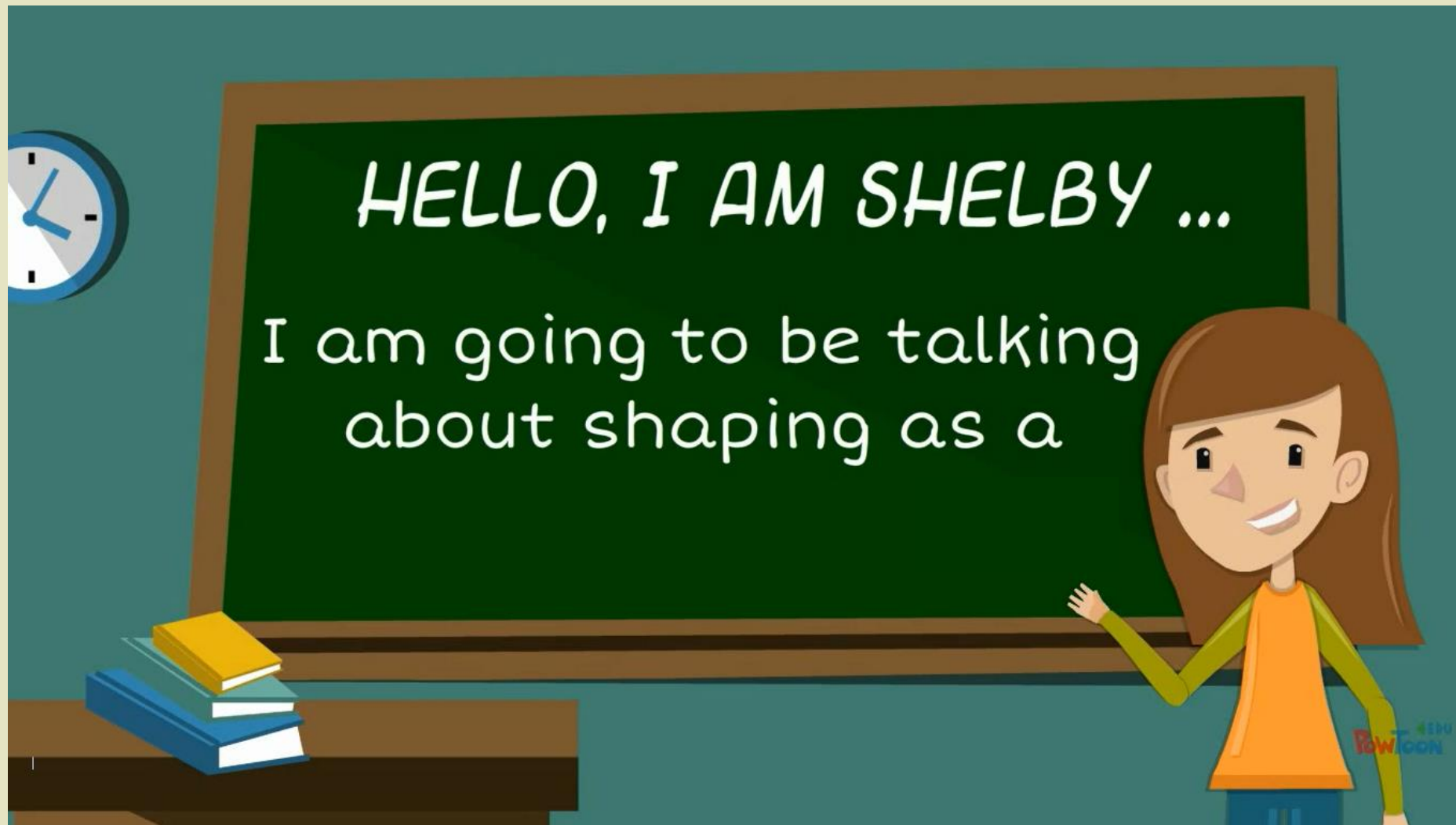
Teacher: I put heart ornaments on my tree

Alex: That's so great (Teacher would give a big temple she cut out)



Click the icon
for the
materials





SHAPING

Is a form of operant conditioning, which reinforces successive approximations to a desired behaviour.



Steps for Implementing Shaping:

1. Define target behaviour.
2. Reinforce successive approximations.
3. Monitor results.



Shaping New Behaviors



Key Concept Of Shaping Behavior

Reinforcement

What is it?

What exactly does it do?

How often does it occur?

How do we present it?

Why is it so IMPORTANT?

Why We Should Use Positive Reinforcement

- Simple to learn and use
- Helps your child feel good about him or herself
- Builds a positive relationship between you and your child
- Creates a positive environment

Behavioral Teaching Strategies

Cycle of Instruction

Instruction → Response → Consequence

Reinforce as quickly as possible to strengthen the desired behavior

Example

Instruction: Stand Up → Response: Child Stands Up → Consequence: Take a break

Behavioral Approach To Teaching New Skills

- Decide on a target
- Reduce a complex skill (behavior) into smaller elements
- Use prompts and prompt fading to teach individual elements
- Use reinforcement to strengthen the new skill



Teaching Procedures

- Imitation Training
- Shaping
- Differential Reinforcement
- Prompts

Guidelines For Imitation Training

- Keep the teaching active and brief
- Reward both prompted and imitative response
- Pair verbal praise and attention with a tangible reward
- If your child's progress break down, back up, and move ahead slowly
- Remember to fade out verbal and physical prompts
- Stop imitation on training when your child consistently imitates others

Imitation Training Example

Parent says, "Do this."

Child imitates

Parent says, "Awesome"
gives tangible reward.



Shaping

Shaping shares certain features of the game "hot and cold."

In playing "hot & cold," you reward any movement that takes the child closer to the prize. Each of those successive movements is a closer approximation of the desired behavior. If the prize is under the couch, and the child is moving toward the couch, every time the child takes a step toward the couch you are yelling, "hotter," and you are rewarding the behavior.

If the child moves away from the couch, you would yell, "colder" (non-rewarding).

Steps Of A Shaping Process

Step
1

- Select the target behavior.

Step
2

- Select the initial behavior that your child currently performs and that resembles the target behavior in some way.

Step
3

- Select powerful rewards with which to reinforce the initial behavior, the successive approximations of the target behavior, and the target behavior.

Step
4

- Reward the initial behavior until it occurs frequently.

Step
5

- Reward successive approximations of the target behavior each time they occur.

Step
6

- Reward the target behavior each time it occurs.

Step
7

- Reinforce the target behavior on an intermittent schedule of reinforcement.

Guidelines For Using Shaping

- Identify the first behavior to reward.
- Proceed in small steps.
- Set a limit of approximations that will be rewarded at each level
- Continue to reward until you reach the target behavior

Teaching New Skills Using Prompts

Why prompts are an important part of teaching new skills.

- The function of a prompt is to produce the occurrence of a behavior, so it may be reinforced.
- They help children perform a correct response, so that the behavior can be reinforced and strengthened
- Prompts make teaching more efficient
- Prompts increase the chances that a correct response will occur

The Three Common Response Prompts

Verbal Instruction

- Vocal verbal instruction
- Non verbal instruction

Modeling

- Demonstrate the desired behavior
- Easy and practical to use

Physical Guidance

- Is effective but intrusive
- Requires direct physical involvement between parent and child

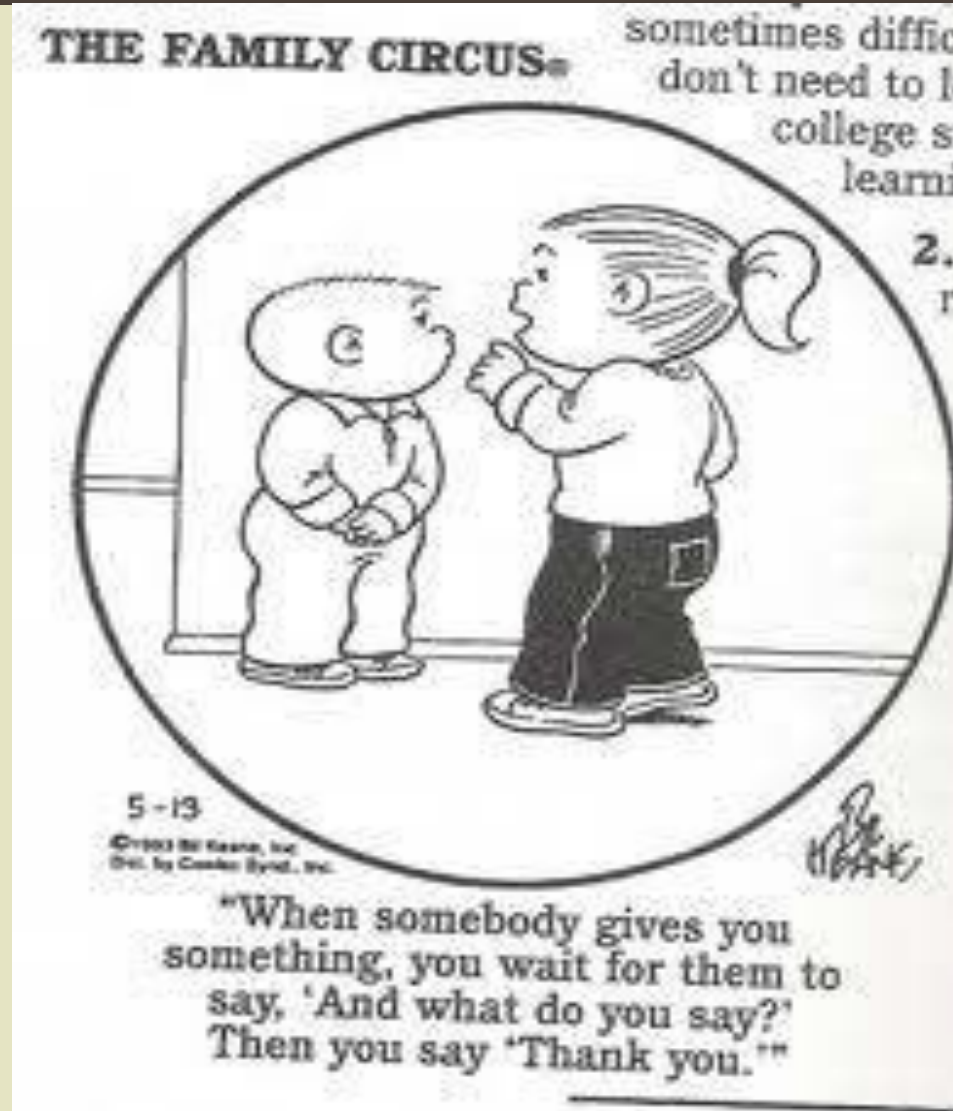
Least to
Most

Most to
Least

Verbal Prompt

Target behavior:
Saying "Thank you"

Verbal instruction:
And what do you
say?



