Instructional Resource Guide

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Additional Resources

This brief guide is meant for quick reference. The following are teacher-friendly resources foreducators who would like to learn more about these procedures.

Collins, B. (2012). *Systematic instruction for students with moderate and severe disabilities.* Baltimore, MD: Paul H. Brookes.

Alberto, P., & Troutman, A. (2012). *Applied behavior analysis for teachers*. 9th Ed. Upper SaddleRiver, NJ: Pearson.

Instructional Resource Guide on Prompting and Instructional Strategies

Systematic Instruction
Teaching focused on specific, measurable responses that may either be discrete or a chained task,and that are established using defined methods of prompting and feedback based on the principles and research of ABA.

The purpose of the Instructional Resource Guide:
- To provide guidance for teachers regarding evidence-based prompting and instructional strategies to be used to teach students with significant disabilities

- To serve as a companion document to the MASSIs (Math Activities with Scripted SystematicInstruction) and LASSIs (Language Arts Scripted Systematic Instruction)

Will include:

- Prompting
- Feedback
- Format of instruction
- Task Analysis
- Repeated Trial

Time Delay
There are two types of time delay, constant time delay and progressive time delay. This InstructionalResource Guide focuses on Constant Time Delay; however, it does provide a brief explanation of Progressive Time Delay.

Additional Prompting Strategies
There are additional prompting strategies that are not covered in this instructional resource guide thatmay be helpful when teaching your students. These strategies were not included because they are not used in the MASSIs or LASSIs. These include, but are not limited to most to least prompting, simultaneous prompting, and graduated guidance.

Find a Response Mode

It is important to identify the best way for your student to show what they know in each lesson. Here are some options to consider:

Point to the correct response when given an array

The number of options in the array may vary depending on the student's current skills. An array of 4is often used with one correct answer, at least one plausible incorrect answer, and two other distractors. Be sure to vary the location of the correct answer in the array. This array can be placed on the students' communication system.

Pull-off

Some students have difficulty pointing but may be able to select when the responses areattached to a page. The array of 4 options is used, but the student pulls the correct response.

Eye gaze

Students who do not have the motor skills to point, but have vision, may be able to indicate the response by looking at the correct option. The array can be attached to each corner of a piece of see-through plexiglass (available from most hardware stores). By looking through the plexiglass, the teacher can see where the student focuses his or her eyes to indicate the answer.

Say or Type

Some students can verbalize the correct answer. This answer may be given after viewing an array of options or by generating the answer when asked a question. Other students may be able to generatethe answer by typing a response. Saying or typing the answer provides students with the most flexibility to describe what they know.

Show

Some learning can be demonstrating through showing the answer. The student may be able to indicate the area of the rectangle by moving his or her hand across the shape. Or, a student may answer a comprehension question by pantomiming the answer.

Write or type on computer

Sometimes the student may be able to write the answer, for example, by writing the correct number inan equation or writing the name of the main character in a story.

Use material from the lesson

Students may be able to show the correct math answer by using a number card or plastic numbers or with other manipulatives. Similarly, in language arts, the student may use a picture on the page in the book or prop that is used with a story to answer a comprehension question.

Remember: the response mode needs to be something students can do without assistance once they learn the material.

Constant Time Delay (CTD)

CTD is a form of errorless learning that can be used with discrete responses (e.g., number ID; vocabulary words, matching). If a student makes a lot of errors through guessing, it may take longer to learn the response. CTD teachers the student to WAIT for help if unsure of the correct answer but ANTICIPATE (answer before the prompt) when sure.

First, use a zero-delay round to introduce the skill. Give the cue to respond and prompt together to ensure correct responding. The student can only make an error if he or she does not initiate this response (if this happens, a better prompt may be needed, or the student may need to be reminded to attend closely).

After a few trials (or sessions), wait a few seconds before giving the prompt to allow the student to anticipate the correct answer.

Zero Delay Round

Provide the task direction and immediately give the controlling prompt to teach the child the correct response. Reinforce the child's correct response.

For example (number identification):

1. Teacher says quotation marks "Find 3" while pointing to the number 3.
2. Student responds by pointing to the number 3.
3. Teacher reinforces the correct response by saying, "Good, that is the three," and records the data (prompted correct).

Time Delay Round

After several trials/sessions at zero delay, moved to a 3-5 second delay (pick a delay time that is appropriate for your student to start responding, but do not vary that delay length).

The task direction is given (target stimulus); wait 3-5 seconds delay time for the student to respond.

If no response after delay, then the controlling prompt is used. After the student gives the correct response offer praise. Record Data (prompted correct: P)

If an incorrect response is given, provide error correction procedures (usually the controlling prompt to prompt a correct response) and remind the student to wait if not sure.

If multiple errors occur, return the zero-delay condition.
For example:
1. Teacher says, "Find three" and waits 4 seconds (allowing the student to have a chance to answer).
2. IF the student independently points to 3, reinforce the correct response by saying "Good, that is three" and record the data (independent correct: "+").
3. IF the student waits and does nothing, after 4 seconds the teacher points to the 3. After the student points to the 3, teacher records data (prompted correct: "P").
4. IF the student points to the wrong answer, teacher immediately points to the correct answer, does not reinforce, and records the data (error: "-").

