



PROVINCIAL OUTREACH PROGRAM FOR AUTISM & RELATED DISORDERS

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Introduction to Discrete Trial Instruction

Discrete Trial Instruction is an instructional technique used in an Applied Behaviour Analysis based program. The technique is based on the **three term contingency**, that is, a behavioural sequence that consists of the **Antecedent, Behaviour, and Consequence** (often abbreviated as **A-B-C**). An **antecedent** is defined as the stimulus that immediately precedes a behaviour. A **consequence** is defined as the stimulus that immediately follows a behaviour.

Two Examples of the Three Term Contingency:

1 Antecedent	2 Behaviour:	3 Consequence
Teacher says "Turn to page 43 in your math book."	Student turns to page 43.	Student participates in lesson.
Teacher says "Touch your nose"	Student touches his nose.	Teacher says "great."

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Discrete Trial Instruction involves breaking skills down into small measurable units of learning. It is conducted in short trials. Each discrete trial has a clear beginning and end. An instructional session can consist of many trials. New information is not presented until each part of the skill has been mastered.

In Discrete Trial Instruction, prompts are used to assist learning and are provided by the instructor after the instruction and before the response.

Components of a Discrete Trial:

The labels for the components of a discrete trial vary from author to author. The terms, and abbreviations for each term, follow.

Discriminative Stimulus S^D (the teacher's instruction or direction).

Prompt S^P or P (cue provided to assist the student to provide the correct response-*optional*)

Response R (the skill or **Behaviour**)

Stimulus Reinforcer S^R or C (the **Consequence** or feedback)

Inter-trial interval ITI (the pause before the next trial)

Shorthand for One Discrete Trial:

$S^D \text{ --> } R \text{ --> } S^R \text{ --> } ITI$
(S^P)

Examples:

S^D	R	S^R or C
"7 times 5?"	"35"	"Right."
"Match it."	Matches item	"Nice job."
"What does Mommy drive?"	"A car."	"That's right. Mommy drives a car."

Definitions:

Discriminative Stimulus (S^D) - The instruction or direction that tells the learner that the correct response will result in a positive reinforcer. It should be clear, specific and appropriate to the task. During the early phases of instruction the Discriminative Stimulus remains the same, and it is changed during later phases.

Inter-trial interval (ITI) - The few seconds that separate each discrete trial, during which time the instructor may collect data and/or prepare for the next trial.

Positive Reinforcer: Any stimulus which, when it follows a behaviour, results in an increase in the rate or occurrence of that behaviour.

Prompt (S^P) – Assistance provided by the instructor to encourage correct responding. A prompt can be verbal, physical or a model. Prompts are decreased or faded as soon as data indicate that the learner is making progress.

Response (R) The skill or behaviour the student engages in after the S^D . The student should provide a correct response.

Stimulus Reinforcer (S^R) Feedback which immediately follows the response.

Adapted by Kelly MacGregor of the Provincial Outreach Program from:

- 1) Leaf, R. and McEachin, R. (Eds.). (1999). A Work In Progress. New York: DRL Books.
- 2) www.autismnetwork.org