Discrete Trial Teaching

Discrete trial teaching is an educational strategy based on the principles of applied behavior analysis. Discrete trial teaching involves breaking skills down into smaller components and teaching those smaller sub-skills individually. Repeated practice of skills is conducted, and teachers may incorporate prompting procedures as necessary. Correct responses are followed by reinforcement procedures to facilitate the learning process.

What is a “Discrete Trial”?

A discrete trial is a single cycle of instruction that may be repeated several times until a skill is mastered.

A discrete trial consists of 5 main parts:
1.) An initial instruction – ex. “Touch your nose.”
2.) A prompt or cue given by the teacher to help the child respond correctly – ex. Teacher points to child’s nose.
3.) A response given by the child – ex. Child touches their nose.
4.) An appropriate consequence, such as correct responses receiving a reward designed to motivate the child to respond correctly again in the future – ex. “Nice job touching your nose,” teacher gives child a sticker.
5.) A pause between consecutive trials – waiting 1 – 5 seconds before beginning the next trial.

Collection of Data

Data are usually collected on the outcomes of each trial to monitor student progress. In an individual discrete trial, data may be collected on whether a child responded correctly, required a prompt, or responded incorrectly. Correct and incorrect responses are totaled to determine percentage rates and performance levels of a child.

Collected data may be analyzed to identify relevant patterns in responding, including increases or decreases in target behaviors. Data are important in determining effectiveness of instructional methods and when to begin instruction on new skills or behaviors. Data are also used to make decisions on when it is appropriate to alter prompting strategies to promote student independence.

Application of Discrete Trial Teaching

Discrete trial teaching has been proven effective in teaching children with autism many new forms of behavior and has been the most studied approach for teaching important discrimination skills.

Discrete trial teaching may be used to teach a variety of physical and verbal imitation skills. Imitating clapping, printing the letter A, or producing the vocal sound “ssss” are examples of behaviors that may be taught in discrete trials.

Language skills can also be taught using discrete trials. A child can be taught to perform receptive actions in response to verbal instructions such as “stand up,” “touch number five,” or “show me cup.” Expressive language skills can be taught in a discrete trial format to train skills like verbally responding to identify “nose,” the color “blue,” or “a book.”

Discrete trials can also be used to teach a variety of more complex skills, such as getting dressed or using a phone, by breaking down the
routines and chaining the component steps.
These are only a few of a diverse collection of skills and instructional programs that can be implemented in a discrete trial format.

Generalization
The ultimate goal of discrete trial teaching is for a student to be able to independently perform the skills being taught in appropriate situations and environments. **Being able to demonstrate skills across settings, people, and stimuli is called generalization.**

Typically, discrete trials occur in an environment conducive to learning, with few distractions, and a very small teacher to student ratio (usually 1:1). This specific learning environment does not promote the transfer of skills to more natural situations. Because discrete trial training does not lend itself to generalization, an important component of discrete trial teaching is explicitly teaching the child to perform skills in different settings, with different people, and with different stimuli.

Generalization techniques may include randomizing commands and/or stimuli, having a variety of people work with a student, or practicing skills in the natural environment.

Discrete Trial Teaching and Autism
Children with autism typically do not learn from their environment spontaneously, and therefore, may need extra cues or explicit instruction of skills that may come naturally to typically developing peers. Most need highly structured, repetitive instruction that requires them to engage actively with the environment in order to acquire new skills.

Discrete trial teaching’s consistent, predictable nature makes it a popular choice for working with children with autism. Built in reinforcement in a discrete trial session provides children with autism added motivation for learning and socially interacting, which they may not possess inherently.

Some Discrete Trial Facts
- Discrete trial teaching is not ABA, nor is ABA discrete trial teaching. Discrete trial teaching is one of the many strategies that use the principles of applied behavior analysis to facilitate learning.
- Discrete trial teaching should be combined with other effective interventions to allow children to use skills in other settings and situations.
- Discrete trial teaching is not a method only used for young children with autism.
- A discrete trial program should be set up and monitored by a qualified professional, and discrete trial teaching should be conducted by supervised, trained individuals.
- Discrete trial programs should be tailored to the learning needs of the student and should never be implemented in a cookbook fashion without being individualized to each student.

Suggested Readings


http://www.autismnetwork.org/

http://www.asatonline.org/