TOLERANCE FOR DELAYED REINFORCEMENT

What Is It?

Tolerance for delayed reinforcement is a strategy where the teacher teaches the student a signal that indicates reinforcement is about to be delivered contingent on the student’s appropriate behavior. For example, the teacher signals to the student by saying “just one more minute” or “you’re almost done” to indicate that student will be released from a task or be given access to a reinforcer.

When to Use It

- Tolerance for delayed reinforcement is effective when the teacher would like to increase the time the student engages in a task or activity that the student would like to escape.
- Tolerance for delay of reinforcement can be used when the teacher would like to increase the amount of time a student will wait to access someone’s attention or obtain access to an item or activity.

Steps to Implementation / How to Do It

After identifying a task or activity the student is trying to escape or gain access to someone or something:

1. Determine the shortest period of time the student will wait before engaging in challenging behavior; this is called the critical time period.

2. Choose a delay cue. Delay cues can be verbal or visual and indicate the reinforcement will be delivered after the child engages in the identified socially appropriate behavior for a specified amount of time or task (e.g. “Two more math problems and then you can take a break” or “two more minutes of work, then you can have computer time”).

3. Identify a release cue. Release cues can be verbal or physical and indicate the student has completed the requested requirements as laid out in the delay cue (e.g., two more problems) and that reinforcement is being delivered (e.g. “Okay, now you can take a break”).

4. At the point in the school day in which you want to use the intervention, engage the student in the activity.

5. Deliver the delay cue just prior to the critical time period (i.e., the amount of time a student can stay in the task or wait for an item).

6. Continue to engage the student in the activity for an additional small task or short time period as specified by the delay cue.

7. Deliver the release cue when the student has successfully engaged in the appropriate behavior for the specified time period or task.
8. Systematically increase the amount of time the student must wait for reinforcement (e.g., release from the task or access to the preferred item) after the student is successful across multiple opportunities. The amount of time a student stays engaged in the task or waits for access to an item or someone attention can be increased in two ways: by increasing the time between the delivery of the delay cue and then release cue or by increasing the critical time period (i.e., the time between the beginning of the task or wait period and delivery of the delay cue).

Example

Ashley can stay engaged in independent seatwork for about 10 minutes before demonstrating challenging behaviors. Ashley will put her head down on her desk and stop working or leave her desk and wander around the classroom to escape the activity. Because Ashley can work independently for at least 10 minutes, the critical time period is 10 minutes. Mr. Landry provides instruction for math and then asks his students to start independent math work. At 9 minutes and 30 seconds, he quietly tells Ashley “two more problem and then you are done”. After Ashley finishes her two problems, Mr. Landry tells Ashley that she is done with her work and can take a break in the library.

Once Ashley is successful in engaging in the appropriate behavior over the course of several work periods, Mr. Landry increases the number of problems she must complete to 3 before she is released from the independent work. After several more successful opportunities completing 3 more problems, Mr. Landry increases tells Ashley she must complete 5 more problems before taking a break. After many increases in the number of problems required for Ashley, Mr. Landry decides to change the delay cue to a general cue. After 9 minutes and 30 seconds, Mr. Landry delivers the delay cue to Ashley saying, "keep working, you’re doing great."

How to Increase Effectiveness

- Delivery of the release cue and reinforcement should only be given if the student continues to engage in the appropriate behavior for the amount of time specified in the delay cue.
- Ensure that reinforcement is delivered when specified. That is, release the student after two more problems if the delay cue was “complete two more problems”. Do not increase the requirements for reinforcement during a given opportunity.
- Gradually increase the requirements to stay in the task (e.g., “three more problems”). Increasing in short increments will be more effective.
- Use specific cues, such as, “Read 2 more minutes” instead of general such as “Almost done”.
- This intervention can be used with verbal cues, visual cues, or a combination of cues.

Resources