Sample Script for CTD (Teaching Expressive Symbol Identification)

0 Second Delay Round

Materials:
Card with a + sign on it

Teacher Says/Does:
"What symbol is this? Plus"

Student Response:
"Plus"

Teacher Feedback:
"Good, this is the plus sign, we use it to add."

Materials:
Card with a = sign on it

Teacher Says/Does:
"What symbol is this? Equal"

Student Response:
"Equal"

Teacher Feedback:
"Good, this is the equal sign, it means the same."

Materials:
Card with a - sign on it

Teacher Says/Does:
"What symbol is this? Subtraction"

Student Response:
"Subtraction"

Teacher Feedback:
"Good, this is the subtraction sign, we use it to subtract."

4 Second Delay Round

Materials:
Card with a + sign on it

Teacher Says/Does:
"What symbol is this?"
Wait 4 seconds.

Student Response:
1. Student responds "plus" before additional prompting.
2. Student responds incorrectly before additional prompting.
3. Student waits (does not respond within 4 seconds).

Teacher Feedback:
1. "Good! You got it! This is the plus sign, which we use to add."
2. "Plus, this is the plus sign. If you don't know the answer, wait and I'll help you."
3. "Plus, say plus. Good."

Materials:
Card with a = sign on it

Teacher Says/Does:
"What symbol is this?"
Wait 4 seconds.

Student Response:
1. Student responds "equal" before additional prompting.
2. Student responds incorrectly before additional prompting.
3. Student waits (does not respond within 4 seconds).

Teacher Feedback:
1. "Good! You got it! This is the equal sign; it means the same."
2. "Equal, this is the equal sign. If you don't know the answer, wait and I'll help you."
3. "Equal, say equal. Good."

4 Second Delay Round (continued)

Materials:
Card with a – sign on it

Teacher Says/Does:
"What symbol is this?"
Wait 4 seconds.

Student Response:
1. Student responds "subtraction" before additional prompting.
2. Student responds incorrectly before additional prompting.
3. Student waits (does not respond within 4 seconds).

Teacher Feedback:
1. "Good! You got it! This is the subtraction sign, which we use to subtract."
2. "Subtraction, this is the subtraction sign. If you don't know the answer, wait and I'll help you."
3. "Subtraction say subtraction. Good."

Sample Script for CTD (Teaching Receptive Word Identification)

Note: distracters can be made very different in the beginning (e.g., a blank card or a card with a picture of an unrelated item), but eventually should be similar items, such as cards other targeted symbols (e.g., cat, dog, or hat).

Shuffle cards and distracters between every trial

0 Second Delay Round

Materials: Card with the word cat on it and two distracters: **<u>Cat</u>** Dog Hat Teacher Says/Does: Point to word cat and say, "Touch cat." Student response: Student touches word cat. Teacher Feedback: "Good, that says cat."

Materials: Card with the word dog on it and two distracters: Hat **<u>Dog</u>** Cat Teacher Says/Does: Point to the word dog and say, "Touch dog." Student Response: Student touches the word dog. Teacher Feedback: "Good, that says dog."

0 Second Delay Round (continued)

Materials:
Card with the word hat on it and two distracters:
<u>Hat</u>
Dog
Cat

Teacher Says/Does:
Point to the word hat and say, "Touch hat."

Student Response:
Student touches the word hat.

Teacher feedback:
"Good, that says hat."

4 Second Delay Round

Materials:
Card with the word cat on it and two distracters:
Dog
Hat
Cat

Teacher Says/Does:
"Touch cat." Wait 4 seconds.

Student Response:
1. Student touches cat before additional prompting.
2. Student responds incorrectly before additional prompting.
3. Student waits (does not respond within 4 seconds).

Teacher Feedback:
1. "Good! You got it! That says cat."
2. Point to the word cat. Say: "This is cat. If you don't know the answer, wait and I'll help you."
3. Point to the word cat. Say: "This is cat." After they point say, "Good."

Materials:
Card with the word dog on it and two distracters:
Dog
Hat
Cat

Teacher Says/Does:
"Touch dog." Wait 4 seconds.

Student Response:
1. Student touches dog before additional prompting.
2. Student responds incorrectly before additional prompting.
3. Student waits (does not respond within 4 seconds).

Teacher Feedback:
1. "Good! You got it! That says dog.
2. Point to the word dog. Say: "This is dog. If you don't know the answer, wait and I'll help you."
3. Point to the word dog. Say: "This is dog." After they point say "Good."

Some Tips for Using Time Delay

What do I do if my student keeps guessing/making errors?
Progressive Time Delay. If students begin to make errors whenever the teacher delays the prompt, it may be better to use Progressive Time Delay (PTD). In this approach, the prompt is delayed by a very small increment of time (e.g., 2 seconds). Then the delay is gradually and systematically lengthened, allowing the student more time to respond independently.

Examples:
- 0 seconds, 1 second, 2 seconds, 3 seconds
- 0 seconds, 2 seconds, 4 seconds, 6 seconds

The teacher can also use "wait training." Begin with blank index cards and teach the student to point where you point (or say what you say) after waiting got a specified amount of time.

What do I do if my student always waits/never anticipates a correct response?
Try using a longer delay interval.

More potent reinforcement for independent responses only may motivate the student to anticipate the response. Tell the student how to earn the reinforcer (answer without help).

What if the student does not imitate the prompt?
For some students who do not imitate a model, an alternative is to use physical guidance as the controlling prompt.