Modeling Prompt

Target behavior:
Raise arms

Model:
Parent raises
arms and show
the child



Physical Prompt

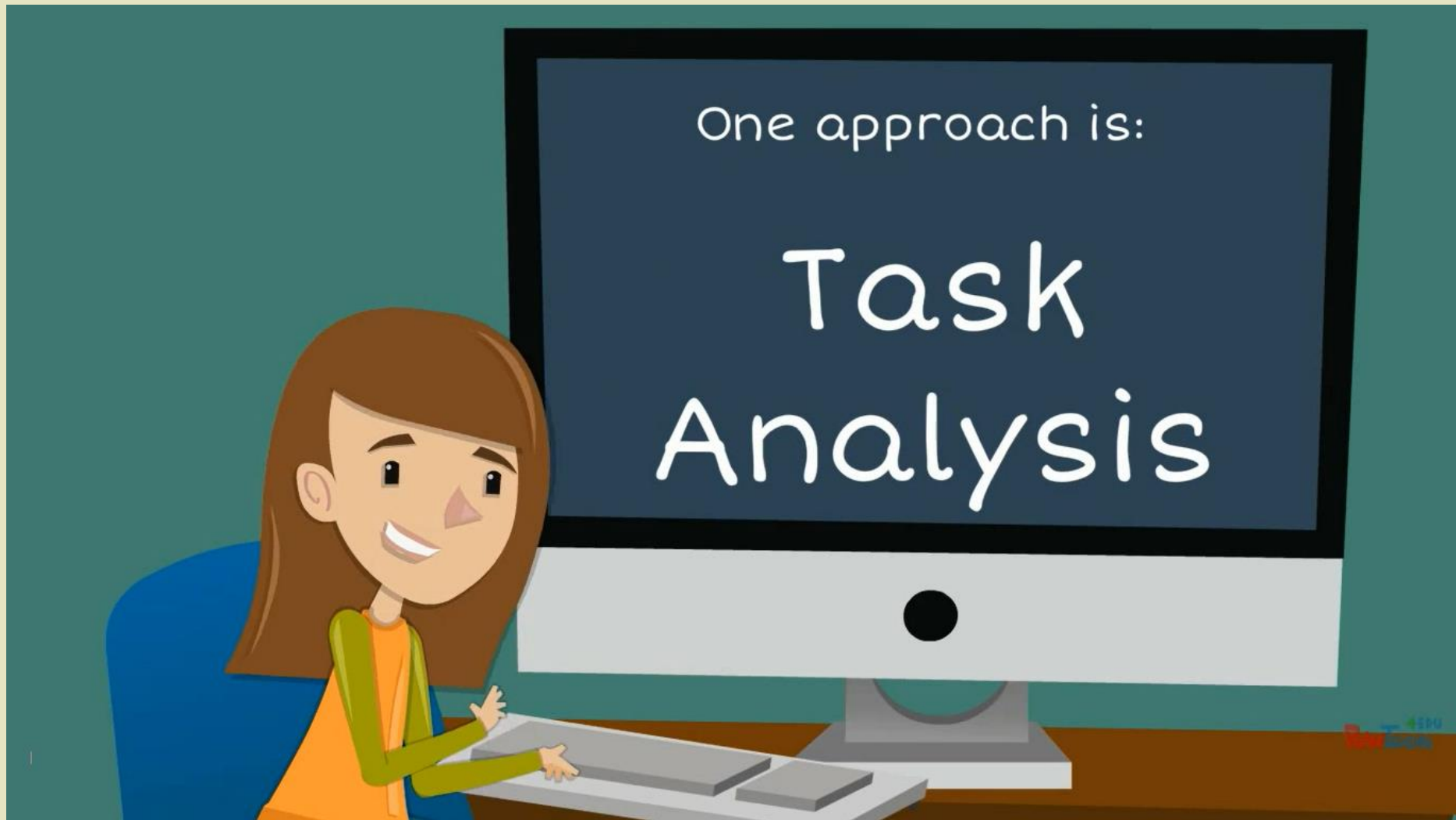
Target behavior:
Tying shoe

Physical:
Guide them using
hand-over-hand



Effective Prompting

- Effective prompts focus the child's attention to the instruction
- They should be as weak as possible
- Remove as quickly as possible



Task Analysis Definition

Breaking down a particular task into steps.

For example, you would use a task analysis to teach a severely disabled student how to dress, eat, fold laundry, brush their teeth, or other day to day tasks.

Why Use Task Analysis?

Teachers must assess students to determine baseline data in order to begin instruction.

Teaching students to perform daily tasks will increase their independence, self confidence, and social acceptability.

Important Information

Parents are the child's first teacher.

Teachers need to coordinate efforts with parents if possible.

Eating and personal care skills should be taught in *natural environments*.

Provide instruction at *natural times* (Lunchtime).

Avoid instruction activities in public that can be demeaning.

Be aware of students cultural practices.

How to drink from a cup: Environmental Information

Elementary- moderate task analysis (3rd grade student)

Subject: Elementary student with a moderate disability

Domain: Personal responsibilities and relationships

Environment: Home/school/ restaurants

Sub environment: kitchen/ cafeteria/dinning room

Skill: drinking from a cup (use a flexible, plastic cup with a small rim.)

Look at the website to see more examples

http://maxweber.hunter.cuny.edu/pub/eres/EDSPC715_MCINTYRE/TaskAnalysis.html

How to Drink from a Cup: Task Analysis Steps

Place the cup with drink inside the cup on the table in front of the student.

Place both hands around the sides of the cup.

Slowly pick the cup off the table.

Open your mouth.

Place the cup on your lips while your mouth is still open, but not on your teeth.



How to Drink from a Cup: Task Analysis Steps

Slowly tilt the open end of the cup towards your mouth until the liquid falls into your mouth.

Continue tilting the cup for 1 second.

Close your mouth without biting the cup and swallow the liquid.

Remove cup from mouth with both hands.

Slowly return the cup to the table using both hands, with the open end of the cup upright.

Repeat if you want to drink more.

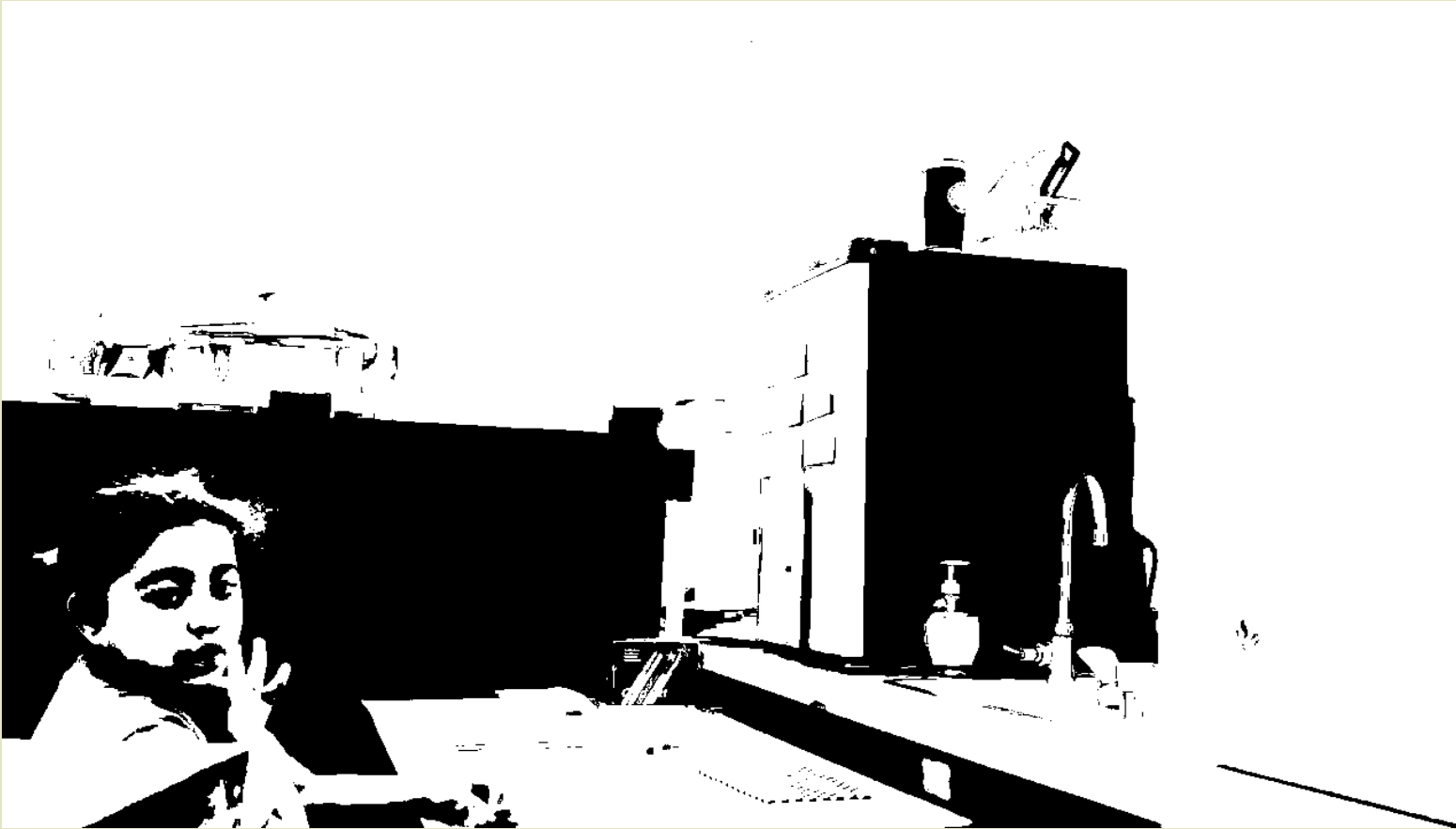


Closing

With a student population having moderate, severe, or profound disabilities a task analysis is part of daily lesson planning.

Each student has unique needs so a separate task analysis would be devised for individual goals.

ABA VIDEOS



Sample Lesson: Compliance

Scenario: Packing Away of Toys

Teacher: "Jason, pack away time."

