Journal of Education and Practice
ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)
Vol.15, No.2, 2024

An Innovative Technique Teachers Can Use to Both Increase Students' Appropriate Behaviors While Decreasing Their Inappropriate Behaviors

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Abstract

An inability to effectively manage students' challenging behaviors is one of the reasons 40% to 50% of teachers leave the profession within the first five years of their career. Many teachers dread dealing with students who misbehave because it has become such an unpleasant experience. They either avoid it or send students out of the room, usually to the principal's office. The purpose of this article is to provide teachers with a fun, positive way to simultaneously increase students' appropriate behaviors while decreasing their inappropriate behaviors without the use of punitive techniques. The technique is a reinforcement delivery system called chart moves. Chart moves are effective in increasing students' motivation to engage in positive prosocial and academic behaviors while also decreasing inappropriate behaviors otherwise used to escape academic tasks perceived to be unpleasant.

Keywords: positive reinforcement, chart moves, motivational strategy, students with challenging behaviors

DOI: 10.7176/JEP/15-2-04

Publication date: February 28th 2024

1. Introduction

Individuals enter the teaching profession, presumably, to help children learn with the implicit belief that they enjoy working with children and have a passion for teaching (e.g., Henry et al. 2012; Osguthorpe and Sanger 2013). Nevertheless, the startling reality is that up to 50% of teachers leave the profession within the first five years (Amitai and Van Houtte 2022; Noordzij and van de Grift 2020). There are several reasons for teachers leaving the profession, such as low pay, overwhelming amounts of paperwork, and a general feeling of burnout. However, one characteristic stands out among others: having to deal with students' challenging behaviors (Hodge 2015).

It should come as no surprise that dealing with students' challenging behaviors is a main reason to leave teaching. Teachers have consistently listed behavior management as the most needed topic for in-service training (e.g., Coalition for Psychology in Schools and Education 2006; Martin et al. 1999). Merrett and Wheldall (1993) interviewed 176 secondary school teachers regarding their professional training and behavior management. Nearly three-quarters of them were dissatisfied with the preparation in this area while a majority indicated interest in attending training courses in behavior management. Gebbie et al. (2012) found that when classroom teachers of preschool children with disabilities were surveyed, their most frequent request was how to address students' challenging behaviors. Teachers' desire for training in behavior management runs the gamut from those who teach preschoolers to those working with high school students.

Part of the problem may be that both preservice and current general education teachers tend to believe the cause of students' problem behaviors reside within the individual and ascribe to developmental explanations rather than those based on learning and principles of applied behavior analysis such as reinforcement histories for engaging in problematic behaviors (Skinner and Hales 1992). Even for special educators, who typically receive a course in behavior management, many schools nevertheless rely heavily on various punishment and exclusionary approaches that creates a culture that does not view behavior management positively or that teachers have any role in creating and maintaining student behavior problems (Maag 2012). Exclusionary practices are so negatively reinforcing to teachers because sending a misbehaving student out of the classroom terminates the unpleasantness of the student's misbehavior (Maag 2018). However, managing students' challenging behaviors does not have to take monumental effort on the part of teachers nor does it need to be viewed as an onerous task. Nevertheless, this view is pervasive with the way behavior management is portrayed—purposely or not—as the use of punitive or negative consequences that are, frankly, invisible and unappealing. Contrast this view with how schools present

academic content. Individuals entering a school library, kindergarten, or high school biology classrooms will notice visually appealing displays of all sorts of colorful pictures of content and curriculum. There is no reason why behavior management cannot be just as visually appealing and presented in a positive fashion. In fact, Collins and Landrum (2022) described several behavioral interventions to enhance relationships with students who display challenging behaviors. Further, positive and interesting ways to also increase motivation for behaving appropriately compliment ways to build relationships with students.

The purpose of this article is to fold: First, positive reinforcement will be explained in an easy practical way while differentiating between positive reinforcement and ways to *deliver* positive reinforcement. Second, a novel way to improve students' appropriate behavior and eliminate inappropriate behaviors by using reinforcement instead of punishment or other forms of negative consequences will be described along with implementation guidelines.