What if the response requires matching?
Give the student the card to be matched. When prompting, point to the correct answer on the array. The student places the card to indicate the match.

What if the student responds by eye gazing?
The prompt can still be pointing to the correct option. If this is not salient enough, leave your finger on the correct answer until the student selects it.

Can I use CTD with a chained response like calculator use?
Yes. On the first day model each response (each step of the task analysis) and have the student repeat it (e.g., point to the key on the calculator, don't press it. Let the student press it). Then on the time delay trials, wait the designated number of seconds before prompting each step.

For more ideas, see Additional Resources or consult with an expert in applied behavior analysis.

System of Least Prompts (also known as Least Intrusive Prompting (LIP) or Least to Most Prompting)

Can be used with a task analysis or a chain of behaviors (e.g., entering a multistep equation into a calculator) or a discrete task (e.g., identifying numbers).

A hierarchy of prompts (with a time delay between each prompt) is used on each step of the task analysis (e.g., verbal, gesture/model. physical) until the student makes the targeted response.

## Guidelines for Using System of Least Prompts

1. Select 3-4 prompts in the hierarchy (e.g., verbal, gesture/model, physical). Remember these prompts can be adapted for students with a range of sensory impairments.

   Examples:
   - Students with visual impairments: partial verbal, full verbal, physical
   - Students with hearing impairments: sign/gesture, model, physical
   - If the task involves literal text recall, use the modified System of Least Prompts hierarchy: verbal 1, verbal 2, model, physical (see diagram on pg. 18 and sample script pg. 21-22)

2. Provide the task direction/natural cue (e.g., "Using your calculator to solve the equation 8x12=?"; "What was the dog's name?")
3. Always give the student an opportunity to make the correct response before providing any prompting on each step of the task analysis.
4. Use the least intrusive prompt first and progress to ore intrusive prompts until the learner responds correctly (usually 3-5 seconds delay between prompts).
5. If the student makes an error, immediately provide the most intrusive prompt to ensure the student makes a correct response. For literal text recall, if the student makes an error, immediately move on to the next prompt in the hierarchy (see diagram on pg. 18).
6. Encourage and praise the student after independent, correct responses.

Example of Prompting Hierarchy

The Hierarchy is in the form of a pyramid. The pyramid reads from top (least intrusive) to the bottom (most intrusive): natural cue, verbal prompt, model (show them) and physical prompt.
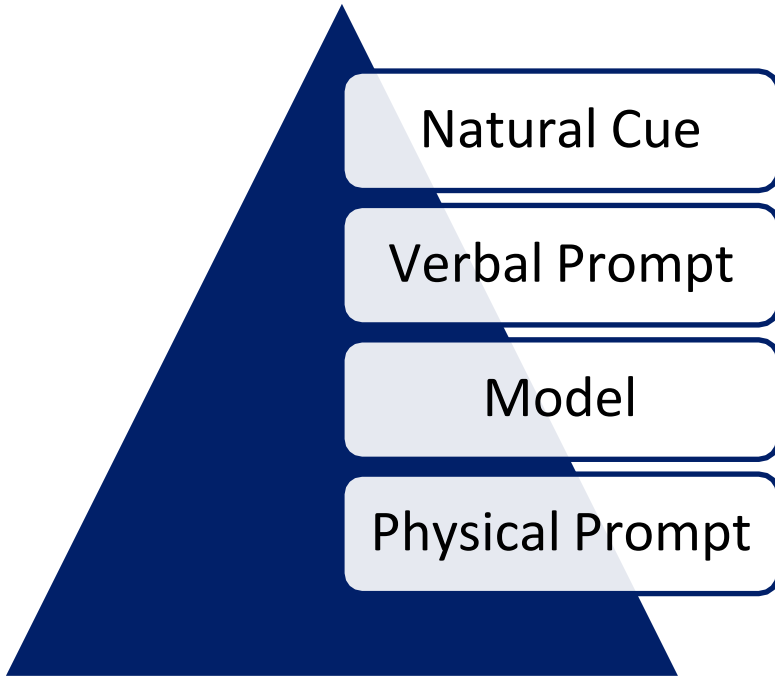
Natural Cue
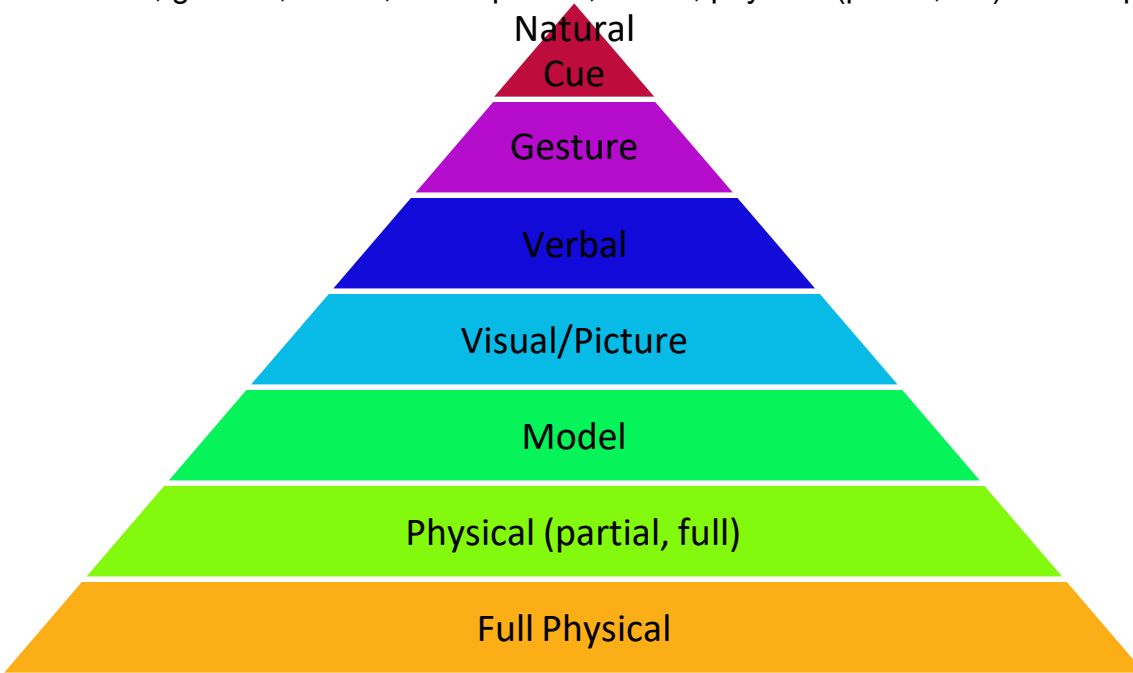
Verbal Prompt

