

Increasing Academic Engagement through Focused Antecedent Modification

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Received: May 2, 2016

Accepted: July 23, 2016

Online Published: August 9, 2016

doi:10.5430/jct.v5n2p7

URL: <http://dx.doi.org/10.5430/jct.v5n2p7>

Abstract

This article reviews the functional behavior assessment steps followed to develop interventions designed to decrease challenging behavior in the classroom. The implementation of antecedent based interventions generated from data gathered through interviews and observations addressed off-task, call outs and other challenging classroom behaviors. The interventions helped the student learn appropriate replacement behavior that resulted in a decrease in challenging behavior. A discussion and description of the step by step process of developing and implementing an effective antecedent based intervention to address disruptive behavior triggered by the demand of academic tasks is presented.

Keywords: *challenging behaviors; antecedents; behavioral intervention*

1. Introduction

Challenging student behaviors can disrupt the classroom environment and hinder effective teaching and learning. Teachers cannot teach and students' engagement in the learning process is disrupted in a classroom with numerous disciplinary problems (Guardino & Fullerton, 2010; Henley, 2006). These disciplinary problems are typically the result of poor classroom management with ineffective rules and procedures, which result in challenging behaviors that lead to lost instructional time, feelings of inadequacy, and stress for the classroom teacher (Crothers & Kolbert, 2008; Sayeski & Brown, 2011). Additionally, disruptive student behavior can create stress for teachers and discourage prospective teachers or be a significant factor in the decision to remain (Conroy, Sutherland, Snyder, & Marsh, 2008; Jones & Jones, 2007).

Effective instruction is important as children who are actively engaged in learning are less likely to engage in disruptive behavior (Crothers & Kolbert, 2008). Furthermore, academic skills deficits that are not addressed can occasion disruptive classroom behaviors that reduce instructional time and disrupt the learning of all students. Effective interventions should address both academic and behavioral skill deficits. Although a positive classroom environment and effective teaching may reduce behavior problems and increase student achievement, some students will occasionally disrupt the learning even in these environments (Jones & Jones, 2007). As such, teachers may need to consider other strategies to support students who have not responded to universal strategies. Strategies may include self-monitoring techniques (Petscher & Bailey, 2006), targeted intervention approaches such as Check in-Check out (Todd, Campbell, Meyer, & Horner, 2008), and systematic specialized intervention such as Priming (Koegel, Koegel, Frea, & Green-Hopkins, 2003).

One approach to effectively addressing these problem behaviors is to focus on events that immediately precede the challenging behavior (Conroy et al., 2008; Kern & Clemens, 2007). Research has shown that withdrawing or attenuating stimuli that occasion problem behavior reduces the instances of the problem behavior (Luiselli et al., 2005). Existing research shows that antecedent instruction in the form of classroom rules and procedures as well as positive reinforcement for following set rules and procedures are important in increasing both academic and behavioral compliance (Conroy et al., 2008). Before implementing classroom behavioral supports, teachers should identify and evaluate existing classroom structures (Sayeski & Brown, 2011). Then develop individualized interventions for those student behaviors that require more support besides the universal classroom rules and consequences that may be sufficient to support some students (Petscher & Bailey, 2006). However, rather than

approach the development of interventions using a trial-and-error approach, researchers advocate using the functional behavioral assessment (FBA) process to determine variables associated with problem behavior (Chandler & Dahlquist, 2010; Kern & Clemens, 2007; Walker, Shea, & Bauer, 2007; Zirpoli & Melloy, 1997). The FBA is a process for determining the reason or reasons why a student engages in problem behavior by identifying predictable influences on the behavior in the environment in which it occurs (Scott, Alter, & McQuillan, 2010). Positive behavioral outcomes for children can be realized by examining behavioral contingencies and intervening at the different environmental levels of influence on their behavior (Conroy et al., 2008).

Effective behavioral interventions accordingly focus on antecedents and consequences related to the problem behavior determined through functional analyses (Chandler & Dahlquist, 2010; Zirpoli & Melloy, 1997). However, conducting a typical functional analysis can be complex and time consuming (Bloom, Iwata, Fritz, Roscoe, & Carreau, 2011) and therefore, is not attempted by most teachers. Nonetheless, the standard method of functional assessment can be modified to increase generalizability outside of the analysis setting and generate a successful intervention (Bloom, et al., 2011; Ellis & Magee, 2004). Moreover, the reduction in problem behavior and increased instructional time that result from function-based behavior intervention strategies make the effort worthwhile however demanding (Koegel et al., 2003).