Jason: (tries to escape by standing up)

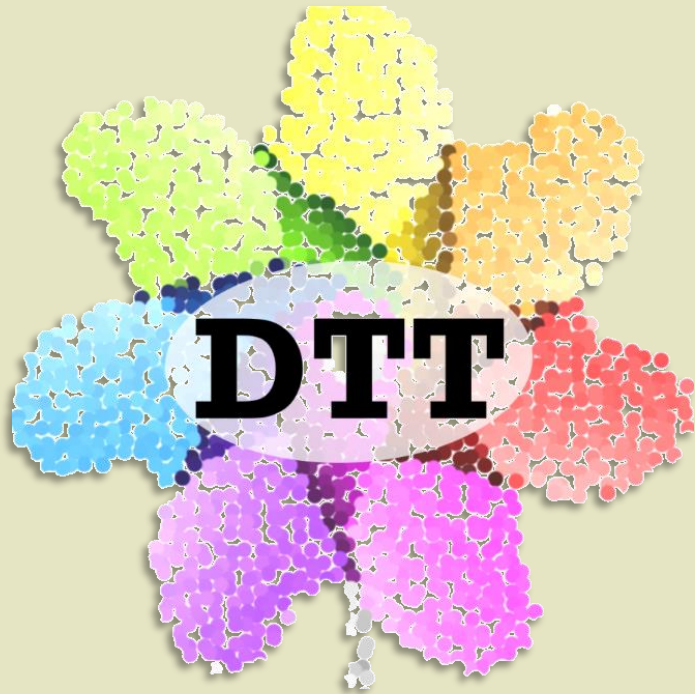
Teacher: (blocks Jason and prompt compliance by pointing to the toys)

Jason: (tries to look for other way)

Teacher: (used physical/hand over hand gesture to prompt Jason in picking up the toys)



WHAT IS DTT?



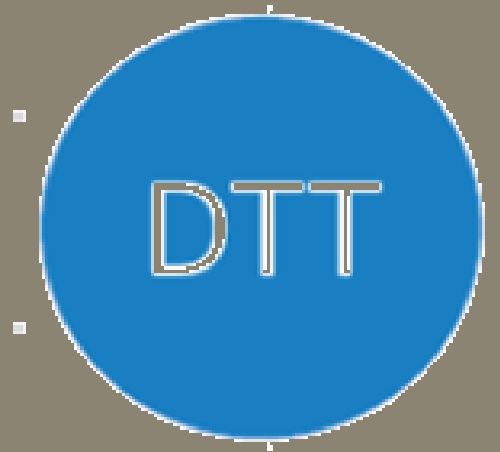
“DTT”

stands
for

Discrete
Trial
Training

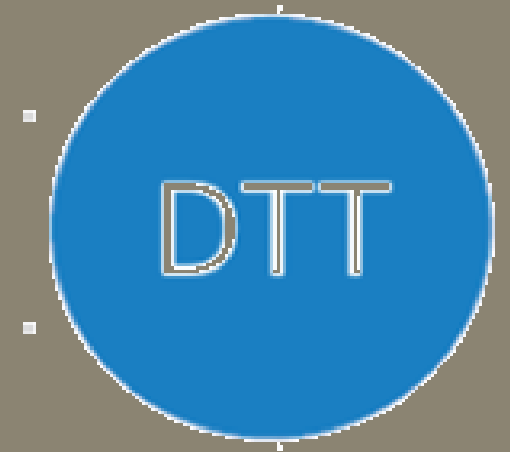
Discrete Trial Training (DTT)

Discrete Trial Training consist of an adult using adult-directed, massed trial instruction, reinforcers, and clear contingencies and repetition to teach a new skill or behavior.



What Will I Learn?

- Learning basic knowledge about discrete trial training (DTT).
- Applying DTT in activity based scenarios that promote real-world application.





Video Story: A Case for DTT

A Case for
Discrete
Trial
Training?



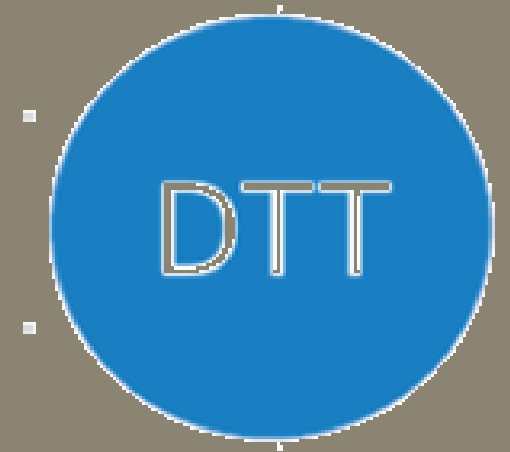
▶ Video Transcript

KEY POINTS

- Think about how discrete trial training could be used to increase the learner's ability to complete the assigned task?
- Focal learner with ASD: boy in blue shirt at table

What Will I Learn?

- Learning basic knowledge about discrete trial training (DTT).
- Applying DTT in activity based scenarios that promote real-world application.



Based on the principles of applied behavior analysis (ABA), discrete trial training (DTT) is used to develop a new response to a stimulus. DTT is based upon the principle of breaking down behavior into discrete steps called a "single teaching unit" or learning trials. Trials are repeated several times with the learner receiving reinforcement for responding correctly.

Often people misuse the term DTT to refer to ABA or vice-versa. Remember, ABA refers to the science of learning principles to teach behavior that will improve one's quality of life. DTT is only one method based upon ABA that uses massed trials, discrimination training, reinforcement, and didactic instruction.

DTT consist of the following core components:

1. Antecedent
2. behavior, and
3. consequence



These are referred to the ABC's of DTT. These core components are used to systematically teach learners the relationship between the environment and their own behavior. The table below provides a description and example for each core component.

Core Components of DTT

Core Component	Description	Example
ANTECEDENT (DISCRIMINATIVE STIMULUS, SD)	Instruction, cue, or stimuli signaling the learner to demonstrate a specific behavior to receive a reinforcer. The antecedent can be a verbal or nonverbal cue or visual stimuli, but must be a clear and concise instruction or cue.	1. "Touch your nose." 2. "Give me the pencil." 3. Pointing to the desk to signal learner to sit.
	The three possible responses or behaviors a learner can have include: 1) a correct response, 2)	1. Learner touches nose. (correct response)



BEHAVIOR (RESPONSE)

The three possible responses or behaviors a learner can have include: 1) a correct response, 2) an incorrect response, or 3) no response at all. Establish the criteria for a correct response in advance to ensure consistency. Clear and well-defined responses will increase the likelihood of correct responding.

1. Learner touches nose. (correct response)
2. Learner gives adult paper. (incorrect response)
3. Learner remains standing. (no response)



CONSEQUENCE

(REINFORCING STIMULUS,
SR+)

The consequence is delivered immediately after the learner's response and includes 1) reinforcement and 2) corrective feedback. Reinforcement is delivered following a correct response and can include verbal praise, edible food, access to preferred object/activity, tokens, etc. (based on learner's preferences). Corrective feedback is used when the learner provides an incorrect response or no response at all. Usually, corrective feedback includes a verbal statement.

1. Adult delivers reinforcer of blowing bubbles for correct response of touching nose.
2. Adult says, "No."
3. Adults say, "No, try again."



When the discriminative stimulus (Sd) is paired with the reinforcing consequence, the learner recognizes that a correct response was provided. When beginning a DTT lesson, the learner might need assistance in generating a correct response. The assistance can be provided by a prompt used after the antecedent is given to help the learner perform the correct response. For example, a team member might say, "Point to the color blue." The team member can point to blue to model the correct response. Types of prompts include gestural prompts, verbal prompts, visual prompts, model prompts, and physical prompts. Remember to avoid prompt dependence, plan to systematically reduce or fade prompts over time to promote independent responding.



Checking In

Mr. Maxwell provides instruction for Miles to point to the number '4'. Miles does not respond.

What should Mr. Maxwell do?

- ✦ Provide reinforcement
- ✦ Provide corrective feedback



Checking In

Mr. Maxwell provides instruction for Miles to point to the number '4'. Miles does not respond.

What should Mr. Maxwell do?

- ✦ Provide reinforcement
- ✦ Provide corrective feedback





Checking In

Mr. Maxwell provides instruction for Miles to point to the number '4'. Miles does not respond.

What should Mr. Maxwell do?

- Provide reinforcement
- ▾ Provide corrective feedback

CORRECT!

Correct. Miles did not respond to the antecedent instruction to point to the number. Mr. Maxwell should provide corrective feedback.

Example
of Giving
corrective
feedback

**THE TEACHER
POINTED THE
CORRECT PICTURE**



DTT Goals

Goals that can be addressed by using discrete trial training include:

- Improve verbal communication skills
- Respond to questions
- Increase responses
- Increase academic skills
- Increase perspective-taking skills
- Increase emotion recognition
- Increase adaptive behavior (safety issues)



How Can DTT Help Learners?

Learners with ASD require skills to be broken down into smaller, clear steps. These steps should be carefully taught with many repetitions, clear instructions, and reinforcement.¹⁵ Behavioral researchers showed that learners with ASD were able to learn skills more quickly when a targeted behavior was followed by an immediate consequence. Dr. Ivar Lovaas found learners with ASD acquired skills well through many repetitions of the same stimulus or direction (massed trials), a simplified teaching environment, prompting, prompt-fading, and consistent delivery of reinforcement.¹⁶⁻¹⁷ Learners with ASD acquire skills easier when the learning environment is structured.¹⁵ The consistent and predictable delivery of DTT creates a structured learning environment.



How Is DTT Being Used?

While many programs are structured to deliver DTT in a 1:1 setting at a table with no distractions, additional options are acceptable. For example, DTT can also be used in a classroom, community, or home setting. When DTT is implemented in multiple environments, skills are more likely to be generalized or used in different settings.

Listen to how three different professionals use discrete trial training (DTT) in their classrooms.

Preschool Special Education Teacher: Mr. Turner



'Charlie has acquired several skills recently with our team using discrete trial training.'

▶ Audio Transcript

Preschool Teacher: Ms. Green



'We are using discrete trial training to address Adam's target skill of identifying colors.'

www.thundershare.net

► [Audio Transcript](#)

Elementary Special Education Teacher: Ms. Young



'Sorting was a difficult skill for Elliot to learn.'

www.thundershare.net

▶ [Audio Transcript](#)

Selecting an EBP

**Watch a Short Overview
Video on the Selecting
EBP Process**





www.thundershare.net

Before beginning any new practice or intervention with a learner, it is important to follow four general planning steps. The four-step process includes:

- Identifying the behavior
- Defining the extent of the behavior (collecting baseline data)
- Establishing an observable and measurable goal or outcome
- Choosing an EBP

Identify the behavior or skill

To help you select the best evidence-based practice to use with your student, it is important to identify the target behavior. The target behavior must be observable and clearly defined in the setting where it occurs. All team members should be able to identify the behavior (including its frequency and duration) based on the clarity of the definition of the behavior.