Model

Physical Prompt

The Hierarchy is in the form of a pyramid. The pyramid reads from top (least intrusive) to bottom (most intrusive): natural cue, gesture prompt, light physical prompt, and full physical prompt.

Natural Cue

Gesture Prompt

Light Physical Prompt

Full Physical Prompt
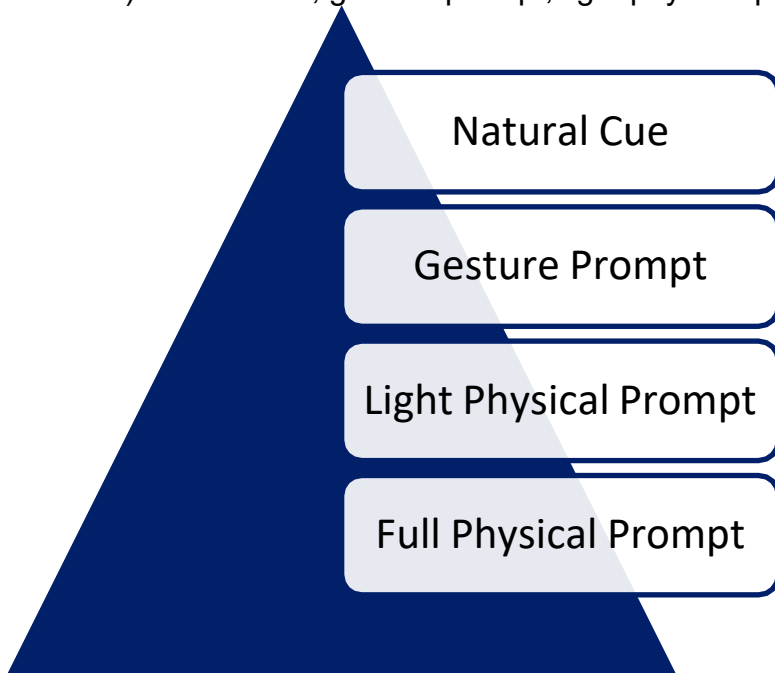
Prompting Hierarchy Pyramid

This is a Prompting Hierarchy Pyramid. The pyramid reads top (least intrusive) to bottom (most intrusive): natural cue, gesture, verbal, visual/picture, model, physical (partial, full) and full physical.

Natural Cue

Gesture

Verbal

Visual/Picture

Model

Physical (partial, full)

Full Physical

Prompting Hierarchy for Literal Text Recall (Reads Top to Bottom)

Natural Cue: Question (e.g., Who is the main character?)

Verbal Prompt 1: Reread 3 sentences containing answer

Verbal Prompt 2: Reread sentence containing answer

Model Prompt: Reread answer and point to it in text

Physical Prompt: Hand over hand assistance to point to answer on response board and state answer

Sample Script for System of Least Prompts (Calculator Use)

*Note: In this example, if the student presses the wrong button, the teacher will have to clear the calculator and re-enter the equation up to the step the student was working on when the error occurred.

Example 1:

Steps/Materials
Student has worksheet with 8x12=__ on it, a calculator, and a pencil.

Teacher Says/Does
"Use your calculator to solve this equation: Eight times twelve equals?"

Student Response	Teacher Feedback
Correct: Student enters 8 into calculator.	"Good." Or wait for them to initiate the next step (2).
Student makes an error.	Provide an immediate physical prompt (take their hand and help them press 8 in the calculator).
Student does not respond.	Wait 3-5 seconds. Provide a verbal prompt "Push 8."
No response after being given a verbal prompt.	Wait 3-5 seconds. Provide a gesture prompt (point to the 8 on the calculator).
No response after being given a gesture prompt.	Wait 3-5 seconds. Provide a physical prompt (take their hand and help them press 8 in the calculator).

Example 2:

Steps/Materials
Student has worksheet with 8x12=__ on it, a calculator, and a pencil.

Teacher Says/Does
N/A (student should start the next step automatically after completing the precious step). Teacher can say "What's next?" or "Keep going."