2. Developing and Implementing an Antecedent Based Intervention

Classroom teachers do not need extensive training in behavior analysis to successfully develop and implement the behavioral intervention described in this paper. The development of an effective intervention begins with a behavioral assessment that identifies the antecedents, consequences, and function of the challenging behavior. These can be achieved through accurate data collection.

2.1 Identifying and Defining the Challenging Behavior

Semi-structured interviews with adults with whom the student has regular contact with are useful in helping identify and operationally define the problem behavior. It is important to have input from multiple sources to ensure objectivity as there is substantial variation in individuals' perspectives regarding behaviors considered challenging (Chandler & Dahlquist, 2010). The Functional Assessment Checklist for Teachers and Staff [FACTS] (Crone & Horner, 2007; McIntosh, Borgmeier, Anderson, Horner, Rodriguez, & Tobin, 2008) can be used to guide the interviews and data collection process. The form helps the teacher identify where, when, and with whom problem behaviors are most likely.

The teacher then prioritizes the routine or activity with the highest rating of problem behavior. The function of problem behavior varies across different environments and settings, therefore, it is essential to examine the behavior within the particular routine (Crone & Horner, 2007).

2.2 Observing the Challenging Behavior

The teacher then provides a brief description of exactly what the behavior looks like when the student engages in the behavior. The student should be observed at least five times and data on the occurrence of the problem behavior recorded to determine the triggers or antecedents to the behavior and pattern. The observations can be recorded using Antecedent Behavior Consequence charts.

Asking follow-up questions will enable the teacher to have a clear understanding of the antecedents or triggers that should be modified or eliminated to prevent the occurrence of the problem behavior (Crone & Horner, 2007).

2.3 Developing a Hypothesis of the Function of the Challenging Behavior

Once the observations verify the behavioral pattern, the data can be summarized in the form of a hypothesis statement that will guide the development of an intervention. For example, when David a 3rd grade student is presented with an academic task in math or reading, he will engage in disruptive behavior to avoid completing the assigned task. Sending David to the office or time-out reinforced his challenging behavior.

The summary or hypothesis statement is then used to identify strategies that prevent the problem behavior, teach appropriate alternative behaviors, and increase desired behavioral outcomes (Crone & Horner, 2007).

3. Developing and Implementing the Intervention

Research indicates that students' challenging behaviors can be more successfully addressed through interventions that are sustained, flexible, culturally appropriate, regularly evaluated, built on the strengths of the student and their families, and that address both academic and behavioral deficits (Bullock & Gable, 2006). The intervention

developed should address the function of the challenging behavior as well as the student's skill deficits. "If a student does not have the communication skills to request escape or the social skills to remove her or himself from an unpleasant interaction, she or he may engage in an inappropriate behavior (Alberto & Troutman, 2016 p. 155). Teachers should therefore, include teaching the student skills that are deficient and consider both social and academic variables that influence students' behavior when planning the intervention (Krasch & Carter, 2009).

3.1 Manipulating Antecedents

3.1.1 Previewing Reading Assignments

Each day, the teacher could preview the day's assignment with the student before or after school. The preview tasks could involve previewing key vocabulary, and concepts covered in the lesson e.g. prefixes, suffixes, base words etc. to familiarize the student with the next day's lesson. For David, the previewing sessions lasted about 15 minutes after school. He was not penalized for inappropriate behavior during the sessions, but was redirected and encouraged to complete the session.

3.1.2 Contingency Contract

A contingency or behavioral contract can be developed collaboratively with the student, and the family and other teachers may be included if appropriate. The contingency contract outlined behavioral expectations in English Language Arts (ELA) and Science classes (Figure 1).

Contract

Effective Dates: From 03/20/2015 to 06/20/2015

David agrees to

- complete all reading assignments and the writing tasks during the English Language Arts/ Science
- use appropriate language (no profanities) to speak to classmates and teachers.

David will earn

- two points for completing and turning in each assignment/ task during English Language Arts/ Science.
- two points for completing a lesson without using inappropriate language

When David has earned 24 points he may choose one of the following rewards:

- 10 minutes of free time at the end of the day in the classroom
- 10 minutes of extra computer time
- choice of an item from the classroom store

Bonus: If David has a perfect week (5 days, Monday through Friday) by earning all 40 points, he will be able to choose one additional item from the classroom store.

Consequences:

If David does not complete the assignments during the English Language Arts or Science lesson, he will not earn the two points.

If David uses profane language during the English Language Arts or Science Lessons he will work on the assignments after school and lose the opportunity to earn the two points.