The table below outlines behaviors that are observable and those that are difficult to define.

Observable behaviors	Difficult to define behaviors
Requesting help	Shy
Sharing with peer	Happy
Completing a specific task	Angry
Turning in homework	Social skills

Collect baseline data

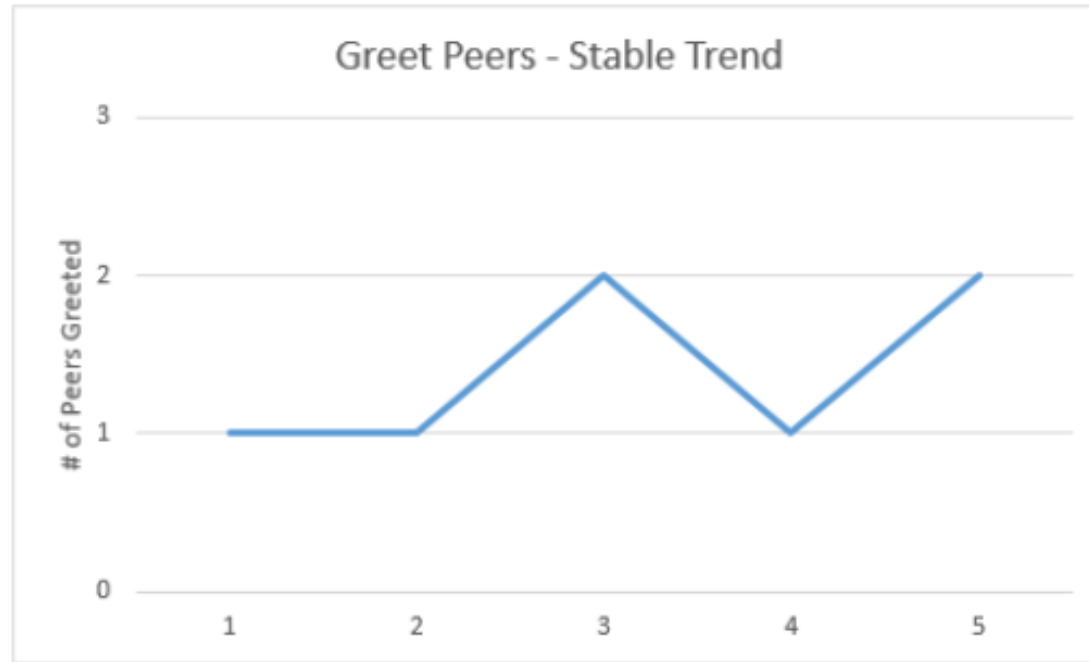
When the behavior has been clearly defined and is observable, members of the team will need to collect data to determine how often (frequency) and for how long (duration) the behavior occurs before beginning an intervention. This is called baseline data collection and is important for establishing a measurable IEP goal or IFSP outcome.

- Baseline data should be collected a minimum of four days or until a trend is clear and stable thus giving you information upon which to base your goal performance expectations.
- When direct observation of behavior is used, data can be graphed in order to show when the baseline trend is stable.

The data collected represent an unstable trend with highly variable data points. Additional data points are needed to determine a stable trend.



The data collected represent a stable trend with only slight variations between data collection points. The intervention can begin.



- Baseline data will also help you determine if the chosen evidence-based practice produced a change in the learner's behavior or use of a skill.

Establish observable and measurable annual goal or outcome statement

The team will then need to review the original IEP or IFSP goal or outcome. Sometimes, these outcomes are not written in clear, measurable terms. If the goal or outcome was stated in broad terms, it will need smaller and more defined "steps" or objectives. These smaller steps or objectives will help the team monitor progress toward achieving the broader outcome.

Check your annual goal or outcome statement and criteria to make sure each one describes:

- ☐ the context (when? or the antecedent)
- ☐ the target skill/behavior that the learner will perform (what? or the behavior), and
- ☐ how the team will know when the skill is mastered (how? or the criterion).

Unobservable Outcome Statement	Observable Outcome Statement
Max will increase his social skills with peers.	Max will initiate interactions with peers by saying, "Hi," on the playground and when joining a small group without prompting from adults in 4/5 opportunities.

Train the team

Once an EBP or several EBPs have been selected as probable interventions, the team needs to identify who will implement the practice(s) with the learner. One might start by deciding where the behavior or skill is most often demonstrated or needed and target the teachers in that environment. With time and success in the use of the intervention, others with whom the student engages could be trained to use the intervention effectively so that consistency across settings is maximized.

Case Studies

Let's look at two case studies of how information helps you choose an effective EBP.



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Selecting EBPs

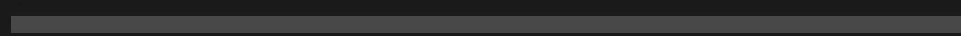
Case Study: Sam



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HD

CC



Basic Activity: Discrete Trial Training

Match the following definition to the concept

CONCEPT

Antecedent

DEFINITION

Instruction, cue or stimuli signaling the learner to demonstrate a specific behavior to receive a reinforcer

The response from the learner

Delivered immediately following the learner's response and can include reinforcement or corrective feedback



You are
right!

NEXT



Oops. Try
again.

BACK

Basic Activity: Discrete Trial Training

Match the following definition to the concept

CONCEPT

Consequence

DEFINITION

Instruction, cue or stimuli signaling the learner to demonstrate a specific behavior to receive a reinforcer

The response from the learner

Delivered immediately following the learner's response and can include reinforcement or corrective feedback



You are
right!

NEXT



Oops. Try
again.

BACK

Basic Activity: Discrete Trial Training

Match the following definition to the concept

CONCEPT

Behavior

DEFINITION

Instruction, cue or stimuli signaling the learner to demonstrate a specific behavior to receive a reinforcer

The response from the learner

Delivered immediately following the learner's response and can include reinforcement or corrective feedback



You are
right!

NEXT



Oops. Try
again.

BACK

Feedback

Discrete trial training consists of the core components of an antecedent, behavior, and consequence.

An **antecedent** is the instruction, cue, or stimuli signaling the learner to demonstrate a specific behavior to receive a reinforcer.

Behavior is the response from the learner.

The **consequence** is delivered immediately following the learner's response and can include reinforcement or corrective feedback.

Lesson 2: Plan for DTT

Refine Target Objective

DTT relies on discrete behaviors which have a clear beginning, middle, and end. The learning objective should clearly state the desired antecedent, behavior, and criterion for mastery.

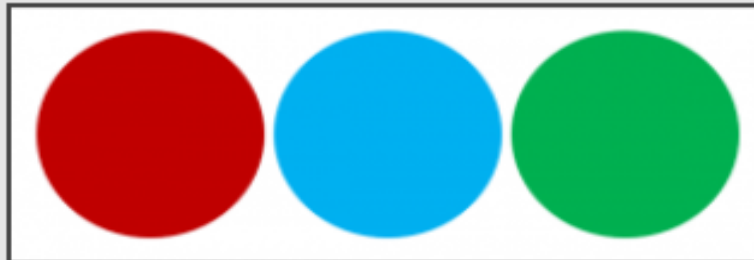


Quick Tip

Use DTT when the learner is not making progress using more naturalistic formats.

Example:

Charlie has the academic objective to identify to the colors red, blue, and green. This objective can be addressed using DTT, but first needs to be refined to include the antecedent, behavior, and criterion for mastery.



Antecedent	Adults says to the learner, "Point to (name color)."
Behavior	Charlie points to the color.
Criterion	Charlie correctly points to the appropriate color during 80% of trials.

This information is then used to make the following refined objective:

When an adult asks Charlie to point to a color (antecedent phrase), Charlie will point to the appropriate color (behavior phrase) in 80% of opportunities across three consecutive days (criterion).



Complete a Task Analysis

When using DTT it is essential to break down the skills into small teachable steps by using a task analysis. ¹⁹⁻²⁰

To help you break down a skill into smaller, teachable steps, consider using one of the following:

- Watch someone competent in completing the target skill/behavior complete the target skill/behavior (task). As the person completes the task, write down each step.
- Ask an expert in the target skill or behavior to record each of the steps.
- Complete the task yourself and record each of the steps.²¹

Once the task analysis is complete, list the steps clearly in a lesson progression so any team member can complete the trials.



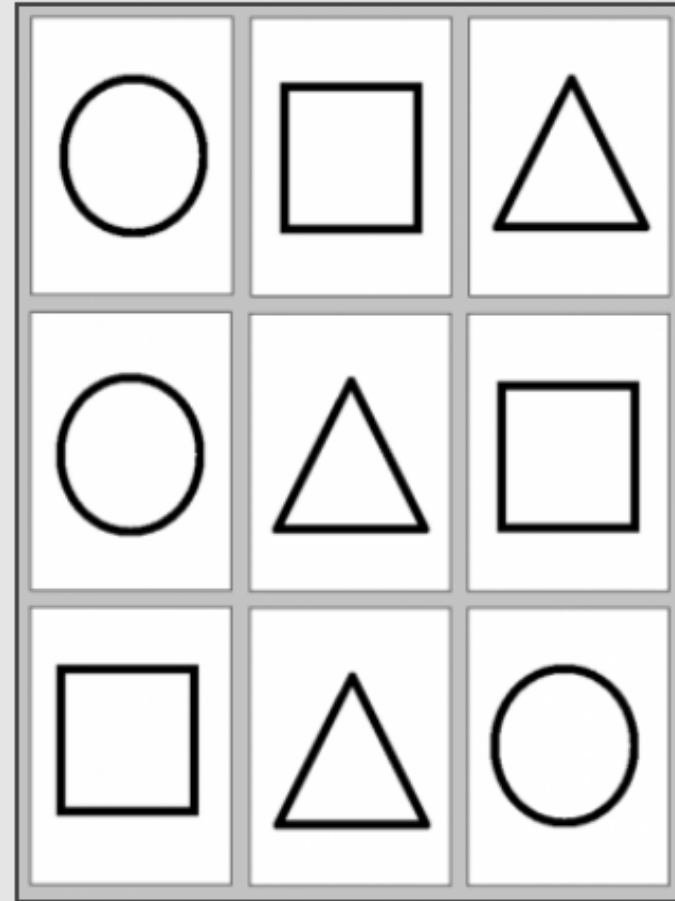
Example

Target objective:

When asked to sort by shapes (square, circle and triangle), Jayden will sort the three shapes (3 of each shape) with no verbal or visual prompts during 80% of opportunities across three consecutive days.