Student Response	Teacher Feedback
Correct: Student enters the x into calculator.	"Good." Or wait for them to initiate the next step (3).
Student makes an error.	Provide an immediate physical prompt (take their hand and help them press x in the calculator).
Student does not respond.	Wait 3-5 seconds. Provide a verbal prompt "Push the x."
No response after being given a verbal prompt.	Wait 3-5 seconds. Provide a gesture prompt (point to the x on the calculator).
No response after being given a gesture prompt.	Wait 3-5 seconds. Provide a physical prompt (take their hand and help them press x in the calculator)

Example 3:

Steps/Materials
Student has worksheet with 8x12=__on it, a calculator, and a pencil.

Teacher Says/Does
N/A (student should start the next step automatically after completing the previous step). Teacher can say "What's next?" or "Keep going."

Student Response	Teacher Feedback
Correct: Student enters 12 into calculator.	"Good." Or wait for them to initiate the next step (4).
Student makes an error.	Provide an immediate physical prompt (take their hand and help them press 12 in the calculator).
Student does not respond.	Wait 3-5 seconds. Provide a verbal prompt "Push 12."
No response after being given a verbal prompt.	Wait 3-5 seconds. Provide a gesture prompt (point to the 12 on the calculator).
No response after being given a gesture prompt.	Wait 3-5 seconds. Provide a physical prompt (take their hand and help them press 12 in the calculator).

Example 4:

Steps/Materials
Student has worksheet with 8x12=__on it, a calculator, and pencil.

Teacher Says/Does
N/A (student should start the next step automatically after completing the previous step). Teacher can say "What's next?" or "Keep going."

Student Response	Teacher Feedback
Correct: Student enters = into calculator.	Or wait for them to initiate the next step (5).
Student makes an error.	Provide an immediate physical prompt (take their hand and help them press = in the calculator).
Student does not respond.	Wait 3-5 seconds. Provide a verbal prompt "Push ="
No response after being given a verbal prompt.	Wait 3-5 seconds. Provide a gesture prompt (point to the = on the calculator).
No response after being given a gesture prompt.	Wait 3-5 seconds. Provide a physical prompt (take their hand and help them press = in the calculator).

Example 5:

Steps/Materials
Student has worksheet with 8x12=__on it, a calculator, and pencil.

Teacher Says/Does
"What is 8x12=__?"

Student Response	Teacher Feedback
Correct: Student writes/stamps/says/selects 96.	"Good work! 8x12=96."
Students makes an error.	Provide an immediate physical prompt (take their hand and help them write/stamp/say/select 96).
Student does not respond.	Wait 3-5 seconds. Provide a verbal prompt "Look at the calculator."
No response after being given a verbal prompt.	Wait 3-5 seconds. Provide a gesture prompt (point to the 96 on the calculator).
No response after being given a gesture prompt.	Wait 3-5 seconds. Provide a physical prompt (take their hand and help them write/stamp/say/select 96).

Sample Script for System of Least Prompts (Text Based Literal Recall)

*Note: Student either reads an appropriate leveled text or has the appropriate leveled text read to them prior to asking literal recall questions. For example:
It was early morning when Ben woke up in his racecar bed. He was hungry breakfast, so we walked into the kitchen. Ben's mom was making pancakes. She put two pancakes with syrup and butter on his plate. Then said, "You better eat quickly, the bus comes at 8:00, and you don't want to miss it."
*Note: If needed, students may also have response options provided. Response options should include all types of possible responses (e.g., what, who, where, when, what doing both from the story and non-plausible options).

Materials
Student has entire text with adaptations if needed (e.g., Braille, picture symbols, objects, etc.)

Example 1:

Teacher Says/Does
Teacher asks literal recall question (i.e., question can be found in the text): "What was mom cooking?"

Student Response	Teacher Feedback
Correct: Student responds "pancakes."	"Good. She was making pancakes!"
Student makes an error/does not respond.	After 3-5 seconds, provide student with Verbal Prompt 1, which is to read 3 sentences of text containing the answer. "It was early morning when Ben woke up in his racecar bed. He was hungry for breakfast, so we walked into the kitchen. Ben's mom was making pancakes."

Teacher Says/Does
Teacher asks questions again: "What was mom cooking?"

Student Response	Teacher Feedback
Correct: Student responds "pancakes."	"Good. She was making pancakes!"
Student makes an error/does not respond after reading the text.	After 3-5 seconds, provide student with Verbal Prompt 2, which is to read the sentence of text containing the answer. "Ben's mom was making pancakes."

Teacher Says/Does
Teacher asks questions again: "What was mom cooking?"

Student Response	Teacher Feedback
Correct: Student responds "pancakes."	"Good. She was making pancakes!"
Student makes an error/does not respond after rereading the text.	After 3-5 seconds, provide student with a model prompt, which is to read and to point to the answer.

Teacher Says/Does
Teacher asks question again: "What was mom cooking?"

Student Response	Teacher Feedback
Correct: Student respond "pancakes."	"Good. She was making pancakes!"
Student makes an error/does not respond after reading the text.	After 3-5 seconds, point to the answer on response board and state answer "Pancakes." Provide physical prompt (hand over hand assistance) for student to point to correct response.

Materials
Student has entire text with adaptations if needed (e.g., Braille, picture symbols, objects, etc.)

Example 2:

Teacher Says/Does
Teacher asks who question: "Who woke up in a race car bed?"