2. Positive Reinforcement and Delivery Systems

There is, arguably, no more misunderstood term in education than positive reinforcement. Misconceptions regarding positive reinforcement abound—it is not a reward, it is not bribery, it is not coercive, and it is not a manipulative tool wielded to make people engage in behaviors chosen by others (Maag 2018). Yet to many, it still carries a negative connotation and, hence the reason for demystifying it and presenting it as an integral part of any school curriculum.

2.1 Demystifying Positive Reinforcement

There are two defining principles of positive reinforcement. First, it is not a "thing" but an *effect*. When a behavior is performed, whatever comes after that behavior is called a *consequence*. If the effect increases future occurrences of the performed behavior, then that consequence is positive reinforcement. Conversely, if the effect decreases future occurrences of the behavior, then that consequence is punishment. Reinforcement is not good, and punishment is not bad—labeling them as such provides no useful information. Rather, it is the effect that determine which one is which.

The second defining characteristic of reinforcement and punishment are that they are naturally occurring phenomena in the environment. B.F. Skinner did not "invent" positive reinforcement any more than Isaac Newton "invented" gravity. Rather they discovered their properties. We cannot see gravity; we can only observe its effect—releasing a pencil from your hand has the effect of it falling to the ground—gravity. Similarly, positive reinforcement cannot be seen or heard, only its effect can be observed.

2.2 Reinforcement Delivery Systems

Understanding that positive reinforcement is a naturally occurring phenomenon and is defined based on its effect on behavior, there still needs to be some mechanism to deliver it when a student performs a behavior a teacher wants to see increase. For example, if a student finds teacher verbal praise reinforcing, then the delivery system would be overt speech via the teacher. However, there are other reinforcement delivery systems—some more complicated than others and they all have their advantages and disadvantages (Maag 2018).

Token economies have been used for decades (e.g., Kazdin 1977). A token economy requires operationally defining behaviors to be reinforced, selecting a medium of exchange (i.e., type of tokens), and identifying back-up reinforcers students can purchase with their tokens. Behavioral contracts have also been used for many years. They are written documents that specify required behaviors of the student and adults participating in the contract. They tend to work well with older students such as those in high school. However, they are also time intensive. A group-oriented contingency involves the presentation or loss of a reinforcer based on whether an individual student within a group, a portion of students within a group, or all the students in a group perform the targeted behaviors (Cooper et al. 2007). The most common approach is the Good Behavior Game (Barrish et al. 1969). A common characteristic among these three reinforcement delivery systems is that they can be very time-consuming and require expertise in applied behavior analysis to develop and implement them correctly. However, there is one reinforcement delivery system that is easy to develop, implement, and also simple to modify, when necessary, called chart moves.

3. Chart Moves as a Novel Reinforcement Delivery System

The important point about any reinforcement delivery system is that students can satiate on them (i.e., bored of the format) the same way they can of the actual reinforcers themselves. However, the good news is there are simpler, quicker, and just as effective reinforcement delivery systems as those described previously that decrease the

likelihood of satiation occurring. One such method is *chart moves*. Figure 1 shows the simplest type of chart move—connect-the-dots. As a student performs a behavior to a predetermined criterion, they connect one dot to the other. The circled dots represent where the student can obtain small reinforcers to maintain their interest and motivation, with the larger reinforcer being administered when all the dots are connected. The most important consideration when creating a chart move is that the picture is something the student likes or finds interesting. Figure 1 shows a picture of a dinosaur. A dinosaur was chosen because this particular student enjoys reading about dinosaurs, visiting museums with dinosaur bones, and watching movies about dinosaurs. Almost any existing board game can be turned into a chart move. The key is to find a theme a student would find interesting, such as their favorite movie, sports team, or music group.

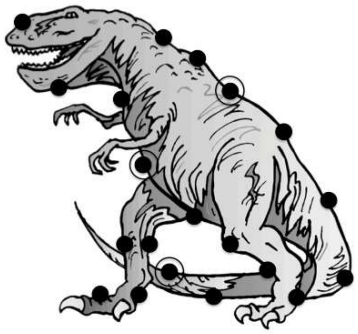

Figure 1. *Connect-the-Dots Chart Move*

3.1 Developing and Implementing a Chart Move

Developing a chart move requires some work, but more so a large dose of creativity from teachers. There are four steps in creating a chart move: meet with the student, determine what behaviors to target, how many moves the chart should contain, and how many places the student can move on the chart depending on the number of correct behaviors performed.

