

### *The Difference between Reinforcement and Rewards*

Reinforcement is contingent on the ebb and flow of behavior. It consists of a *relation*. **Rewards** are *things*: tangible items or privileges. In some circumstances, especially when working in special education, tangible items are used to build behavior. They should be used with care. They can create a dependency that may be hard to break (see Chapter 12), and their delivery is controlled by a person other than the behaving individual. In a regular classroom most tangible items and privileges that teachers use do not have clear connections to moment-to-moment behavior. Whether, for example, your student moves her fingers rapidly as she works on problem six, or whether she is thinking of

recess at exactly 10:35, are actions that have been determined by immediate contingencies, not by a distant reward. It would be nice if distant payoffs controlled behavior effectively. Then none of us would be overweight, or drink too much, or procrastinate.

The target of rewards also differs from that of reinforcement: You reward students, you reinforce actions. Becoming sensitive to the relationship between actions and their immediate results gives you an understanding of behavior that thinking of rewards cannot provide. Many things that reinforce behavior would never be considered rewards. Take, for example, a reminder to sit down.

*Example: Unplanned Reinforcement in a First-Grade Class: The “Criticism Trap”*

Telling a student to sit down would never be called a reward, but a study showed that it reinforced behavior. The study was done in a first grade of 48 children. A movable divider partly separated the room into two sections, each of which had one teacher. During the study, the teachers in each section of the room worked on reading with small groups, while the rest of the children were assigned seat work.

For 20 minutes each day, two observers came into each part of the room and recorded the children’s behavior. Every 10 seconds each observer counted how many children were out of their seats. They also recorded whether or not the teacher had told them to get back to their seats during that 10-second period.

During the first six days, roughly three children were standing during each 10-second observation period. Over the 20 minutes, their teachers told them to sit down about seven times. Then “some very strange events began to occur.”<sup>16</sup> The teachers were instructed to tell the children to sit down *more* often. They did so for 12 days—telling the standing students to sit down almost four times as often as before. The result was an *increase* in the number of children standing: 50 percent more children stood up than before the teachers had increased saying “sit down.”

The sequence was tried again. For the next eight days, the teachers went back to saying "sit down " only 7 times in twenty minutes. Out-of-seat behavior declined to an average of 3 times every ten seconds. Again the teachers were asked to tell the children to sit down more often (28 times in twenty minutes). Again the children stood up more—4 times every ten seconds.

What can be going on? How do we explain such happenings? There is one further perplexing piece of information. The children actually did sit down when asked by the teacher to do so, so the result wasn't just due to a few children standing a lot.

A beautiful **trap!** Imagine, the teacher thought that telling the children to sit down worked, because they did sit down, but that was only the immediate effect. The effect on standing was not seen until later and might have been missed altogether by the teacher if careful observations had not been made. Her words were in fact having exactly the opposite effect on standing from what she desired.<sup>17</sup>

Telling students to sit down *follows* standing so it is a postcedent procedure. Telling students to sit down more often produced standing up more often: The postcedent was positive reinforcement. The authors called it the **Criticism Trap**.

There was one more part of this study. The teachers were asked to stop telling the children to sit down altogether. Instead they were asked to comment approvingly to

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The **Criticism Trap** is a situation where criticizing a behavior you wish to decrease seems to work because it temporarily decreases the behavior, but your criticizing actually strengthens the operant so that it occurs more frequently in the future.

students who were sitting and working. That produced the lowest levels of standing in the whole study.

Inadvertently reinforcing the very behavior you wish to eliminate is a common occurrence in classrooms.<sup>18</sup> Whenever you criticize sloppy writing, doodling, talking out, looking out the window, or any inappropriate behavior, there is a chance you may be reinforcing just what you want to weaken. If so, you are caught in the **Criticism Trap**.

This kind of interaction is why it is so important to understand contingencies. Many of the problems that teachers encounter in their classrooms are maintained by their own actions. If so, changing the timing of those actions will improve behavior. This was illustrated in a college lecture.

*Example: Timing the End of a College Lecture to Improve Behavior*

As a young professor I was assigned a lecture course to several hundred students (See Chapters 1 and 2). As I wrapped up my first 50-minute lectures, many students snapped notebooks, put on their coats, and otherwise got ready to leave. The noise and commotion bothered me and I began escaping the commotion by ending class a minute or two early. By becoming noisy, the students were setting up a situation where excusing them was reinforcing for *me*. The *students'* behavior also appeared to be strengthened by the announcement of the end of class. If this analysis was correct, I could change the students' actions by changing the timing of my dismissal.

The next session, I listened carefully as the minute hand approached the end of the lecture hour, talking all the while. Just as there was a tiny lull in the commotion, I quickly said, "See you next week." I followed this procedure for a few more sessions. The effect was dramatic. Without looking at the clock, I could tell when the hour was almost up because the class got especially quiet! For the students, going on to their next activity was reinforcing. When ending class was contingent on staying especially quiet, that behavior was strengthened. Note that I did not admonish the students by saying something like, "I'll let you go when you are quiet." The procedure worked by timing reinforcement only.

In high schools, you will often notice increased noise near the ends of classes. Even if your school uses bells for class change, there are a few seconds just before the bell rings when you can excuse class a tiny bit early. If you consistently do so at the exact moment you detect a tiny drop in your students' commotion, you will soon notice less noise at the end of the period.