Student Response	Teacher Feedback
Correct: Student responds "Ben."	"Good. Ben woke up in a racecar bed!"
Student makes an error/does not respond.	After 3-5 seconds, provide student with Verbal Prompt 1, which is to read 3 sentences of text containing the answer. "It was early morning when Ben woke up in his racecar bed. He was hungry for breakfast, so we walked into the kitchen. Ben's mom was making pancakes."

Teacher Says/Does
Teacher asks who question: "Who woke up in a racecar bed?"

Student Response	Teacher Feedback
Correct: Student responds "Ben."	"Good. Ben woke up in a racecar bed!"
Student makes an error/does not respond after reading the text.	After 3-5 seconds, provide student with a model prompt, which is to read and point the answer "Ben."

Teacher Says/Does
Teacher asks who question: "Who woke up in a racecar bed?"

Student Response	Teacher Feedback
Correct: Student responds "Ben."	"Good. Ben woke up in a racecar bed!"
Student makes an error/does not respond after rereading the text.	After 3-5 seconds, point to the answer on response board and state answer. "Ben." Provide a physical prompt (hand over hand assistance) for student to point to correct response.

Model, Lead, Test

Model, Lead, Test is also known as "I do," "we do," "you do."

It is a form of scaffolding that begins with teacher modeling and guidance to support student learning.

As the student progresses, the teacher should provide less support and helps students gain independence with the skill or task.

This can be especially helpful when teaching students academic skills with multiple steps, such as using the Pythagorean Theorem or completing a graphic organizer.

Steps to Using Model, Lead, Test

1. First (Model or "I do"), the teacher models the skill/task/strategy while students watch.
2. Next (Lead or "we do"), the teacher leads the students to use the skill/task/strategy simultaneously with the teacher.
3. Last (Test or "you do"), the teacher has the students complete the skill/task/strategy independently and observes to see if they responded correctly.

Guidelines for Using Model, Lead, Test

Student(s) must respond with a predetermined level of accuracy during the test phase to consider the skill mastered prior to moving on; for example, 80% accuracy for 2 consecutive sessions.

If students make an error, a correction is provided in the form of modeling the correct response, then having the student correctly perform the step.

Model, Lead, Test is not appropriate for students who are not able to observe someone perform an action and attempt to imitate that action (e.g., students without imitation skills).

You can easily test this by observing the student performing a few behaviors/movements (e.g., clap your hands). Do NOT say "clap your hands."

If the student attempts to imitate the action (e.g., claps their hands) then model, lead, test may be an appropriate teaching strategy for that student.

Sample Script for Model, Lead, Test (Measuring Length in Inches with Ruler)

Model

Steps/Materials	Teacher Says/Does	Student Response	Teacher Feedback
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	"We can use a ruler to measure the length of an item. Watch me measure the length of this pencil." Line up the ruler to the pencil and say, "First, I line up the ruler alongside the pencil, starting at zero."	Student watches	"Good watching me."
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	Move your finger to the end of the pencil and point to the corresponding number on the ruler and say. "Then I move my finger to the end of the pencil."	Student watches	"Good watching me."
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	"Now I read the number on the ruler that is closest to the end of the pencil. Look this pencil measures seven inches."	Student watches	"Good watching me."

Lead

Steps/Materials	Teacher Says/Does	Student Response	Teacher Feedback
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	"Now, let's measure the marker. Let's do it together, watch me and do what I do." Line up the ruler to the marker and say "First, line up the ruler alongside the marker, starting at zero."	Student lines up the ruler alongside the marker, starting at zero.	"Good lining up the marker with the zero on your ruler."
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	Move your finger to the end of the marker and point to the corresponding number on the ruler and say, "Then move your finger marker."	Student moves their finger to the end of their marker.	"Good, moving your finger to the end of your marker."
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	"Now read the closest number on the ruler. Look this marker measures six inches. How long is your marker?"	Student correctly says/selects/indicates the length of their marker.	"Great work measuring the marker!"

Sample Script for Model, Lead, Test (Measuring Length in Inches with Ruler) continued
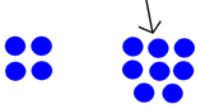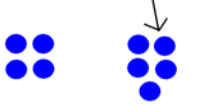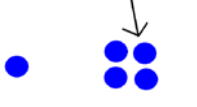
Test

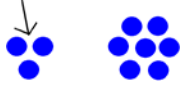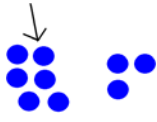| Steps/Materials	Teacher Says/Does	Student Response	Teacher Feedback
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	N/A	Student moves their finger to the end of their spoon.	"Good moving your finger to the end of your spoon."
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	N/A	Student makes an incorrect response or no response.	"Watch me" and model the correct response, then have the student complete it correctly (not scored).
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	N/A	Student correctly says/selects/indicates the length of their spoon.	"Great work measuring the spoon!"
Teacher and student: 1. Marker (to measure) 2. Clearly labeled ruler	N/A	Student makes an incorrect response or no response.	"Watch me" and model the correct response, then have the student complete it correctly (not scored).
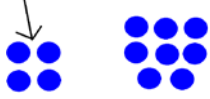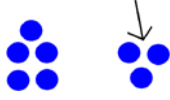
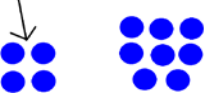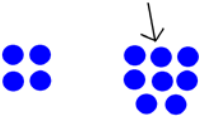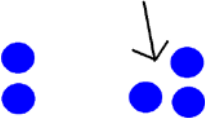# *Sample Script for Example, Non-Example Training (Teaching Concept)*