Lesson Progression:

1. Match circles.
2. Match squares.
3. Match triangles.
4. Sort 2 shapes (circles and squares).
5. Sort 2 shapes (circles and triangles).
6. Sort 2 shapes (squares and triangles).
7. Sort 3 shapes (circles, squares, and triangles).



To help determine the teachable steps and where your teaching steps should begin, consider current levels of proficiency and evaluations related to speech/language, reading/literacy, and gross/fine motor. Curriculum assessments can also be helpful as guides for refining objectives, creating a hierarchy of skills, determining a baseline level of a skill, deciding on an age appropriate demonstration of the skill, and making decisions about what skills to teach and when to teach them.

Design Data Collection System

When using DTT, trial by trial data collection is very important. Specifically design data sheets for the skill being taught.

Use the **DTT Data Sheet** to prepare your lesson and collect data. This data sheet is often helpful to use when multiple team members will be conducting DTT trials and collecting data. Team members can quickly review what materials will be needed, instruction/cue to be provided, correct response expected, reinforcers to use, and error correction method.

Antecedents	Target behavior	Consequence
• Instruction/Cue: "Point to green." • Materials: Index size card with color green. • Prompts: Model prompt - Teach the green index card. • Setting: Special education classroom - teacher table.	• Correct response: Uses index finger and touches green index card. • Incorrect response: Pointing in the air, Pointing beside the index card. • No response: Remains in same position or does not move hand to point/touch index card.	• Reinforce: Blowing bubbles, high-five, Spinning top. • Error Correction: Full physical prompt - using hand over hand to touch green index card. • Other: Not applicable

(Click to enlarge)

DTT DATA SHEET LESSON

Use the **Sheet Lesson** for preparing and collecting data.



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The **Task Analysis Lesson Progression Form** can be used to see a learner's progress for a specific skill. Data on each step of the task analysis can be completed.

Task Analysis (TA) of Skill/Behavior:

Prompting Strategies: I = Independent; FP = Full Physical; PP = Partial Physical; V = Verbal; G = Gestural; TD = Time Delay; M = Model

Steps	Dates				
	4/4	4/5	4/6	4/7	4/8
Match cards with the color red.	I	I	I	I	I
Match cards with the color blue.	I	I	I	I	I
Match cards with the color green.		VP	I	I	I
Sort 2 colors: red and blue.				PP	PP
Sort 2 colors: red and green.					
Sort 2 colors: blue and green.					
Sort 3 colors (red, blue, and green).					

Target behavior: Sorting 3 colors
(Click to enlarge)



TASK ANALYSIS LESSON PROGRESSION FORM

Use the **Form** to collect data.



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To easily determine mastery of a skill, use the **Self-Graphing Trial Data Sheet**. Remember criteria for mastery is usually between 80%-100% over 3 sessions.

Stage of SA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Total 30	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Total 9	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Total 8	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Total 7	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Total 6	+	+	+	+	+	+	0	+	0	-	+	0	+	+	-	+	0	-	+	0	-	+	+	+	+	+	+	+	+	+
Total 5	+	-	+	+	+	+	+	-	0	-	+	+	-	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	-
Total 4	+	+	+	+	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	0	-	+	+	+	+	+	+	+	+	+
Total 3	+	0	+	-	+	+	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Total 2	-	-	-	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Total 1	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Date	3/1	3/1	3/4	3/4	3/6	3/7	3/10	3/10	3/12	3/13	3/14	3/15	3/16	3/16	3/18	3/18	3/19	3/19	3/20	3/22	3/22	3/23	3/23	3/24	3/24	3/27	3/27	3/28	3/28	3/28
Prompting level	PP	G	V	+	+	+	PP	PP	PP	PP	PP	G	G	SP	+	+	+	+	+	PP	PP	M	M	M	M	M	M	M	M	M

Key: + = correct, - = incorrect, 0 = no response

Prompting level Key: PP = Pull Physical, P = Partial Physical, V = Verbal, G = Gestural, M = Model

(Click to enlarge)



SELF-GRAPHING TRIAL DATA SHEET

Use the **Sheet** to collect data.



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Select Reinforcers

To increase the likelihood that the learner will use the target behavior again in the future, select reinforcers that are appropriate for the individual learner and the target skills.

Examples of possible reinforcers include:

- Preferred activities
- Edible, tangible reinforcers
- Non-edible, tangible reinforcers (e.g. bubbles, squeeze ball, etc.)
- Verbal praise

To help you select possible reinforcers, use the **Positive Reinforcer Selection Form**.



POSITIVE REINFORCER SELECTION FORM

Use the **Form** to select possible reinforcers.



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Prepare for DTT Lesson

Determining an appropriate place for a DTT lesson to occur is very important.

Consider the following when selecting a location:

- Is the place quiet without too many distractions?
- Is there sufficient space for instruction AND for breaks?
- Does the location have easy access to peers to promote generalization?
- Is there adequate lighting and seating? For seating, ensure that the seat and table fit the learner's body.

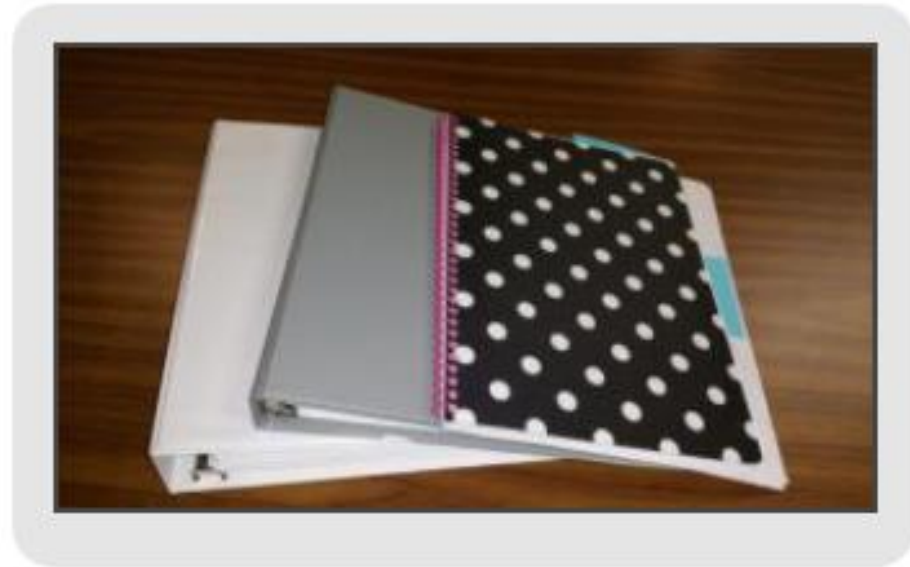


Multiple locations are preferable to help learners generalize skills or behaviors.

Make sure you have all needed materials for the DTT lesson.

Below is a list of possible materials:

- Notebooks/binders for data collection and team communication
- List of possible reinforcers or reinforcer menu
- Variety of tangible reinforcers (can include both edible and non-edible)
- Pictures or symbols of preferred social activities to use as reinforcers
- Instructional materials (for example, numbers, colors, or shapes)



PREPARE FOR DTT LESSON PLANNING FORM

Use the **Form** to determine location and materials needed.



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Checking In

Questions:	Possible Locations				
	Therapy room	Playground	Lunchroom	Home setting	Special education setting
Is the place quiet without too many distractions?	X			X	X
Is there sufficient space for instruction AND for breaks?	X			X	X

Does the location have easy access to peers to promote generalization?		X	X		X
Is there adequate lighting and seating? For seating, ensure that the seat and table fit the learner's body.	X		X	X	X

Based upon the data above what locations would be most appropriate for a DTT lesson?

- Therapy room
- Playground
- Lunch room
- Home setting
- Special education setting

Introduction



Target Objective

When asked to write her name, Sarah will write her name on a piece of paper with no visual prompt during 80% of opportunities across three consecutive days.

Continue

Lesson Progression

Create the lesson progression of writing the name Sarah. Select a step and place the step in the correct order.

1. Trace the letters S-a-r-a-h by connecting dots that mark the beginning and the end of each stroke.
2. Trace letters S-a-r-a-h without veering more than $\frac{1}{4}$ " from the model.
3. Trace the letters S-a-r-a-h by connecting dots spaced $\frac{1}{2}$ " apart.
4. Write the letters S-a-r-a-h given a verbal prompt.
5. Write the letters S-a-r-a-h given a visual model.
6. Trace the letters S-a-r-a-h by connecting dots spaced $\frac{1}{4}$ " apart.

Feedback

Lesson Progression:

1. Trace letters S-a-r-a-h without veering more than $\frac{1}{4}$ " from the model.
2. Trace the letters S-a-r-a-h by connecting dots spaced $\frac{1}{4}$ " apart.
3. Trace the letters S-a-r-a-h by connecting dots spaced $\frac{1}{2}$ " apart.
4. Trace the letters S-a-r-a-h by connecting dots that mark the beginning and the end of each stroke.
5. Write the letters S-a-r-a-h given a visual model.
6. Write the letters S-a-r-a-h given a verbal prompt.

Lesson 3: Use DTT Deliver DTT Trials

In this section, you will learn how to deliver DTT trials by:

- Transitioning the learner to a teaching location
- Obtaining the learner's attention and selecting reinforcer
- Providing instruction
- Providing feedback
- Repeating same instruction for targeted number of trials

Transition Learner to Teaching Location



To help the learner transition to the teaching location, provide the learner with a warning or cue. For example, you might give the learner a five-minute warning before transitioning to the teaching location or provide the learner with a visual cue card to facilitate the transition. Keep in mind the importance of generalization and use the most natural and commonly occurring cue that is meaningful to the learner. For example, a

clock or watch is more commonly used than a timer.

Obtain the Learner's Attention and Select Reinforcer

Once the learner is sitting down, make sure you have the learner's attention. If necessary or appropriate, allow the learner to select desired reinforcer. Possible reinforcers include:

- A desired toy,
- An action or movement the learner enjoys such as tickles,
- A picture/symbol of an activity that can occur following the trial such as time on the computer,
- Food or drink (use cautiously),
- A video,
- Music, and
- A token to be exchanged for a tangible reinforcer.



Wait for the learner to respond following the delivery of the discriminative stimulus.

Provide Instruction

Provide the learner with the discriminative stimulus (Sd). The discriminative stimulus is the antecedent or the instruction that signals the learner to respond (behavior).

