Prompts, Probing, and Prompt Fading in ABA and PBS

In Applied Behavior Analysis (ABA) and Positive Behavior Support (PBS), prompting refers to the use of additional cues or assistance to evoke a desired response that might not occur independently. Prompts increase the likelihood that a learner will engage in the correct behavior, which can then be reinforced.

Prompts come in many forms, such as:

- Physical prompts: Guiding the learner's body.
- Model prompts: Demonstrating the action.
- Gestural prompts: Pointing or motioning.
- Verbal prompts: Spoken hints or instructions.
- Visual prompts: Pictures, symbols, or text.
- Positional prompts: Placing materials to guide responses.
- Echoic prompts: Having the learner repeat a verbal model.

In both ABA and PBS, prompts serve to support learning while promoting dignity, autonomy, and the eventual goal of independent skill performance.

Why We Fade Prompts

Prompt fading is the systematic reduction or removal of prompts to transfer stimulus control from the prompt to the natural environmental cue, or discriminative stimulus (SD).

The rationale for fading prompts includes:

- Avoiding prompt dependency, where the learner only responds when prompted.
- Encouraging independent functioning, which aligns with PBS's emphasis on autonomy and quality of life.
- Ensuring that behavior is maintained in natural contexts, not just structured teaching settings.

Probing to Identify Prompt Levels

A probe is a brief, structured assessment used to determine how much assistance a learner requires before formal teaching begins. Probing allows practitioners to:

- Avoid over-prompting.
- Identify the least intrusive yet effective prompt.
- Tailor teaching to the learner's current capabilities.

Example Process:

1. Present the natural cue (SD).
2. Wait for an independent response.
3. If no response, provide the least intrusive prompt (e.g., gestural).
4. Progress to more intrusive prompts (e.g., model, partial physical, full physical) until the learner responds.

The highest level of prompt needed during probing sets the starting point for instruction, while the prompt hierarchy guides the plan for fading.

Prompt Hierarchies

A prompt hierarchy is an ordered sequence of prompts, either from most to least intrusive or least to most, designed to guide learners toward independence.

Common Prompt Hierarchies:

- Most-to-Least (MTL): Start with the most intrusive prompt (e.g., full physical), then systematically reduce.
- Least-to-Most (LTM): Start with the least intrusive (e.g., gestural) and increase support only as needed.
- Echoic Hierarchies: Full echoic prompt, partial echoic, time delay, independent.
- Graduated Guidance: Dynamic physical support, adjusted moment-to-moment. System of Least Prompts: A structured sequence applied within sessions.

Prompt hierarchies provide a roadmap for both teaching and fading supports. Please note that these categories of prompt hierarchies may overlap in practice.

Fading Prompts: Within Sessions vs. Across Sessions

Prompt fading can occur:

- Across Sessions: The prompt level is reduced between sessions when data show consistent success.
- Within Sessions: Prompt levels are faded dynamically in the same session as the learner demonstrates competence.

Example:

- Across Sessions: A learner receives partial physical prompts to brush teeth for three sessions. Upon meeting mastery criteria (e.g., 80% independent trials across sessions), prompts are faded to modelling.
- Within Sessions: A learner making coffee starts with visual prompts. After successful trials, the coach drops to verbal prompts within the same session.

Standard Prompting Procedures

Most-to-Least (MTL):

- Start with maximum support.
- Example: Teaching coat-wearing with full physical, then partial, then model, then verbal.

Least-to-Most (LTM):

- Start with minimal assistance.
- Example: Vending machine use, starting with a visual prompt, then verbal, gestural, and so on.

Graduated Guidance:

- Physical prompts that fade within the action.
- Example: Lightly guiding hand movements while zipping a backpack, reducing touch as competence emerges.

Time Delay Procedures:

- Introduce a delay between the SD and prompt.
- Types: Constant time delay (fixed interval) and progressive time delay (gradually increasing the delay).
- Example: Teaching a child to say "help" after 0s, 3s, 5s delays.

Using Data to Drive Prompt Fading

Data collection is critical to:

- Determine when to fade prompts.
- Avoid premature fading that leads to errors.
- Establish mastery criteria (e.g., 80-90% correct over 2-3 sessions).

Prompt fading decisions should be data-based, ensuring learners build fluency and generalization.

Ethical Considerations in Prompting and Fading

- Physical Prompts vs. Physical Control: Prompts are assistance, not coercion. They should not require force.
- Consent: Physical prompts require consent or assent.
- Dignity: Minimizing intrusiveness aligns with a rights-based approach.
- Least Restrictive Support: Always seek the lowest level of support needed.

Vignettes Illustrating Prompting and Fading Strategies

Most-to-Least Prompting: Teaching a Child to Wear a Coat

Sam is a six-year-old autistic child who has never put on his coat without help. When it's time for outdoor play, his behavior technician begins with full physical prompting, gently guiding Sam's arms into the sleeves and zipping up the coat with him. Over a few sessions, Sam becomes more familiar with the movements, so the technician steps down to partial physical prompting , guiding only one arm, allowing Sam to find the other sleeve himself.