The contract will be reviewed monthly beginning 04/20/2016.

Student Signature: _____

Teacher Signature: _____

Witness Signature: _____

3.1.3 Altering Consequences

Consequences maintain the problem behavior. The consequences that supported David's challenging behavior were the removal of the task by sending him to timeout or sending him to the office. The teacher modified this consequence by giving David the opportunity to choose which part of the task he wanted to complete first instead of sending him to the office or timeout. Reading assignments can also be segmented into shorter time periods giving the student the opportunity to experience success more frequently.

3.1.4 Self-monitoring

Self-management and self-regulation skills can enable students to assume greater involvement in assessing, directing and evaluating their own performance in academic, behavioral, and social domains (Carter, Lane, Crnabori, Bruhn, & Oakes (2011). Integrated models of reading and behavior intervention are more effective than reading only or behavior only interventions. In self-monitoring interventions, students learn to be aware of their own behavior and record whether or not they demonstrate the desired behavior (Bruhn & Watt, 2012). This part of the intervention included a self-monitoring chart. David was taught how to enter information into the form. He checked the appropriate box at the end of ELA, math, and science then turned the form in to the teacher for verification at the end of each period. At the end of the day, David turned in the form to the teacher. He received a ticket for each behavioral expectation he met. He could then exchange the tickets for a break at designated times or in exchange for an item from the classroom treasure box on Friday.

3.2 Evaluate Outcomes

Eliminating the events that occasion problem behavior usually results in a reduction of problem behavior, which is the goal in behavior management (Kern & Clemens, 2007). The difficult reading assignment was the antecedent to David's challenging behavior; therefore, modifying the antecedent by previewing the assignments prevented the problem behavior from occurring. Consequences that maintained the challenging behavior included task avoidance when the teacher stopped the lesson to reprimand the student, give him time out, or send him to the office. The teacher was inadvertently reinforcing the behavior. To support appropriate behavior, a contract between the student and teacher was developed.

The teacher can gather data on appropriate behavior and disruptive behavior using a scatter plot. The scatter plot procedure is an observational data collection tool that has been found easy to use and useful by classroom teachers (Alberto & Troutman, 2016). The teacher places a slash through each cell on the grid to denote the occurrence of behavior. Successive days or observation periods are plotted along the horizontal axis and time plotted on the vertical axis. Time may be divided into hours, half hours, or class periods depending on the time available for observation.

4. Discussion

To meet the academic, social and behavioral needs of students in today's increasingly diverse classrooms teachers need a variety of skills as well as a shift from the traditional methods of teaching and learning. Although the typical classroom teacher may not have formal training in behavior analysis, they can successfully apply evidence-based behavior management principles to address frequent challenging behaviors in their classrooms. Teachers already engage in their own forms of behavioral intervention regularly. Knowledge and application of these principles ensures effective control of factors that exacerbate problem behaviors.

Early intervention continues to be critical in improving academic and behavioral outcomes for all students. However, the old adage, 'An ounce of prevention is worth a pound of cure,' holds true when dealing with challenging behaviors in the classroom. Proactive measures such as antecedent modifications can create environments that facilitate learning and improve social and academic outcomes for all students while preventing behavior problems. Functional behavior assessments are mandated for students whose challenging behavior interferes with their learning and that of others. However, the FBA procedures should not be used solely as a reaction to behavior problems that are chronic (Alberto & Troutman, 2016). As in this case, difficult reading tasks occasioned a student's challenging behavior until, the implementation of the intervention. Problem behaviors that interrupt teaching and learning can be controlled by manipulating triggers that occasion the behavior, therefore, antecedent assessment should be a prerequisite to the development of interventions (Luiselli et al., 2005). A student with behavioral concerns cannot achieve academically if they are not also provided instruction on ways of managing their behavior in order to have positive interpersonal relationships with their peers and teachers (Mathur, 2007).

The intervention proposed described how changing antecedents to problem behavior such as previewing lessons can effectively reduce challenging behavior precipitated by difficult tasks. Previewing lessons is a simple strategy that

any teacher can easily implement but can act as a powerful antecedent intervention. These strategies contribute to the growing literature on effective easy to implement strategies that promote the academic engagement and improve educational outcomes for all students. Although not all teachers have the time to devote to after school activities, enlisting the help of after school tutors, peer tutors, or parents and guardians can mitigate the need for extra time after school and assist students make significant academic progress. Although the use of functional behavioral assessments maybe time consuming and somewhat challenging to conduct, the interventions developed as a result are worth the time and effort.

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