

Adapting Direct Instruction Curricula for Nonvocal Learners

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The Setting

- The Vista School
 - Approved Private School using Applied Behavior Analysis to teach children with moderate to severe autism
 - Only school in Central Pennsylvania that exclusively meets the need for integrated behaviorally-based therapy and education of children with autism

The Setting

- Competent Learner Model
 - Intensive, individualized teaching program designed to build a bridge of cooperation and understanding, across the school and home programs.
 - Includes 7 repertoires for students to work on: Participator, Reader, Writer, Observer, Problem Solver, Talker, Listener

The Need

- Nonverbal students moving through CLM were not participating in lessons traditionally requiring verbal responding
 - Talker
 - Observer
 - Reader
- Observer Tract modifications
 - "When I touch a picture, tell me what it is"

Language For Learning

- Why we started with Language for Learning
 - Language for Learning incorporates the majority of skills found within the Observer and Participation tracts

Pre-requisite Skills

- CLM
 - Observer (imitate)
 - Participator
 - Teacher-directed
 - Semi-directed
 - Non-directed
 - Problem Solver

Preparation

- Lesson examination for:
 - Icons needed:
 - Pronouns, nouns, actions, sentence starters
 - Generalization
- Creation of:
 - Icons
 - Page set-up/placement of icons
 - Books

Response Form

- Considerations
 - Dropping icons and handing over a strip
 - Dropping icons and pointing to icons (no exchange)
 - Dropping icons and hold up response (waiting for teacher acknowledgement)

Response Form

- Our choice:
 - Dropping icons and hold up response (waiting for teacher acknowledgement)
- Pros:
 - Teaches waiting for teacher affirmation response
 - Does not allow multiple/unmissed errors
 - More adaptable to group instructional setting
 - Resembles choral responding
 - Incorporates methodology that could be used in a typical classroom

Response Form

- Teaching the Response Card
 - Teacher Behavior
 - Teacher will present each exercise page with only 1 icon on the page at a time for errorless teaching.
 - Response card will be at the bottom of the page.

Response Form

- Teaching the Response Card
 - Teacher Behavior (con't)
 - Teacher will deliver question
 - A second person prompter will physically prompt the student to drop the icon from the page to the response card, pick up the response card, and turn the response card to face the teacher with the answer holding it with two hands.
 - SPP will physically prompt the student to hold the response card until the teacher acknowledges the answer (i.e. "Standing up, good!)
 - SPP should fade prompts ASAP (full physical→partial physical→independent).

Response Form

- Teaching the Response Card
 - Teacher Behavior (con't)
 - After the teacher acknowledges the response, the teacher should put the icons back.
 - Teacher should move the icons to different spots to ensure scanning.

Response Form

- Teaching the Response Card
 - Considerations
 - Teacher should ensure that the student is using different color response cards across different lessons.
 - Holding the card

Response Form

- Teaching the Response Card
 - Learner Behavior
 - Drop the icon independently
 - Hold up the response card
 - Wait for teacher acknowledgement

Response Form

- Teaching the Response Card
 - Data collection
 - For the first day of implementation, is teaching only. No data is necessary.
 - For the second day, begin taking data on independent versus prompted responding.

Response Form

- Teaching the Response Card
 - Data collection
 - Sample Data Sheet

Student: _____ Date: _____

Drop icon	Hold up response card	Wait for teacher acknowledgement
+ / -	+ / -	+ / -
+ / -	+ / -	+ / -
+ / -	+ / -	+ / -
+ / -	+ / -	+ / -
+ / -	+ / -	+ / -

Response Form

- Teaching the response card
 - Criteria for Mastery
 - Learner will drop 1 icon independently (from a field size of 1 icon), hold up response card for teacher to see, and wait for teacher acknowledgement of answer MEETING ALL CRITERIA for 80% of opportunities across 3 consecutive days.

Response Form

- Video: Teaching Response Card

General Guidelines for Instruction

- Teacher will follow the script as written. If no expressive response is required, no adaptations are required.
- Teacher will use pre-made material book.
- For ease of prompting, use a book stand.

General Guidelines for Instruction

- Teacher should ensure that different color response cards are being used.
- If the student makes an error, the Teacher will follow error correction indicated by curriculum when teaching in a 1:1 setting.
- If the student does not respond, the teacher will prompt the correct response and repeat the question.

General Guidelines for Instruction

- Model-Lead-Test is infused within the curriculum as a teaching strategy and error correction

General Guidelines for Instruction

Example of Model Lead Test (teaching)

- **Model:** Teacher should model the appropriate learner behavior when the skill is being taught
 - i.e. When saying "I can say the whole thing—I am touching my nose", teacher should pull down the icons as they are saying the sentence so they are also modeling what they are expecting the learner to do when they have to do it by themselves
- **Lead:** When responding with the learner (i.e. "Say the whole thing with me"), the teacher will prompt the learner to pull down the correct icons. The learner does not need to pick up and hold up the response card because the teacher and the learner are responding together.
- **Test:** When the learner is expected to answer "All by yourselves", the learner is required to drop the icons independently and hold up the response card.