The table below provides skills and a potential discriminative stimulus for the skill.

Skills and Potential Sd



Skill	Discriminative Stimulus (Antecedent)
Identifying colors	"What color?"
Identifying numbers	"What number?"
Writing name	"Write name."
Saying hello.	"Say, 'hello.'"

Provide Feedback

Team members provide a tailored consequence to the learner's response (behavior). If the learner responds correctly to the instruction (antecedent), the team member should deliver a reinforcer. In addition, the team member will mark the trial as correct on the data collection form.

If the learner does not respond or responds incorrectly, the team member will do one of the following for feedback:

- Provide corrective feedback and begin the trial again by presenting the antecedent (discriminative stimulus).
- Prompt the learner to respond correctly, reinforce, and record the result of the prompted trial.
- Provide another trial, with reduced or no prompting, reinforce appropriately and record.

Five Types of Prompts

PROMPT TYPE	DESCRIPTION
GESTURAL PROMPTS	Teachers/practitioners use a gesture to provide the learner with ASD information about how to use a target skill or complete a task.
VERBAL PROMPTS	Includes any verbal assistance provided to learners to help them use a target skill correctly. Verbal cues range in intensity level from least to most restrictive.

VISUAL PROMPTS

Visual prompts can be used to teach a variety of skills including academics and communication. These prompts might include checklists, schedules, visual instructions, pictures, or photographs.²² Remember to use visual prompts that are developmentally and age appropriate for the learner.

MODEL PROMPTS

Model prompts involve demonstrating the target skill and are used when verbal or visual prompts are not sufficient in helping the learner with ASD use the target skill correctly. Modeling can be used for discrete or chained skills.²² Model prompts can be either full model or partial model. Full model prompts model the target skill for the learner with ASD and can be verbal if the target skill is verbal or motor if the target skill involves moving a body part. Partial models also can be either verbal or motor but only model part of the target skill.

PHYSICAL PROMPTS

Physical prompts are useful when teaching motor behaviors and when the learner with ASD does not respond to less restrictive prompts (modeling, gestural, visual, or verbal). Physical prompts can either be full physical prompts or partial physical prompts. For full physical prompts, the teacher or practitioner leads the learner through the task by providing full assistance (e.g. hand-over-hand) to ensure correct use of target skill. For partial physical prompts, the teacher or practitioner provides minimal physical assistance (e.g. taps, nudges, and light pushes) to help the learner use the target skill correctly.



Video Story: DTT Deliver Trials



► [Video Transcript](#)

Key Points

- Watch the teacher deliver a trial.
- Notice if the adult provides a prompt to the learner.

Conduct Massed Trial Teaching

Massed trial teaching is a primary characteristic of DTT. Massed trial teaching involves team members repeating the same learning trial several times in a row to shape the behavior of the learner. Prompts are faded to ensure the learner is responding correctly, independently, and consistently for the step of the skill being taught. As the learner becomes more independent at a step, additional steps are added. Massed trial teaching is used to help the learner become fluent in a skill in order to generalize the skill in a more natural setting.

In this section, you will learn how to conduct massed trial teaching by:

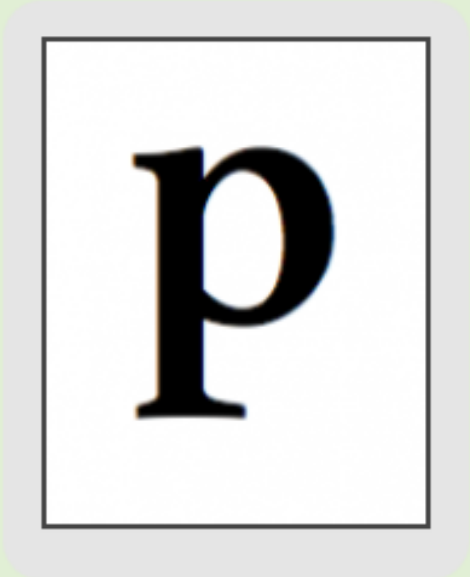
- Delivering a maintenance trial.
- Delivering trials and responding to learner's behavior.
- Reviewing mastered steps.

Deliver a Maintenance Trial

Each teaching episode begins with a maintenance trial. A maintenance trial consists of the learner demonstrating a skill that is already mastered. If the learner passes the maintenance trial, then the team member will present the teaching step. If the learner does not pass the maintenance trial, the skill needs to be taught again.

Example:

If the learner's goal is to identify letters and has already learned to identify the letter "p", the maintenance trial would consist of asking the learner to identify the letter "p". By reviewing previously learned or mastered skills, team members ensure the learner is retaining the mastered skill.



p

Deliver Trials and Respond to the Learner's Behavior

If the learner passes the maintenance trial, a team member will present the teaching step. Remember when delivering a trial, provide the learner with instruction (the Sd) and wait for the learner's response (behavior). Team members will respond differently to the learner based upon the learner's response.

Example

Teaching Trial: The learner, Sam, is working on identifying body parts. The teaching trial will focus on identifying 'nose' by having the Sam point to his nose.

Learner's Behavior	Team Member's Response	Example
Responds correctly on first trial of current teaching step.	1. Repeat the teaching step several more times and record the results. 2. If the learner reaches mastery criterion for the step (for example, 80% success for in 3 of 4 days), then the team member presents a task at the next level of difficulty.	On the first teaching trial, Ms. Oaks says, "Sam, point to nose." Sam correctly identifies his nose. Ms. Oaks then repeats the instruction (Sd), three more times by saying, "Sam, point to nose." She provides reinforcement each time Sam correctly points to his nose and records the correct responses on a data form. When Sam reaches mastery with identifying his nose, Ms. Oaks begins teaching identification of forehead.

Responds incorrectly or does not respond to first trial of current teaching step.

3. If learner is unsuccessful on second trial, the team member repeats the trial again with an increased level of assistance.
4. Team member repeats the step with the additional level of assistance 3-5 times.
5. If the learner responds correctly with additional prompts, repeat the trial several times without assistance (prompts).

Sam points to his ear. Ms. Oaks repeats the instruction again of, "Sam, point to nose," and provides a model prompt by pointing to her nose. Sam points to his nose. Ms. Oaks repeats the trials 4 more times asking Sam to point to his nose and providing the model prompt. Sam continues to identify his nose correctly. Ms. Oaks then provides only the instruction of, "Sam point to nose," without any prompts. Sam points to his nose. Before ending the teaching

6. If the learner is unsuccessful with the trials with no assistance, add the prompts for several more successful trials before ending the teaching session.

session, Ms. Oaks then repeats the trials 3 more times without prompts before ending the teaching session.



Checking In

Response to teaching trial

If the learner responds incorrectly to the first teaching trial, what should the team member do first?

- Administer the maintenance trial again.
- Administer the first teaching trial again.
- Administer the first teaching trial again with additional prompts.



Video Story:

Conduct Massed Trial Teaching



Key Points

- Watch the adult deliver trials.
- Notice how the adult responds to the learner.

Conduct Discrimination Training

Teaching a learner a new response to a stimulus is an important element of DTT. To teach a new response, team members teach a learner to discriminate one stimulus from other similar stimuli. For example, if the objective is for the learner to identify squares, the learner first needs to discriminate squares from other shapes and then to perform a specific behavior response to the instruction (Sd).

In this section, you will learn how to conduct discrimination training by:

- Presenting a new stimulus and fading prompts
- Presenting distracter stimulus
- Teaching generalization

Present New Stimulus and Fade Prompts

When teaching a new stimulus, present the new stimulus to the learner without any other items to choose from. Provide the learner with instruction (SD), prompt the target behavior, and then reinforce the learner's response if correct. Over time, prompts should be systematically faded until the learner can independently and consistently perform the skill with the one stimulus object.

Example:

John is learning to identify the numeral '2'. Ms. Clark places a card with the numeral '2' written on it. She provides instruction by saying, "John, point to two." Next, Ms. Clark uses a physical prompt of taking John's hand and touching the card with the numeral '2'. She then provides reinforcement for John correctly identifying the number two. Ms. Clark fades prompts by using a partial physical prompt and then a gesture prompt until John can correctly identify the number two when provided with the instruction of, "Point to two."

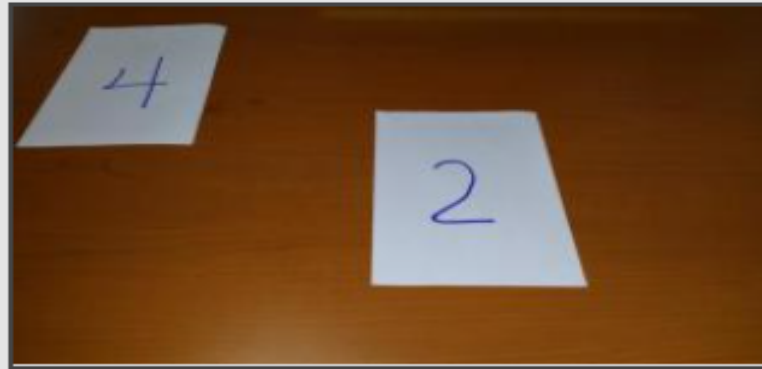


Present Distracter Stimulus

Once the learner is able to perform the skill independently and consistently with the one stimulus, another stimulus (distracter) is presented in the periphery. The distracter stimulus should only vary from the target stimulus on the one specific dimension being taught. The team member will provide the instruction (Sd) and then reinforce the learner's behavior if correct. If the learner responds correctly, move the distracter position. Gradually move the distracter stimulus closer until the two stimuli are side by side. Next use a random rotation of the two stimuli by adjusting the order, proximity, and sequence of the two stimuli. After the learner can correctly identify the correct stimuli when two are presented, add a third stimuli following the same procedure.

