Unit 5
Discrete Trial Instruction

One afternoon Rosa was observing Abby, the youngster newly assigned to her, in the Kindergarten classroom.

Rosa noticed that the Kindergarten teacher, Mrs. McKenney, was trying to teach Abby names of colors. She would put out the crayons, and ask Abby to take a blue one, or a yellow one, or an orange one. Each time Abby chose the wrong crayon, the teacher would say something like, “Oh, you picked red instead!” or “Oh, that's not yellow, that's blue.” She then would allow Abby to color—an activity Abby favored—and would move on with the lesson.

All the other students in the group seemed to be able to identify at least eight basic colors, whereas Abby seemed to label them randomly. Mrs. McKenney said they had been working on colors with Abby for a long time (just red, yellow, and blue), yet she wasn't sure if the child was capable of identifying them with any consistency. Her helper, Mrs. Simon, also tried teaching Abby color names, but was working on black and white only.

When Rosa joined the group, Mrs. McKenney was delighted to pass along the color-naming task to her, reasoning that would be a perfect assignment. Rosa was excited at the prospect, but felt unsure about how best to go about it. She would ask her field supervisor, Ginger, for advice.

Ginger told Rosa she would be pleased to show her how to teach a child a specific discrimination. She should learn to do this in a manner that would be clear and help the child figure out whether or not her actions were right or wrong, simultaneously allowing the teachers to monitor progress.

They decided they would begin by presenting Abby just one color, red. After removing all other extraneous materials from the work area, they would present just one red crayon, saying “Take red.” Then they would place a hand over Abby's hand and guide her to take the red crayon. Once she grasped the red crayon, they would tell her “Great job!”, and allow her to color for about 5 seconds. They would repeat this sequence multiple times, gradually fading out their physical prompts from one trial to the next, until Abby was able to do this 3 times in a row with no prompting at all!

On returning to the kindergarten Rosa put the plan to the test, and wonder of wonders, it worked! Excitedly she declared to Ginger during their next meeting, “Wow, I taught Abby to identify the color red!”

“Not so fast,” said Ginger. “Are you sure she is not simply choosing red because that was the only possible choice?” So, they decided to pair another crayon, a green one, with the red crayon, and repeat the instruction “Take red.” At first, they would prompt Rosa to take the red crayon. Soon they were able to fade their prompts, and even add crayons of additional colors, until Abby was able to choose the red crayon in the presence of up to 4 other colors. They collected data to allow them see whether she really was able to do this with 90% accuracy.

Eventually, Rosa used this same method to teach additional colors, until, when presented with up to 4 choices, Abby was able to identify 4 different colors, with an accuracy level of over 90%.
Unit 5 Objectives

Assuming you have completed formal coursework in or otherwise mastered information about applied behavior analysis in autism educational practice, along with its principles, practices, other key features, by the end of this week you should become familiar with the specific aspects of discrete trial teaching by:

1. identifying what constitutes a correct response and collecting student response data.
2. conducting a discrete trial training session following the CHECKLIST TRAINING PROTOCOL.
3. observing a teaching session and identifying various types of prompting strategies the teacher used during the session.

Activity 5.1 (Estimated time 2 hours)
Collecting Student Response Data

As you begin to work in an applied behavior analysis setting, you will be expected to collect student-response data. To do this well, you will read a written program to identify the correct response and the teacher cues that precede that response. In addition, you will practice collecting student response data.

Tools: Form 5.1

Objectives: To observe a teaching session and collect student response data, you will:

1. with the input of your field facilitator, choose a student to observe during a structured teaching session.
2. with the help of the student’s teacher, or your field facilitator, choose three instructional programs to observe. These programs should have comprehensive lesson plans available to review, and require trial-by-trial accuracy data.
3. upon review of the lesson plan, for each program, list the objective, current set (target) and a description of a correct response.
4. complete Form 5.1. You will include information gathered from the lesson plans, and will be observing the teaching session and collecting data while observing.

Preparation

1. Schedule 1–2 hours to observe one student in an actual site. (If you do not have an actual site, observe the DVD video on this text’s companion website).
2. Observe the student working on prescribed instructional programs.
3. Arrive at the scheduled time equipped with:
   - Form 5.1
   - A pencil or pen
   - A clipboard
Form 5.1
Collecting Student Response Data

Your Name ___________________ Dates / / & / / Instructor ___________________

Observe a teaching session and choose three objectives that will be taught during the session. Complete the assignments below for each of the objectives:

**Objective #1**
1. What is the objective? ________________________________________________________________
2. What is the correct response? ___________________________________________________________
3. Collect trial-by-trial data for a total of 10 trials:

<table>
<thead>
<tr>
<th>Trial</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<td>+/-</td>
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</tbody>
</table>
4. Compare your data with the teacher. Are your data points similar? Y / N

**Objective #2**
1. What is the objective? ________________________________________________________________
2. What is the correct response? ___________________________________________________________
3. Collect trial-by-trial data for a total of 10 trials:

<table>
<thead>
<tr>
<th>Trial</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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</tr>
</tbody>
</table>
4. Compare your data with the teacher. Are your data points similar? Y / N

**Objective #3**
1. What is the objective? ________________________________________________________________
2. What is the correct response? ___________________________________________________________
3. Collect trial-by-trial data for a total of 10 trials:

<table>
<thead>
<tr>
<th>Trial</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</tbody>
</table>
4. Compare your data with the teacher. Are your data points similar? Y / N
Activity 5.2 (Estimated time: 1–2 hours)
Discrete Trial Instruction Checklist

Now that you have observed discrete trial teaching programs, it’s your turn to try. During this assignment, you will practice incorporating a lesson using discrete trials.