The first step is to meet with the student and find out what they like in terms of movies, sports, games, hobbies, or anything in which they are interested. This meeting will provide the teacher with some ideas of how to theme the chart. Below is an example:

> *George, I really would like you to raise your hand and wait to be called on before blurting out an answer. I think we can create a fun way for you to improve this behavior. I know you like playing Candy Land and the Game of Life. Board games can be lots of fun. What other types of games, movies, or any activity you really like because we can make a chart based on any topic you find fun! Well, teacher, I really like dinosaurs and that would be a fun chart to have.*

The second step is to determine what target behavior a teacher wants to see a student improve such as hand raising, asking/answering questions, writing more correct answers on a worksheet, to name but a few. Regardless of the behavior selected, they need to be operationally defined using objective rather than subjective words. For example, instead of saying the student needs to be "on-task" the teacher should say the student needs to have eyes on teacher, be writing answers, and asking or answering questions. The same approach is used with hand raising to continue with the previous scenario.

> *We've talked about improving hand raising, George, but I want to be sure you understand what exactly is involved to move on your chart. A hand raise begins when your hand goes over your head and ends when you lower your hand below your chin. If you blurt out an answer, it won't count as a hand raise. It's okay if someone else is called on because as long as you don't blurt out, you'll get to move on your chart.*

The third step is to determine how many moves should be on the chart and where to place small intermittent reinforcers to keep the student motivated until reaching the end of the chart and earning a larger reinforcer. There is no exact formula for determining the number of moves. Rather the teacher should determine, during the course

of each activity, how many times they want students to either ask or answer questions. The teacher can simply tally the number of hand raises for each student across activities requiring this behavior and then dividing them by the number of students in the classroom. That will result in an average number of hand raises.

> *I have made your chart with 20 moves on this picture of a dinosaur, your favorite, the T-Rex. I used 20 moves because that's the average number of times students raise their hands during group activities. Those circled dots are very special because you can earn small prizes when you connect to one of them such as stickers, special pens, or erasers. When you complete the entire chart, you will get a larger prize such as being first in line for recess, having five minutes of free time to work on a crossword puzzle or word search or visiting the librarian or school nurse.*

The final step is to determine how many moves a student can make depending on the number of targeted behaviors performed. Once the chart is made, the teacher can explain how it works:

> *Here is your final chart, George. It has 20 moves like we talked about with the small circle dots showing where you earn a small prize. Now, most students raise their hands eight times during our reading, math, and social studies activities. I noticed that you only raised your hand one time without blurting out something. Therefore, every two times you raise your hand without blurting out, you can move one space on your chart. The reason for having to raise your hand two times is that you already can raise your hand once without blurting out so we are going to expect a little more, but it will be easy for you to reach one of the circled dots to earn a prize.*

3.2 Addressing Inappropriate Behavior

In the current scenario, George is required to raise his hand without blurting out in order to move around his chart by connecting the dots. However, blurting out may be so habitual for the student and occur automatically without thinking about it because he has done it so many times in the past. Therefore, the chart move must also address a way to reduce this behavior without the use of punishment. For example, the teacher could add a response cost (i.e., fine) as a punishment to address blurting out by having the student move back a space every time this behavior occurs. However, fining the student can severely curtail their motivation and requires finding positive ways to counter misbehavior during classroom activities (e.g., Banda et al. 2009). Consequently, there is a simple, positive way for the teacher to address these types of behaviors by incorporating into the chart move *differential reinforcement of other* (DRO) behavior—simply known as reinforcing the absence of inappropriate behaviors. This approach requires the teacher to figure out how much time passes on average, between each time the student blurts out answers instead of raising their hand and waiting to be called on to answer questions. The first step is for the teacher to know how long any activity lasts that requires students to raise their hands, such as 30 minutes. The teacher then tallies how many times the student blurts out during each 30 minute activity. Let's assume George blurts out 10 times for each 30 minute activity. To find the average amount of time that passes between blurting out the teacher divides 30 minutes into the 10 times the student blurts out ($30 \div 10 = 3$). Therefore, on average, the student blurts out every three minutes during a 30 minute activity. The teacher can set the time that must pass without the student blurting out a little higher than 3 minutes since the student is already going that long without receiving any reinforcement for not blurting out. The following scenario illustrates how the teacher can present this method along with the chart move.