Example:

Once John correctly and independently identified the numeral '2', Ms. Clark used a card with the numeral '4' as a distracter. Over time, the card with the numeral '4' was moved closer to the correct stimulus (numeral 2) until the two cards were side by side. Ms. Clark then used a random rotation to present the two stimuli. When John correctly and independently selected



Teach Generalization

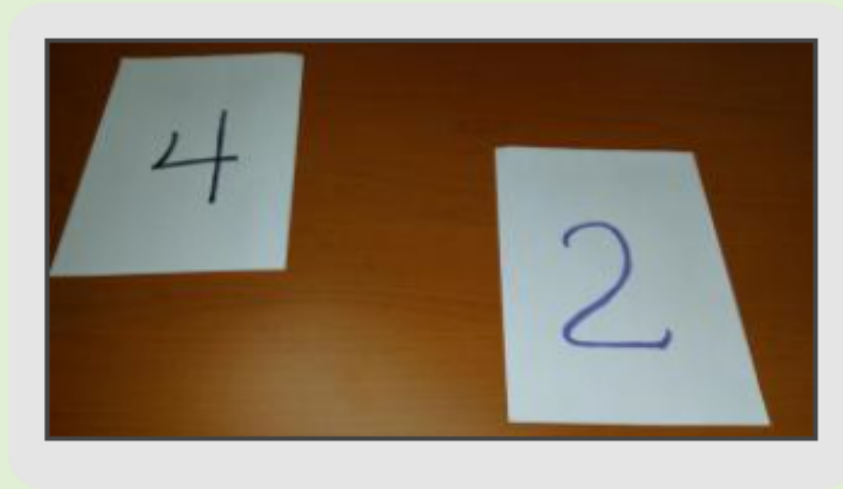
Teach generalization of the skill or concept by teaching discrimination of multiple stimuli and applying use of skill in multiple situations.

Teaching discrimination of multiple stimuli:

To be certain the learner understands the concept, reteach the concept with several different stimuli. "Probe" the learner's understanding by introducing a new set of materials that vary only be the dimension you are teaching and asking for the target item. If the learner selects the correct item without being taught, then the learner has generalized the concept. If the learner does not respond correctly, re-teach the steps with the new set of materials. After mastery with the new materials, probe again. Continue to use new materials until the learner demonstrates generalization.

Example

Ms. Clark checks John's ability to discriminate multiple stimuli by using numerals written in a different color font. John correctly identified the numeral '2'. Ms. Clark continues to probe John's ability to identify the numeral '2' by using various materials.



Applying use of skill in multiple situations:

When skills are mastered at the teaching table, practice skills in other situations. If the learner does not correctly respond, conduct teaching trials in that location following the inappropriate response. Remember, the goal is for the learner to demonstrate the behavior in multiple situations and with multiple stimuli.

Example

During centers, John is putting together a number puzzle. Ms. Clark asks to point to '2'. When John does not respond correctly, Ms. Clark conducts a teaching trial using the puzzle pieces. By using different materials, John is more likely to generalize the skill.



Introduction



Ms. Nelson is using DTT to teach colors to Evan. She will begin by teaching the color 'red.' Help Ms. Nelson determine the steps of delivering a trial.

Delivering a Trial

Question 1 of 4

What should Ms. Nelson do first?

- ☐ Obtain Evan's attention by saying his name.
- ☒ Transition Evan to a teaching location.
- ☐ Provide the instruction by saying, "Point to red."

Correct - Click anywhere or press 'y' to continue.

Feedback



Before beginning a teaching trial, transition Evan to a teaching location that is set up for the trial.

It might be helpful to provide a five-minute warning before transitioning to the teaching location.

Delivering a Trial

Question 2 of 4

After transitioning to the teaching location, what should Ms. Nelson do next?

- ☐ Allow Evan to play with the reinforcer that will be used for the trial.
- ☒ Allow Evan to select the reinforcer that will be used for the trial.
- ☐ Provide the learner with feedback.

Feedback



After transitioning to the teaching location, Ms. Nelson should allow Evan to select the reinforcer that will be used for the trial. Ms. Nelson could use *actual objects*, *symbols*, or a *reinforcer menu* for the selection process.

Continue

Delivering a Trial

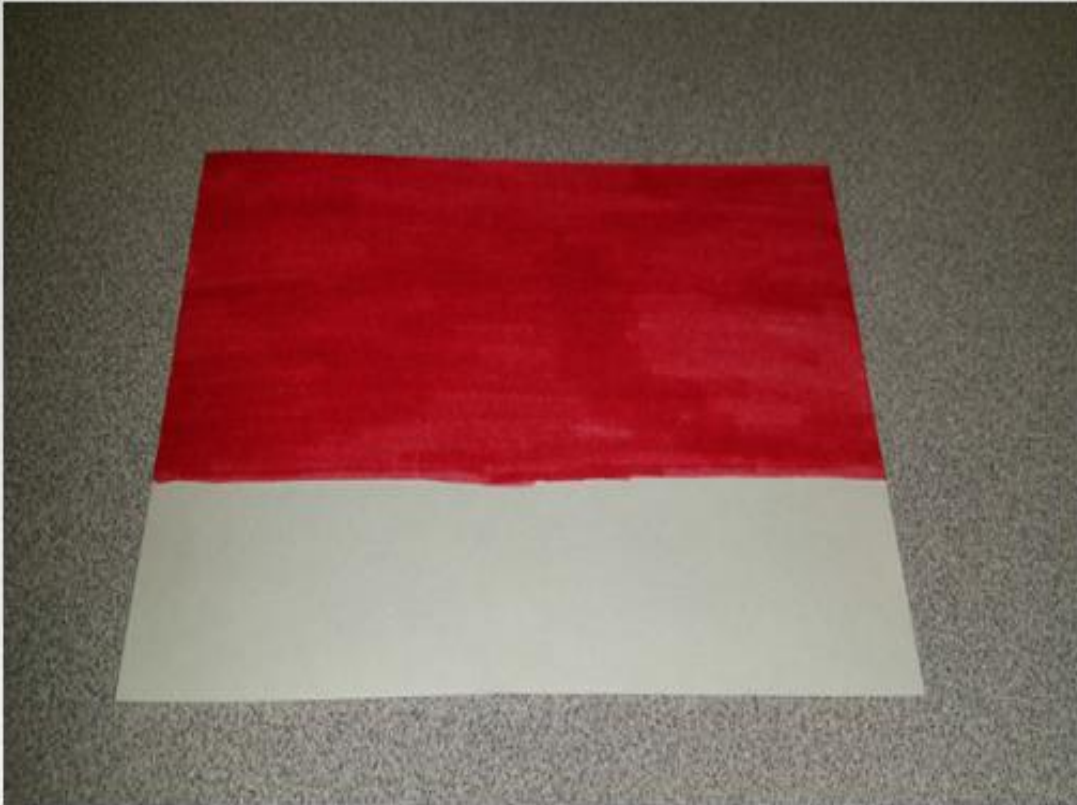
Question 3 of 4

Once a reinforcer is determined, what should Ms. Nelson do?

- ☒ Provide the learner with discriminative stimulus by saying, "Point to red."
- ☐ Use a full physical prompt to place the learner's hand on a red card, then say, "Red."

Correct - Click anywhere or press 'y' to continue.

Feedback



After determining the reinforcer, Ms. Nelson should provide the learner with the discriminative stimulus by saying, "*Point to red.*"

Delivering a Trial

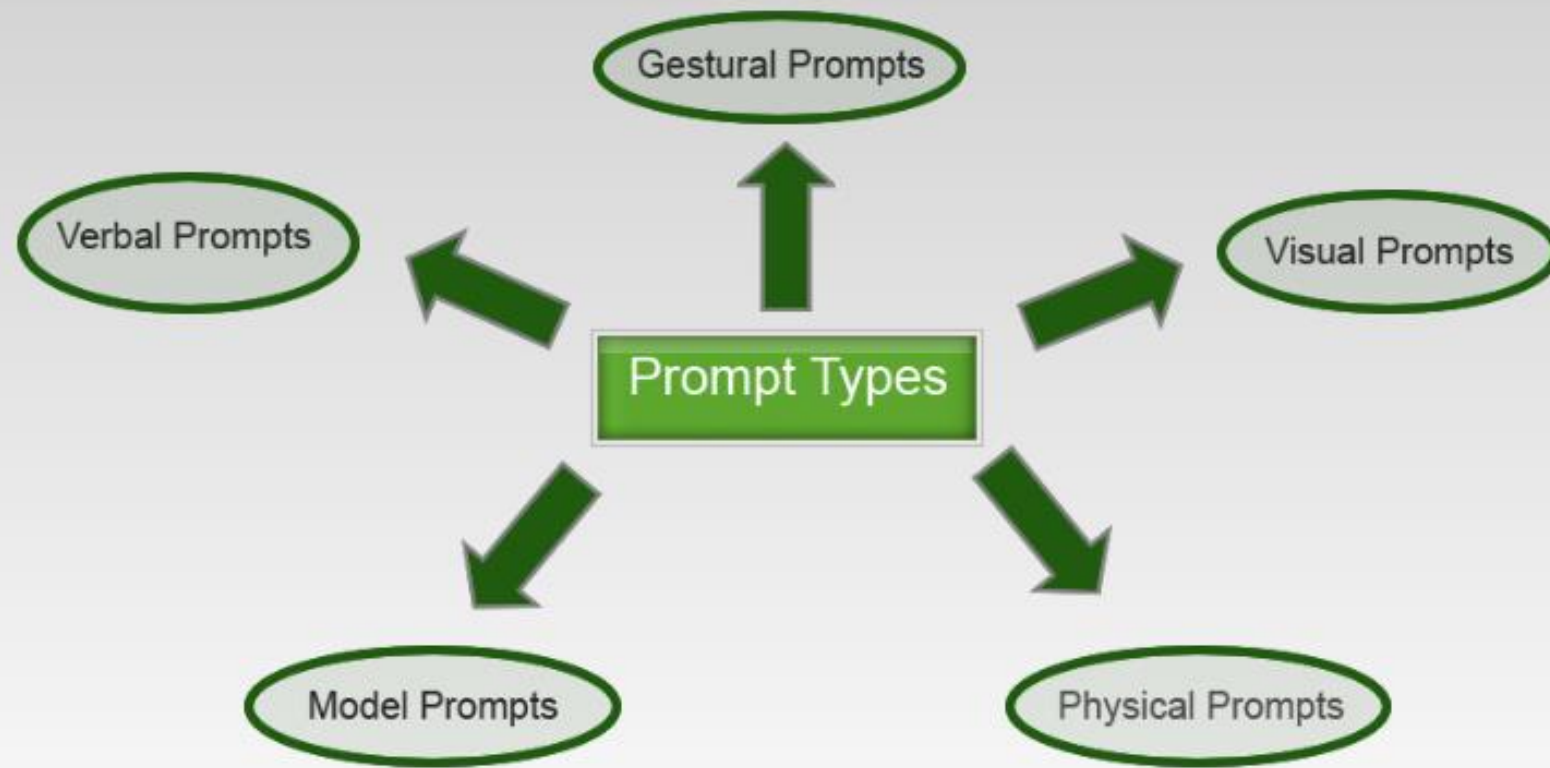
Question 4 of 4

If Evan does not respond to the instruction, what should Ms. Nelson do?