Tools: Discrete Trial Checklist (Form 5.2)

Objective: Conduct a discrete trial training session following the CHECKLIST TRAINING PROTOCOL

Instructions:

With the input of your student’s teacher or field facilitator, choose a student with whom you can practice implementing discrete trials. With their assistance, choose three instructional programs that you can implement with the student. These programs should have comprehensive lesson plans available to guide you, and should incorporate discrete trials as a teaching strategy. THE PROGRAMS YOU CHOOSE SHOULD BE BASED ON SKILLS THE STUDENT HAS MASTERED ALREADY. This provision will increase the probability that the student will be successful during your lesson, and therefore, help you yourself to maintain your focus on delivery of instruction and reinforcement. In addition, this will substantially decrease the probability that you will need to insert prompts. (If a response requires considerable prompting, please have your supervisor help you with this skill or choose an easier lesson).
## Form 5.2

### Discrete Trial Checklist

#### Part 1: Oral Checklist

**Instructions:**
Supervisor scores appropriate box for each item. Part 1 of checklist is administered by direct questioning.

**Criteria for Passing:** 100% correct supervisor re-administers checklist if below 100%.

<table>
<thead>
<tr>
<th>Implement discrete trial procedure by:</th>
<th>Score first 10 trials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+/- +/- +/- +/- +/- +/-</td>
</tr>
<tr>
<td>1. obtaining student’s attention before presenting the instruction.</td>
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<tr>
<td>2. providing the steps of the discrete trial in the appropriate sequence.</td>
<td></td>
</tr>
<tr>
<td>3. providing a clear and concise discriminative stimulus ($S^d$).</td>
<td></td>
</tr>
<tr>
<td>4. allowing student 5 seconds to respond (unless otherwise specified in the individual lesson plan).</td>
<td></td>
</tr>
<tr>
<td>5. providing student with appropriate consequences:</td>
<td></td>
</tr>
<tr>
<td>a) contingent on behavior</td>
<td></td>
</tr>
<tr>
<td>b) immediate</td>
<td></td>
</tr>
<tr>
<td>c) consistent (unless during maintenance phase)</td>
<td></td>
</tr>
<tr>
<td>d) unambiguous</td>
<td></td>
</tr>
<tr>
<td>6. prompting the desired response, if necessary:</td>
<td></td>
</tr>
<tr>
<td>a) prompts provided following the $S^d$</td>
<td></td>
</tr>
<tr>
<td>b) prompts effective in evoking the desired response</td>
<td></td>
</tr>
<tr>
<td>c) prompts faded systematically</td>
<td></td>
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<tr>
<td>7. maintaining inter-trial intervals at 3 seconds or less in duration</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
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<tr>
<td><strong>PERCENT CORRECT</strong></td>
<td><strong>%</strong></td>
</tr>
</tbody>
</table>

_Criteria for passing:_ 90% correct supervisor re-administers checklist if below 90%.
Activity 5.3 (Estimated time 1–2 hours)
Prompts Across the Day

As you begin to teach using the methods of applied behavior analysis, you will find you often need to use a variety of prompting strategies. Probably you have learned in your coursework about various modes of prompting. For this assignment, you will be observing one or more teachers conducting lessons with a variety of students, and will identify as many different prompts as you can.

Written Requirements: Form 5.3

Objective: Observe a teaching session and identify modes of prompting.

Instructions:

- With the input of your field facilitator, choose at least 3 students to observe during direct instruction. Observing students during times when they require shadowing to increase independence would be especially beneficial.
- Arrive at the scheduled time with Form 3.3, a pencil or pen, and a clipboard.
- Complete Form 3.3 by listing the program name during which you observed a specific type of prompt, and describe each prompt you saw. For example, if you notice a teacher providing full physical prompts while working with a student, you would list “hand-over-hand assistance during zipping of coat” under the section “Full Physical.”
Form 5.3 (p. 1 of 1)

Your Name ___________________________ Dates / / & / / Instructor _____________________
Indicate the day(s) _______________________ and times _______________ you are attending
this location each week.

Prompts Across the Day: Observe a variety of students participating in instruction. List modes of
prompts you observe and the programs in which they were used.

Full Physical
1. 
2. 

Faded Physical
1. 
2. 

Gestural
1. 
2. 

Model
1. 
2. 

Verbal
1. 
2. 

Faded Verbal
1. 
2. 

Shadow
1. 
2. 

Other prompts you may see:
Unit 5 Discussion Topics

1. What do you feel was the most effective part(s) of the lessons that you observed?

2. How did the student respond to the lessons?

3. If you have worked in a public school, what challenges would you anticipate in conducting 1:1 sessions in that setting?

4. Under what circumstances do you think prompting would be most helpful? When do you think it would be least helpful?

5. Would you agree with the following statement “The prompting strategy you use will vary across students and tasks?” If you agree, why? If you do not agree, why not?