As Sam's confidence builds, the technician shifts to modelling, putting on her own coat while narrating each step. When Sam watches but doesn't act, she adds a gestural prompt, pointing to his coat. Eventually, the technician fades to just a verbal prompt, "It's time to put your coat on," and finally, no prompt at all.

Soon, Sam begins to put his coat on independently when he sees others preparing to go outside, the natural cue. The progression from maximum to minimal support allows him to succeed without becoming dependent on adult assistance.

Least-to-Most Prompting: Using a Vending Machine at Work

Lena, a 25-year-old woman with an intellectual disability, is learning to use the staffroom vending machine at her new job. The job coach starts by giving the natural cue, "Go ahead and get a snack," and waits. When Lena stands still, the coach presents a visual prompt: a diagram illustrating the steps of using the machine.

Lena remains unsure, so the coach adds a verbal prompt, saying, "Put the coin here." Still uncertain, Lena watches the coach gesturally prompt by pointing to the coin slot. Eventually, the coach models the entire process by inserting a coin herself and pressing the button. When needed, she provides partial physical guidance, helping Lena hold and insert the coin.

Over time, Lena begins to initiate each step after the visual prompt, reducing the need for more intrusive help. The least-to-most sequence ensures that Lena gets just enough support to succeed while encouraging her independence.

Graduated Guidance: Zipping a Backpack

Jonah, a 7-year-old with motor coordination difficulties, is learning to zip his backpack. His therapist uses graduated guidance, starting by placing her hand over Jonah's to help him grasp the zipper. As Jonah starts pulling, she reduces the pressure of her guidance, allowing him to continue with minimal support.

If Jonah pauses or struggles, she briefly increases the prompt, a light touch or a guiding motion, then withdraws again as he progresses. Gradually, Jonah completes the task with just verbal encouragement, and eventually, no assistance at all.

Time Delay: Requesting Help with a Puzzle

Sasha, age 5, loves puzzles but becomes frustrated when pieces don't fit. To teach her to request help, the therapist introduces a 0-second time delay, immediately prompting Sasha to say, "Help please!" every time she struggles. As Sasha repeats this consistently, the therapist increases the delay to 3 seconds, waiting to see if Sasha requests help independently before prompting.

With practice, the time delay is extended, and Sasha starts asking for help without any prompt, reducing her frustration and fostering effective communication.

System of Least Prompts: Greeting a Peer

In a social skills group, Maya, a teenager with social anxiety, is working on greeting her peers. When a peer enters the room, the therapist waits to see if Maya greets them spontaneously. When she does not, the therapist gives a verbal prompt, "Say hi to Jamie."

If there is still no response, the therapist models the greeting by saying, "Hi Jamie!" and waving. If Maya remains hesitant, the therapist adds a gestural prompt by waving towards Jamie, or lightly guides Maya's hand to wave (partial physical prompt).

After several sessions, Maya begins greeting her peers independently or with just a verbal cue, demonstrating progress in social engagement.

Echoic Prompt Hierarchy with Time Delay: Teaching a Toddler to Say Please

At snack time, Ava, a neurotypical toddler, reaches for a biscuit without saying anything. Her father starts by using a full echoic prompt, saying, "Say please," and Ava repeats the word to receive the biscuit.

Once Ava consistently echoes, her father switches to a partial echoic prompt, "Plee…," allowing Ava to finish the word. As her fluency improves, he introduces a time delay, waiting a few seconds after Ava reaches for a snack to see if she says "please" independently.

Over a few days, Ava begins saying "please" without any prompting, having transferred the behavior from prompted to independent through fading.

Probing to Identify Prompt Level: Learning to Tie Shoelaces

Before teaching shoelace-tying, the behavior analyst conducts a prompt probe with Liam, a child with fine motor difficulties. Presented with his shoes, Liam does not respond to a verbal prompt. A model prompt results in partial imitation but no success. A gestural prompt yields no progress.

Finally, when the analyst uses partial physical guidance, Liam completes the task. The probe establishes partial physical as the starting prompt level, with a planned fading sequence from physical to modelling, to gestures, to verbal prompts, and ultimately to independence.

Within-Session Fading: Operating a Coffee Machine

In a supported employment programme, Darius is learning to operate a coffee machine. The job coach starts by providing the natural cue: "Can you make me a coffee?" When Darius hesitates, the coach offers a visual prompt, showing a diagram of the steps. After some success, the coach fades to a verbal prompt.

As Darius becomes more proficient, the coach stops using visuals and provides only verbal reminders. By the session's end, Darius completes the task independently, showing that within-session data and observation can guide real-time prompt fading.

Conclusion

Prompting and prompt fading are fundamental to teaching in ABA and PBS, but must be driven by data, respect for the learner, and ethical considerations. A structured, thoughtful approach ensures not only skill acquisition but also the preservation of dignity, autonomy, and the potential for genuine independence.