
Nonverbal Imitation

- Objectives:**
1. Student learns to imitate the actions of others
 2. Imitation becomes the foundation upon which other important skills are based (*e.g.*, verbalization, play, social, self-help, etc.)
 3. Imitation is the basis for modeling which is a very important type of prompting
 4. Imitation facilitates a positive relationship between Student and teacher (*i.e.*, being like the teacher becomes reinforcing)
 5. Imitation builds awareness of the environment
 6. Imitation helps develop attending skills
 7. Imitation is a simple task that can be used to establish or reestablish compliance and attention. It allows Student to easily earn reinforcement

Procedure: The teacher demonstrates an action and says “do this.” Student is to mirror the action of the teacher (*i.e.* if teacher uses right hand, he should use his left hand). The phases start with obvious large actions and progress to more subtle and refined movements. Imitations involving the manipulation of a physical object (dropping a block in a bucket) or produce discrete sensory feedback (ringing a bell) are generally easier to learn. Ones that involve moving body parts away from the body (*e.g.*, arms out to side) or a part of the body he cannot directly see (*e.g.*, nose, head) are more difficult.

As Student progresses, the verbal cue will be generalized to other phrases which have the same meaning as “Do this” (*e.g.*, “do what I’m doing”, “copy me”, etc.). As a final step, the action will be named (*e.g.*, “Clap hands”). This builds the knowledge base for following verbal directions. “Do this” is used at first to establish the concept of imitation, an essential skill that provides a nonlanguage-based means of teaching a variety of other skills.

- Prompts:** Use physical guidance to move Student through the action. Gradually fade the prompt to a light touch and then a slight gesture.
- Entry criter:** There are no prerequisites for this skill. It is one of the simplest skills we can teach. In-seat behavior and eye contact can usually be shaped at the same time this skill is being taught.
- Mastery crit:** Student performs a response eight out of ten times correctly with no prompting. This should be repeated with at least one additional teacher.
- Phase 1:** **Start with items that involve the manipulation of an object.** Teach each one individually in isolation. This means doing repeated trials of just that item with no other object in view. Once Student is successfully performing an action without prompting, then move in one or more distractor items on each trial. Also, each item needs to be used in more than one way in order to build attention and establish a discrimination. For example, some times you should drop the hammer in the bucket, instead of using it to pound the pegs in. Once two items are able to be rotated randomly, introduce a new item. As each one is mastered in isolation it should be randomized with all previously taught items.

Object Manipulation

Block in container	Ring bell (shake or tap)
Pop up toy	Stir spoon in bowl
Bang drum	Throw bean bag
Ring on cylinder	Comb/brush hair
Put on hat	Wave streamer
Shake tambourine	Pop-up toy
Tap table with block	Spin top (press down)
Stack block	Honk horn
Raise cup to mouth	Pull lever
Shake snow globe	Tap sticks
Roll car	Crash car
Put on sunglasses	Clap with blocks
Load/unload dump truck	Throw ball
Play piano	Rock doll
Answer phone	Blow whistle

- Phase 2:** **Start when Student has mastered five items from Phase 1.** Choose three items from large motor list. As each one is mastered, add an additional item for training. Sitting down should not always be the response that follows standing up. For example, you can have Student clap his hands while standing.

Large Motor:

Raise arms	Arms out to side
Clap hands	Stamp feet
Touch nose	Wave bye-bye
Pat tummy	Touch mouth
Pat head	Slap knees
Cover ears with hands	Pull hair
Touch elbow	Touch eyes
Tap shoulders	Touch toes
Tab table with hand	Stand up

Phase 3: **Imitations away from chair.** Start when Student has learned five items from Phase 2. Teach responses that involve going to a location away from the chair, carrying out an action and returning to the chair. Student should remain in the chair until teacher has finished demonstrating the action and has returned to the chair.

Knock on door	Touch spot on wall with extended hand
March	Look out window
Drop marble down chute	Put item on shelf
Mark on chalkboard	Open/close drawer
Put object in drawer	Throw item in trash
Turn on/off light	Put doll to bed
Roll car down ramp	
Put shape in sorter	

Phase 4: **Imitates another person.** Teacher indicates someone for Student to imitate and says, "Do that."

Phase 5: **Once five large motor items are learned (Phase 2), add fine motor actions.**

Fine Motor:

Squeeze Playdoh	Roll Playdoh
Touch chin	Touch mouth
Touch eyes	Touch ears
Pick up penny & drop in jar	Push button
Make OK sign	Put small pegs in board
Make victory sign	Drumroll fingers on table
Pinch clothespin	Thumbs up
Point	Squeeze squeaky toy
	Spin top (with fingers)

This is an appropriate stage to begin oral-motor imitation. See the Verbal Imitation, Phase 2 (oral-motor imitation).

Phase 6: **Continuous chain.** Once ten imitations are learned from Phase 2, have Student follow along with you as you link together a series of responses. Vary the responses to maintain interest and attention and promote generalization. Start with two or three responses and then continue on with longer chains. The goal is to give a single verbal cue and defer reinforcement until the chain is completed.

Phase 7: **Advanced imitation.** Once ten imitations are learned from Phase 2 and five from Phase 5, go on to finer discriminations.

Discrimination Examples:

Raise one vs. two arms

Touch nose with one finger vs. whole hand

Wave bye-bye with right vs. left hand

Tap once vs. two times

Clap high vs. clap low

Phase 8: **Two-step chains.** This requires the use of memory. Once 20 responses are mastered from any of Phases 1-7, begin chaining responses together into two-step responses (*e.g.*, put on hat and knock on door). Start with items taught in Phases 1 and 3. Demonstrate both responses while Student watches. If necessary, prompt him to wait until the second action is completed. Then have him perform the two responses. Once he is good at responses from Phases 1 and 3, begin using items trained in phases 2 and 5 (*e.g.*, clap hands and slap knees).

Phase 9: **Crossing over** (*e.g.*, touch right leg with left hand; touch left shoulder with right hand)

Phase 10: **Two responses at once** (*e.g.*, touch shoulder with right hand and knee with left hand; crossing arms)

Phase 11: **Three-step chains.** Same as Phase 8, but Student performs three steps instead of two.

Phase 12: **Imitates action in video.** Present visual stimulus and tell Student, "Do this."

- a. Single discrete action
- b. Two-step action (simultaneous)
- c. Three-step action (simultaneous)
- d. Continuous chain