> *I figured out about how often you blurt out during our 30 minute activities, George. You blurt out about once every three minutes. I'd like to get you to go a little longer without blurting out so here is what I'm going to do. For every four minutes that pass in which you don't blurt out, you can move an extra space on your chart. And, anytime you can go five minutes or longer without blurting out you can move two spaces! That way you'll be able to get your big prize by connecting all the dots a lot faster.*

With this arrangement, the student is moving on the chart for both increasing correct hand raising and going longer periods of time without blurting out. This approach eliminates the need to punish the student for blurting out which may otherwise cause an argument or get the student angry and purposely blurting out more often knowing there would be no way to move fast enough on the chart to earn the small prizes and large one when the chart is complete.

3.3 Deciding Where the Chart Should Be Stored

A teacher needs to decide where the chart should be stored. Some charts are too large for it to be kept on or in the student's desk—especially if it is the size of Monopoly or Candy Land boards. Even if the chart is the size of a normal worksheet with a picture of a dinosaur to connect the dots, it does not have to be on the student's desk all the time or even during the 30 minute activities because it may draw undo attention from the other students which

could either embarrass the student with the chart move or provide attention which could potentially reinforce other unwanted behaviors. Therefore, the teacher can inconspicuously tally the number of correct hand raises during each 30 minute activity and when it concludes, the teacher and student can go to a private place, count up the number of correct hand raises, and move the appropriate number of spaces (i.e., connecting the dots).

There is another decision the teacher has to make. If the student does not complete the chart during any 30 minute activity, should they stay at the move they ended with or start the chart over for the next activity? There is not hard and fast rule that can guide the teacher—this decision must be made on an individual student to student basis. On the dinosaur chart developed for George, there are three circled dots indicating small prizes. If George gets past the second circled dot and the 30 minute activity finishes, the teacher may want to start the chart over for the next activity. The rationale for this condition is that if the student goes farther than the second circled dot, they have already received at least two small reinforcers and, hence, their motivation should not be quashed for the following activity. In addition, keeping them more than halfway through the chart may mean they do not have to perform as many correct hand raises to obtain the final reinforcer. Conversely, if the student only reaches one circled dot when the 30 minute period ends, the teacher may decide to keep them at the same place when the next 30 minutes begins. The reason is so the student does not get discouraged by not ever reaching the end of the chart to obtain the large reinforcer. Sometimes, a teacher just needs to try both approaches to see which one works best with any given student.

4. Conclusion

Addressing students who display challenging behaviors during instructional activities does not have to be an onerous and unpleasant task. It can be a relatively easy, fun, creative, and visually appealing activity to motivate students to perform appropriate behaviors while simultaneously addressing inappropriate behaviors is a positive fashion. However, teachers need to understand that the distinction between academic and social behavior is fairly arbitrary so that they do not approach them differently—with academic mistakes being addressed with proactive, positive corrective action and social behavior mistakes (e.g., challenging behaviors) resulting in reactive negative consequences. The key is for teachers to understand what positive reinforcement is, how to use it effectively, and developing creative ways for delivering it rather than defaulting to conventional misconceptions which result in negative and ineffectual interactions and outcomes between teachers and students.

Developing and implementing chart moves is a way for teachers to use their creativity and actually "like" behavior management. This type of reinforcement delivery system focuses on a student's interests and can be modified in any number of ways. This last point is important because students can satiate just as easily on the reinforcement delivery system as they can on the actual reinforcers themselves. Therefore, teachers need to understand that it is normal, and preferable, to change the reinforcement delivery system as much as it is to change the reinforcers for which the system delivers. A final point is the power of the reinforcement delivery system in and of itself. Students can find the novelty of the delivery system just as reinforcing as the actual reinforcers themselves. Both are powerful and novel tools for promoting appropriate and accurate performance of both academic and social behaviors while simultaneously decreasing inappropriate behaviors without the use of negative consequences. In this regard, future research should examine the effectiveness of chart moves compared to other reinforcement delivery systems such as token economies and group-oriented contingencies. Also, the social validity of chart moves should be established. At its most basic level, social validity addressed whether a relevant audience (e.g., teachers) find an intervention acceptable in terms of being easy to implement, does not require tedious work to develop, and is effective. Chart moves may turn out to be one of the most socially valid and novel reinforcement delivery systems which both teachers and students find exciting and pleasurable.

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