Examples (Vary only the relevant feature)

Materials	Teacher Says/Does	Student Response	Teacher Feedback
Picture of two different amounts.	Point to the larger amount and say, "This is greater."	Student watches.	"Good watching." Or no response.
Picture of two different amounts.	Point to the larger amount and say, "This is greater."	Student watches.	"Good watching." Or no response.
Picture of two different amounts.	Point to the larger amount and say, "This is greater."	Student watches.	"Good watching." Or no response.
Picture of two different amounts.	Point to the larger amount and say, "This is greater."	Student watches.	"Good watching." Or no response.

Interspersed Example and Non-Examples (Randomize order of trials)

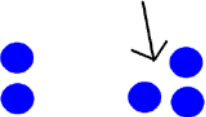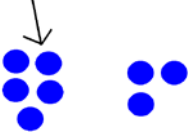| Materials	Teacher Says/Does	Student Response	Teacher Feedback
Picture of two different amounts.	Point to the smaller amount and say, "Not greater."	Student watches.	"Good watching." Or no response.
Picture of two different amounts.	Point to the smaller amount and say, "Not greater."	Student watches.	"Good watching." Or no response.
Picture of two different amounts.	Point to the larger amount and say, "Not greater."	Student watches.	"Good watching." Or no response.
Picture of two same amounts.	Point to both amountsand say, "Not greater."	Student watches.	"Good watching." Or no response.
Picture of two different amounts.	Point to the larger amount and say, "This is greater."	Student watches.	"Good watching." Or no response.
Picture of two same amounts.	Point to both amountsand say, "Not greater."	Student watches.	"Good watching." Or no response.
Picture of two different amounts.	Point to the larger amount and say, "This isgreater."	Student watches.	"Good watching." Or no response.

Student Responses (Randomize order of trials)

Materials	Teacher Says/Does	Student Response	Teacher Feedback
Picture of two different amounts.	Point to the smaller amount and say "Ok, now it's your turn. Is this a greater or not greater?"	1. Student responds "not greater" vocally, by using symbols, or an assistive technology device. 2. Student makes an incorrect response or no response.	1. "Good, this is not greater." 2. "Not greater. Repeat after me… not greater." Then repeat 3 trials of you demonstrating greater/not greater
Picture of two different amounts.	Point to the larger amount and say "Ok, now it's your turn. Is this a greater or not greater?"	1.Student responds "greater" vocally, by using symbols, or an assistive technology device. 2.Student makes an incorrect response or noresponse.	1."Good, this is greater." 2. "Greater. Repeat after me…greater." Then repeat 3 trials of you demonstrating greater/not greater before moving to the next trial (not scored).
Picture of two different amounts.	Point to the larger amount and say "Ok, now it's your turn. Is this a greater or not greater?"	1. Student responds greater" vocally, by using symbols, or an assistive technology device. 2. Student makes an incorrect response or noresponse.	1."Good, this is greater." 2. "Greater. Repeat after me…greater." Then repeat 3 trials of you demonstrating greater/not greater before moving to the next trial (not scored).

Student Responses (Randomize order of trials) continued

Picture of two different amounts.	Point to the larger amount and say "Ok, now it's your turn. Is this a greater or not greater?"	1. Student responds greater" vocally, by using symbols, or an assistive technology device. 2. Student makes an incorrect response or no response.	1."Good, this is greater." 2."Greater. Repeat after me… greater." Then repeat 3 trials of you demonstrating greater/not greater before moving to the next trial (not scored).
Picture of two same amounts.	Point to one amount andsay "Ok, now it's your turn. Is this a greater or not greater?"	1. Student responds "not greater" vocally, by using symbols, or an assistive technology device. 2. Student makes an incorrect response or no response.	1."Good, this is not greater." 2."Not greater. Repeat after me… not greater." Then repeat 3 trials of you demonstrating greater/not greater before moving to the next trial (not scored).
Picture of two different amounts.	Point to the larger amount and say "Ok, now it's your turn. Is this a greater or not greater?"	1. Student responds "greater" vocally, by using symbols, or an assistive technology device. 2. Student makes an incorrect response or noresponse.	1."Good, this is greater." 2."Greater. Repeat after me… greater." Then repeat 3 trials ofyou demonstrating greater/not greater before moving to the next trial (not scored).

Generalization When Using Example,Non-Example Training

In order to promote generalization, use different objects/pictures on different days (e.g., on day two use apples, day three use cars, day four use hats, day five use star stickers). Do not vary objects within a session (e.g., if you are using apples, continue to use apples for that entire session). Use thesame script as above, simply using the other objects.
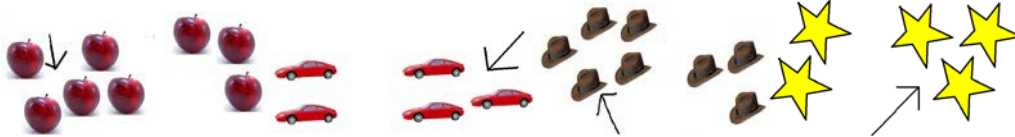
Once the student masters greater than in the above format now introduce new formats. These includegreater than with volume and greater than with numbers.

