Step-by-Step Guide

This step-by-step practice guide outlines how to plan for, use, and monitor Discrete Trial Training.



BEFORE YOU BEGIN…

Each of the following points is important to address so that you can be sure Discrete Trial Training is likely to address the target goal/behavior/skill of your learner on the spectrum.

HAVE YOU FOUND OUT MORE INFORMATION ABOUT…?

- ❑ Identifying the target goal/behavior/skill…?
- ❑ Collecting baseline data through direct observation…?
- ❑ Establishing a target goal or outcome that clearly states when the behavior will occur, what the target goal or outcome is, and how team members and/or observers will know when the skill is mastered…?

If the answer to any of the above questions is 'No,' review the process of how to select an appropriate EBP (https://afirm.fpg.unc.edu/selecting-EBP).

For more information about Discrete Trial Training, please visit https://afirm.fpg.unc.edu/ .

STEP 1: PLANNING FOR DTT

The planning step details the initial steps and considerations involved to prepare for using Discrete Trial Training with a learner on the spectrum.

1. **Refine target objective to state the desired antecedent, behavior, and criterion for mastery**
   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.

This step-by-step practice guide outlines how to plan for, use, and monitor **Discrete Trial Training**.

Keep in mind that **Discrete Trial Training** is used to break down behavior into discrete steps.

2. **Complete a task analysis to break the skill into teachable steps.**
   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.

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

3. **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 Lesson** for preparing a lesson form and collecting data.
   - Use the **DTT Lesson Progression** to collect data.
   - Use the **DTT Self-Graphing Trials** to collect data.

4. **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.
   - Use the **Reinforcer Sampling & Checklist** to select possible reinforcers.

5. **Prepare DTT Lesson**
   Determine an appropriate place for a DTT lesson to occur. Remember, multiple locations are preferable to help learners generalize skills or behaviors. Make sure you have all needed materials for the DTT lesson.
   - Use the **Planning Checklist** to determine location and materials needed.

STEP 2: USING DTT

This step details the process of implementing Discrete Trial Training with a learner on the spectrum.

1. **Deliver trials**
   - Transition learner to teaching location.
     - To help the learner transition to the teaching location, provide the learner with a warning or cue. Keep in mind the importance of generalization and use the most natural and commonly occurring cue that is meaningful to the learner.
   - 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.
   - 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).

- 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.
- Repeat same instruction for targeted number of trials.
  - Team members will repeat the same instructions in the same manner for the targeted number of trials. Remember to record each trial.

2. Conduct massed trial teaching

- 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.
- Deliver trials and respond to the learner's behavior.
  - If learner responds correctly on first trial, repeat teaching step several more times. If learner reaches mastery criterion for step, present a task at the next level of difficulty.
  - If learner does not respond or responds incorrectly, administer the trial again. If learner is unsuccessful on second trial, team member repeats trial with increased level of assistance. After repeating the trial with additional assistance 3-5 times, team member delivers trial without assistance.
- Review mastered steps.
  - Remember to use maintenance trials at least once or twice per session to review mastered steps. New steps are taught following the massed trial format until all steps of the skill have been mastered.

3. Conduct discrimination training

- 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. Prove the learner with instruction (SD), prompt the target behavior, and then reinforce the learner's response if correct. Overtime, prompts should be systematically faded until the learner can independently and consistently perform the skill with the one stimulus object.

- Present distractor stimulus.
  - Once the learner is able to perform the skill independently and consistently with the one stimulus, another stimulus (distractor) is presented in the periphery. The distractor 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
- Teach generalization.
  - Teach generalization of the skill or concept by teaching discrimination of multiple stimuli and applying use of skill in multiple situations.

STEP 3: MONITORING DTT

The following step details how to monitor the use of Discrete Trial Training with a learner on the spectrum and how to determine next steps based on the data.

1. **Collect and analyze data**
   Data should be collected from each teaching trial. . 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.
   - Use the **DTT Lesson** for preparing a lesson form and collecting data.
   - Use the **DTT Lesson Progression** to collect data.
   - Use the **DTT Self-Graphing Trials** to collect data.

2. **Determine next steps based on learner progress**
   Collecting data will help team members decide about the effectiveness of using Discrete Trial Training and whether the learner on the spectrum is making progress. If a learner is making progress based upon data collected, team members should continue to use the selected strategies.
   If team members determine that the learner is not making progress, consider the following:
   - 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 on the spectrum continues not to show progress, consider selecting a different evidence-based practice to use with the learner on the spectrum.

3. **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.