- ☒ Provide corrective feedback, and begin the trial again by presenting the discriminative stimulus.
- ☐ Provide reinforcement.
- ☐ End the teaching trial.

Correct - Click anywhere or press 'y' to continue.

Feedback



Conclusion

When delivering DTT trials remember to:

- Transition the learner to a teaching location

- Obtain the learner's attention and selecting reinforcer

- Provide instruction

- Provide feedback

- Repeat the same instruction for targeted number of trials

Lesson 4: Monitor DTT

Review Collected Data and Modify Program

Data should be collected from each teaching trial. [Lesson 2](#) provided multiple examples of various data collection forms to use when collecting data. Team members should continuously review collected data to determine progress the learner is making. Based upon data collected, the program can be modified to address the learner's needs. If the learner is doing well, the learner might be ready to move to the next step for learning the skill. If the learner is not showing progress, the learner might need more assistance. For example, the learner might need a full physical prompt rather than a gesture prompt.

What if the learner with ASD is not showing progress with DTT?

If the learner with ASD is not showing progress with discrete trial training, ask yourself the following questions:

- Is the target skill or behavior well defined?
- Is the skill or behavior measurable and observable?
- Does the learner have the prerequisite skills needed to learn the skill/behavior?
- Is the task completely analyzed?
- Does the learner receive reinforcement that is appropriate for the learner?
- Is DTT being used with fidelity based upon the implementation checklist?



If the learner with ASD is not showing progress with discrete trial training, ask yourself the following questions:

- Is the target skill or behavior well defined?
- Is the skill or behavior measurable and observable?
- Does the learner have the prerequisite skills needed to learn the skill/behavior?
- Is the task completely analyzed?
- Does the learner receive reinforcement that is appropriate for the learner?
- Is DTT being used with fidelity based upon the implementation checklist?

If these issues have been addressed and the learner with ASD continues to not show progress, consider selecting a different evidence-based practice to use with the learner with ASD.

Review Mastered Programs

To ensure the learner maintains previous acquired skills, review mastered programs and continue to teach them as maintenance trials. Additionally, target maintenance trials for generalization.

Consider generalizing by practicing the trials:

- in other settings,
- with different adults,
- with different reinforcers, and/or
- with different instructions or stimuli.

Remember, the ultimate goal of DTT is to utilize the acquired skills in natural environments.

Introduction

Jeremy's target behavior is to sort three shapes: squares, triangle, and circle. Mr. Carter, Jeremy's teacher, has broken down the steps of the skill and has been working for two weeks on teaching this skill. Review the data to help Mr. Carter determine next steps for Jeremy.



[View Data](#)

Task Analysis (TA) of Skill/Behavior

Prompting Strategies: I = Independent; FP = Full Physical; PP = Partial Physical; V = Verbal; G = Gestural; TD = Time Delay; M = Model

Steps	Dates				
	4/4	4/5	4/6	4/7	4/8
1. Match circles.	I	I	I	I	I
2. Match squares.	I	I	I	I	I
3. Match triangles.		VP	I	I	I
4. Sort 2 shapes: squares and triangles.					
5. Sort 2 shapes: squares and circles.					
6. Sort 2 shapes: triangles and circles.					
7. Sort 3 shapes (squares, triangles, circles).					

Continue

Data Analysis

Question 1 of 2

Based upon the data collected, what should Mr. Carter do next when using DTT to teaching sorting three shapes?

- ☐ Teach matching squares.
- ☐ Continue to teach matching triangles.
- ☒ Move to next step of sorting 2 shapes: squares and triangles.

[View Data Chart](#)

Correct - Click anywhere or press 'y' to continue.

Feedback

Over three consecutive days, Jeremy has independently matched triangles.

Additionally, he has demonstrated maintenance with acquired skills of matching circles and squares.

Prompting Strategies: I = Independent; FP = Full Physical; PP = Partial Physical; V = Verbal; G = Gestural; TD = Time Delay; M = Model

Steps	Dates				
	4/4	4/5	4/6	4/7	4/8
1. Match circles. 	I	I	I	I	I
2. Match squares. 	I	I	I	I	I
3. Match triangles.		VP	I	I	I
4. Sort 2 shapes: squares and triangles.					
5. Sort 2 shapes: squares and circles.					
6. Sort 2 shapes: triangles and circles.					
7. Sort 3 shapes (squares, triangles, circles).					

Part 2

Mr. Carter began delivering trials to teach the step of sorting by two shapes: squares and triangles. Review the data to determine next steps for Jeremy.

Prompting Strategies: I = Independent; FP = Full Physical; PP = Partial Physical; V = Verbal; G = Gestural; TD = Time Delay; M = Model

Steps	Dates				
	4/11	4/12	4/13	4/14	4/15
1. Match circles.	I	I	I		
2. Match squares.	I	I	I		
3. Match triangles.	I	I	I		
4. Sort 2 shapes: squares and triangles.	FP	FP	FP		
5. Sort 2 shapes: squares and circles.					
6. Sort 2 shapes: triangles and circles.					
7. Sort 3 shapes (squares, triangles, circles).					

Data Analysis

Question 2 of 2

Over the past 3 days, Mr. Carter has used a full physical prompt to teach sorting 2 shapes of squares and triangles. What should he do for the next day?

- ☐ Continue to use a full physical prompt.
- ☒ Use a partial physical prompt.
- ☐ Use no prompts.

[View Data Chart](#)

Correct - Click anywhere or press 'y' to continue.

Feedback

Over the past three days, Mr. Carter has used a full physical prompt when teaching sorting squares and triangles. To reduce prompt dependence, Mr. Carter should try to use a less restrictive prompt such as a partial physical prompt. If Jeremy is unsuccessful with a partial physical prompt, Mr. Carter should return to using a full physical prompt. Remember to review data to modify the program to address the needs of the learner.

Prompting Strategies: I = Independent; FP = Full Physical; PP = Partial Physical; V = Verbal; G = Gestural; TD = Time Delay; M = Model

Steps	Dates				
	4/11	4/12	4/13	4/14	4/15
1. Match circles.	I	I	I		
2. Match squares.	I	I	I		
3. Match triangles.	I	I	I		
4. Sort 2 shapes: squares and triangles.	FP	FP	FP		
5. Sort 2 shapes: squares and circles.					
6. Sort 2 shapes: triangles and circles.					
7. Sort 3 shapes (squares, triangles, circles).					

Additional materials to help you with applying discrete trial training (DTT):

-  Use the [DTT Step-by-Step Practice Guide](#) as an outline for how to plan for, use, and monitor DTT. Each step includes a brief description as a helpful reminder while learning the process.
-  Use the [DTT Implementation Checklist](#) to determine if the practice is being implemented as intended.
-  Use the [DTT Tip Sheet for Professionals](#) as a supplemental resource to help provide basic information about the practice to professionals working with the learner with ASD.
-  Use the [DTT Parent Guide](#) to help parents or family members understand basic information about the practice being used with their child.
-  Use the [Additional Resources](#) to learn more about the practice.
-  The [EBP Brief Packet](#) contains all of the resources and materials about the practice.

DTT RESOURCES AND TOOLS FOR DTT

By using DTT team members can break a behavior or skill into discrete steps. Team members use trials to teach the discrete steps.



Autism Focused Intervention
Resources and Modules

<http://afirm.fpg.unc.edu/discriminate-trial-training>

Contact Us



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Autism Focused Intervention Resources & Modules (AFIRM) is an extension of the National Professional Development Center (NPDC) on ASD. Visit the [NPDC website](#) for more information.



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Awards this
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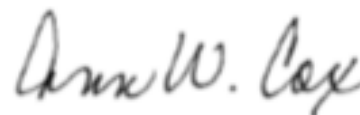
For completing the AFIRM Module

Discrete Trial Training

February 4, 2018



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Director, FPG Child Development Institute



Ann W. Cox, Ph.D.
Director, NPDC and AFIRM Module Projects



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GLOSSARY

Antecedent

a cue that tells the learner to use the target skill/behavior.

Applied Behavior Analysis

the use of behavioral techniques to teach a learner a new skill

Discrete task

a task that requires a single response and is of a relatively short duration.

Discrete trial training

discrete trial training consists of an adult using adult-directed, massed trial instruction, reinforcers, and clear contingencies and repetition to teach a new skill or behavior

Discrimination training

method of teaching a learner a new response to a stimulus when using DTT

Discriminative stimulus

instruction, cue, or stimuli signaling the learner to demonstrate a specific behavior to receive a reinforcer

Generalization

when the target skill or behavior continues to occur when the intervention ends, in multiple settings, and with multiple individuals (e.g. peers, teachers, parents)

Gestural prompt

a gesture/movement provides the learner with ASD information about how to use a target skill or complete a task.

Individualized Intervention

an intervention that is planned and implemented in a way specific to the learner receiving the intervention

Maintenance trial

consists of the learner demonstrating a skill that is already mastered

Massed trial teaching

a primary characteristic of DTT. Massed trial teaching involves team members repeating the same learning trial several times in a row to shape the behavior of the learner

Model prompts

involve demonstrating the target skill and are used when verbal or visual prompts are not sufficient in helping learner with ASD use the target skill correctly.

Positive reinforcement

refers to the presentation of a reinforcer after a learner uses a target skill/behavior, therefore encouraging him/her to perform that behavior again.

Prompt

any help provided that will assist the learner in using specific skills. Prompts can be verbal, gestural, or physical.

Reinforcement

feedback that increases the use of a strategy or target behavior/skill.

Reinforcer menu

a menu of objects, pictures, or text from which a learner can select a reinforcer.

Reinforcer sampling

helps to identify activities and materials that are motivating to learner with ASD.

Social reinforcer

found in any setting, but might need to be taught to learners with ASD if these reinforcers are not inherently reinforcing. Examples include facial expressions, words and phrases ("Good job!").

Tangible reinforcers

objects that a learner with ASD can acquire.

Task analysis

breaks down complex target skills or behaviors into smaller steps.

Team members

includes the parents, other primary caregivers, IEP/IFSP team members, teachers, therapists, early intervention providers, and other professionals involved in providing services for the learner with ASD.

Verbal prompts

includes any verbal assistance provided to learners to help them use a target skill correctly. Verbal cues range in intensity level from least to most restrictive.



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ADDITIONAL INFORMATION

<http://maxweber.hunter.cuny.edu/pub/eres/EDSP C715 MCINTYRE/TaskAnalysis.html>

http://classweb.gmu.edu/ndabbagh/Resources/Resources2/procedural_analysis.htm