Once the student masters greater than in the above format, now introduce the symbol (>). Teach students to identify the amount that is greater and turn the opening of the symbol to the greater thanamount.

Only after the student has fully mastered the concept of greater, then introduce the concept of less than (e.g., do not teach opposing concepts simultaneously). Use the same procedures as above (lessthan, not less than) to teach less than; however, if you are showing students a trial of "not less than" you should accept a response of either "not less than" or "greater."

Sample Script for Example, Non- Example Training (Teaching Setting)

Note: Student either reads an appropriate leveled text or has the appropriate leveled text read to themprior to teaching setting. For example:

It was early morning when Ben woke up in his racecar bed. He was hungry for breakfast, so we walkedinto the kitchen. Ben's mom was making pancakes. She put two pancakes with syrup and butter on his plate. Then she said, "You better eat quickly, the bus comes at 8:00, and you don't want to miss it." Benate his pancakes and ran outside. He got on the bus and rode to school. He was excited about school because there was a bookfair going on in the library.

**Note: If needed, students may also have response options provided. Response options should include alltypes of possible responses (e.g., plausible, and non-plausible).

Examples (Vary only the relevant feature)

Materials	Teacher Says/Does	Student Response	Teacher Feedback
Picture or symbol for kitchen with the word "kitchen."	Hold up the kitchen visual. "Setting is a place that is in a story. The kitchen is a setting in our story."	Student watches.	"Good watching." Or no response.
Picture or symbol for outside with the word "outside."	Hold up the outside visual. "Outside is a setting in our story."	Student watches.	"Good watching." Or no response.
Picture or symbol for school with the word"school."	Hold up the school visual. "School is a setting in our story."	Student watches.	"Good watching." Or no response.
Picture or symbol for library with the word "library."	Hold up the library visual. "Library is a setting in our story."	Student watches.	"Good watching." Or no response.

Interspersed (Example) and Non-Examples (Randomize order of Trials)

Materials	Teacher Says/Does	Student Response	Teacher Feedback
Picture or symbol for Ben with the word "Ben."	Hold up the Ben visual. "Ben is NOT a setting in our story."	Student watches.	"Good watching." Or no response.
Picture or symbol forpancakes with the word "pancakes."	Hold up the pancakes visual. "Pancakes are NOT a setting in our story."	Student watches.	"Good watching." Or no response.
Picture or symbol for outside with the word "outside."	Hold up the outside visual. "Outside is a setting in our story."	Student watches.	"Good watching." Or no response.
Picture or symbol for gym with the word "gym."	Hold up the gym visual. "Gym is NOT a setting in our story."	Student watches.	"Good watching." Or no response.
Picture or symbol for kitchen with the word "kitchen."	Hold up the kitchen visual. "The kitchen is a setting in our story."	Student watches.	"Good watching." Or no response.
Picture or symbol for mom with the word "mom."	Hold up the mom visual. "Mom is NOT a setting in our story."	Student watches.	"Good watching." Or no response.
"Picture or symbol for library with the word "library."	Hold up the library visual. "Library is a setting in our story."	Student watches.	"Good watching." Or not response.

Student Responses (Randomize order or trials)

Materials	Teacher Says/Does	Student Response	Teacher Feedback
Picture or symbol forbooks with the word "books."	Hold up the books visual. "Okay, now your turn. Are books a setting in our story?"	1.Student responds "nota setting" vocally, by using symbols, or an assistive technology device. 2.Student makes an incorrect response or no response.	1."Good, books are not a setting." 2."Not a setting. Books are not a place in our story. Repeat after me… not a setting." Then repeat 3 trials of you demonstrating setting/not a setting before moving to the next trial (not scored).
Picture or symbol for school with the word "school."	Hold up the school visual. "Is school a setting in our story?"	1. Student responds "setting" vocally, by using symbols, or an assistive technology device. 2. Student makes an incorrect response or noresponse.	1. "Good, the school is a setting." 2. "Setting. The school is a place in our story. Repeat after me… setting." Then repeat 3 trials of you demonstrating setting/not setting before moving to the next trial (not scored).

Picture or symbol for kitchen with the word "kitchen."	Hold up the kitchen visual. "Is kitchen a setting in our story?"	1. Student responds "setting" vocally, by using symbols, or an assistive technology device. 2. Student makes an incorrect response or noresponse.	1. "Good, the kitchen is a setting." 2. "Setting. The kitchen is a place in our story. Repeat after me…setting." Then repeat 3 trials of you demonstrating setting/not setting before moving to the next trial (not scored).
Picture or symbol for park with the word "park."	Hold up the park visual."Is park a setting in our story?"	1. Student responds "nota setting" vocally, by using symbols, or an assistive technology device. 2. Student makes an incorrect response or noresponse.	1. "Good, the park is not a setting." 2. "Not a setting. The park is not a place in our story. Repeat afterme… not a setting." Then repeat 3 trials of you demonstrating setting/not a setting before moving to the next trial (not scored).

Picture or symbol for library with the word "library."	Hold up the library visual. "Is library a setting in our story?"	1.Student responds "setting" vocally, by using symbols, or an assistive technology device. 2. Student makes an incorrect response or noresponse.	1."Good, the library is a setting." 2. Setting. The library is a place in the story. Repeat after me…setting." Then repeat 3 trials of you are demonstrating setting/not setting before moving to the next trial (not scored).

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