General Guidelines for Instruction

- When the learner is engaging in a lesson with a field size of more than 1 icon, the teacher should begin the lesson with the field size indicated by the lesson.

General Guidelines for Instruction

- Placement of icons will be as follows:
 - Sentence starters will be in the upper left hand corner/in left column on the page (i.e. "This is" and "I am", etc.).
 - Actions will be in second column.
 - Pronouns will be in the third column.
 - Nouns are in the last column.

General Guidelines for Instruction

Page Set-up

Sentence Starter	Action	Pronoun	Nouns
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>

General Guidelines for Instruction

- The response board for each exercise within a lesson should be out at all times. It is important for the student to understand when to answer our questions by listening to what we say, rather than by the visual stimulus of the board being present or not.

Instructional Modifications

- Lesson examination for modifications to lessons
 - Started looking at first 15 lessons
 - After a year of implementation, the majority of students are between lessons 10-12.

Instructional Modifications

- Lesson 1, Exercise 3 and 4
 - Teacher will drop the icon as a model as they are modeling the item.
 - Teacher says "I'll tell you about these pictures."
 - Point to tree in the book and say "This is a tree"
 - Drop the tree icon to the sentence strip and say "tree"
 - Move the icon back up to the top and repeat for shoe, dog, and cat

Instructional Modifications

- Video: Lesson 1, Exercise 4

Instructional Modifications

- Lesson 3, Exercise 2—Teaching Dropping 2 Icons
 - Teacher will have the “This is” on the board at the beginning of the lesson
 - When the teacher asks “What is this?”, the teacher should accept either “a boy” or “This is a boy”.
 - If the learner responds with “a boy” The teacher should continue to follow the script and model the whole sentence if the learner answers with only “a boy” to ensure they learn to respond to “Say the whole thing”.
 - If the learner independently responds with “This is a boy” then the teacher should reinforce by saying “I like how you said the whole thing” and skip the teaching section of “say the whole thing” within the script.
 - When implementing lessons in a 1:1 setting, for exercises requiring a boy or girl to stand up (ex. in Lesson 3, Exercise 2), teacher may use pictures of a boy or a girl, if one is not available to serve as a model.

Instructional Modifications

- Video: Lesson 3, Exercise 2

Instructional Modifications

- Lesson 4, Exercise 1—Teaching Dropping 3 Icons
 - In 1.2, Teacher will teach the skill errorlessly
 - I.e. Prompt student to drop the correct icon/icon sequence (“standing up”, “touching my head”)
 - In 1.3, Teacher will fade prompts to encourage independent responding from learner
 - All icons should be on the board, organized in columns.

Instructional Modifications

- Lesson 4, Exercise 1—Teaching Dropping 3 Icons

Instructional Modifications

- Video: Lesson 4, Exercise 1

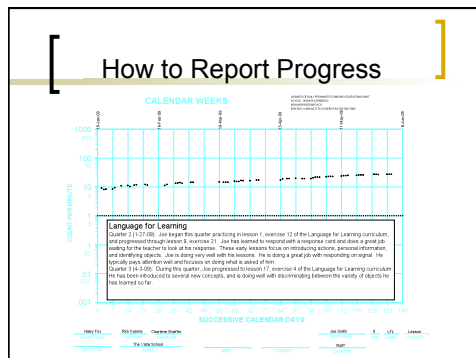
Instructional Modifications

- Lesson 5, Exercise 2
 - Keep boy and girl in the same column



Instructional Modifications

- Lesson 15, Exercise 7—Teaching Yes or No for Factual Information
 - Begin teaching yes/no through responding according to preference in Lesson 10
 - Move to yes or no for factual information following mastery with preference



- ### Generalization
- Using Yes/No to:
 - Ensure comprehension
 - Across concepts
 - E.g. Student sees a picture and responds with an icon of that picture (matching) versus seeing a picture and answering yes/no question(s) about that picture (comprehension)
 - Across settings
 - E.g. Identifying objects/actions/personal identification questions in the community

- ### Generalization
- Video—Language for Learning with Yes/No responding

- ### Benefits
- Expanding receptive vocabulary
 - Increasing comprehension of longer lengths of utterance
 - Intertwining core skills
 - Requiring the learner to practice participation in group, listening, observing, problem solving, and writing.
 - Theme groups/lessons
 - Increases participation

[Struggles]

- Creating instructional set-up
- Time for material preparation
- Time spent analyzing the curriculum and documenting modifications

[Where We Are Going]

- Planning for future Language for Learning lessons
- Opening doors for other:
 - Repertoires
 - Curriculums
 - Testing

[The Road to Success]

- Video