BeyondBehavior

Using Precorrection as a Secondary-Tier Intervention for Reducing Problem Behaviors in Instructional and Noninstructional Settings

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Mrs. Perinka, an assistant principal, was frustrated with the lunchroom behavior of her middle schoolers at Buccaneer Middle School. As a result, it was difficult to find teachers outside of the lunch monitors to supervise the three lunch periods. She and the other administrators were spending a significant amount of time addressing office referrals generated from this noninstructional time, and teachers were reporting lost instructional time because of student behavior following lunch. Since adopting schoolwide positive behavioral interventions and supports (PBIS) the previous year, the school climate was more positive and, with the exception of those generated during lunch, office discipline referrals had decreased by almost 50%. Mrs. Perinka decided to meet with her PBIS team to brainstorm ways to address this problem using a secondary-tier intervention.

Students with emotional and behavioral disorders (E/BD) have academic, behavioral, and social characteristics that present unique needs within schools. Recent investigations have demonstrated that these characteristics are stable over time (Hayling, Cook, Gresham, State, & Kern, 2008) without intervention. Educators across the country are responding to the academic, behavioral, and social needs of all students, including students with E/BD, by implementing a continuum of supports across a three-tiered model of positive behavioral interventions and supports (PBIS; Lane, Kalberg, & Menzies, 2009; Sugai, 2002). PBIS provides a systematic way to meet the needs of students with challenging behaviors at the primary

(universal), secondary (small group), and tertiary (individualized) levels. Many schools experience increases in positive interactions between staff and students as well as decreases in office discipline referrals (ODRs) after consistently implementing PBIS at the primary level, including procedures for teaching, reinforcing, and monitoring behavior (Lane et al., 2009). However, as PBIS is a continuum of supports, schools often need to adopt secondary-tier interventions (STI) to target the behavior of a small group of students and/or the behavior of a large group of students in a targeted location (e.g., lunchroom, classroom, hallway).

Precorrection

One effective teaching practice that educators may use as an STI to respond to behavior problems is precorrection. Precorrection is a preventive behavioral strategy where predictable contexts that result in problem behaviors are identified and then teachers provide students with prompts and reinforcement for successful participation within the context (Colvin, Sugai, & Patching, 1993). Precorrection has been used to reduce problem behaviors in the classroom (DePry & Sugai, 2002), during morning gym (Haydon & Scott, 2008), during recess (Lewis, Colvin, & Sugai, 2000), and during transitions (Colvin, Sugai, Good, & Lee, 1997). Precorrection is a systematic process that involves seven steps that effective teachers can apply to prevent the future occurrence of problem behaviors (Colvin et al., 1993: see Appendix A for a checklist template of all steps).

Step 1: Identify the Context and Predictable Behavior

The first step is to identify a context where problem behavior is likely to occur (both times of day and locations) and the predictable undesirable behavior(s) that are displayed within the targeted context(s). To do this systematically, a school's administration or PBIS team should consult their ODR data system. Administrators should look for locations, times of day, and activities that occasion problem behavior within the school. One such system of ODR data is the Schoolwide Information System (May et al., 2000), which provides data on the number of ODRs in addition to the type of problem behavior, location, time of day, students contributing, and referring staff. Also, this can be determined by looking at classwide data collected by an individual teacher. For instance, if a teacher collects classwide data on the number of minor behavioral incidents (e.g., not following directions, not being academically engaged, being disruptive) across various classroom activities, he or she can then target either high frequency behaviors using precorrection or activities resulting in a high frequency of minor behavioral incidents (e.g., transitions after lunch or recess, using manipulatives).

Step 2: Identify and Define the Expected Behavior

This step involves identifying acceptable replacement behaviors for the current undesirable behavior. For example, if students are engaging in horseplay and talking too loudly while entering or exiting the

classroom after recess, an appropriate replacement behavior would be to talk in a low voice where only those next to you can hear while keeping hands and feet to oneself. It is essential that behaviors are defined in observable terms so that teachers and staff can effectively monitor student performance (Crosby, Jolivette, & Patterson, 2006). If a school is currently implementing schoolwide (primary) PBIS, then this step can be accomplished by reviewing the school's expectation matrix for the problem context (see *Figure 1*). It is possible that the expectation matrix is unclear for the problem context and may need to be clarified before continuing with the remaining steps of precorrection. For example, for the lunchroom setting of the expectation matrix Be Respectful is defined as, ''leave the facilities in the condition you found them, talk in a low voice to those around you, and follow teacher directions the first time.''

This clearly defines the expected behavior, and can be used for Step 2 in the precorrection plan.

Step 3: Modify the Context

The third step involves making any necessary changes to the problem context to promote the likelihood that the expected appropriate replacement behavior will occur. This may include making changes to the physical arrangement of the setting, altering the schedule or routines, repositioning supervisory teachers and staff, and/or repositioning the location of students. For example, if a teacher examines classwide data and notices that there are high levels of problem behaviors while using manipulatives in the classroom, he or she can reorganize how manipulatives are stored, ensure there are enough for everyone to have their own set, and provide ample time to transition into set up and clean up of the manipulatives before and after the designated activity.

Step 4: Practice the Expected Behavior

Step 4 involves providing an opportunity for behavioral rehearsal of the expected replacement behavior. This rehearsal may take place at the class-, group-, or individual-level. If it takes place at the class- or group-level, teachers should target students who previously engaged in undesirable behaviors and have them play an active role in the rehearsal of the expected behavior. For example, if a teacher is practicing appropriate use of manipulatives in the classroom, the teacher may review the expected behavior orally, have the students orally convey the expectations, and then have students practice demonstrating this behavior. During this time, the teacher should give students who have previously engaged in inappropriate behavior opportunities to play an active role in the behavior rehearsal.

Step 5: Provide Reinforcement for the Expected Behavior

The reinforcement component of precorrection should be implemented contingent on the students' engagement in the expected behavior. Depending on the age of the students and the strength of the reinforcers provided, educators can provide reinforcement on a daily, weekly, or even monthly basis. Teachers should poll their students to determine items and activities that students are willing to engage in appropriate behavior to earn. In addition, teachers can provide behavior-specific praise statements (i.e., ''Rob, I like how you are talking quietly in the lunchroom'') that verbally reinforces students for engaging in appropriate behaviors. Furthermore, reinforcement can be provided using independent (each student earns their own reward), interdependent (each group of students works together to earn a reward for the group), or dependent (a student or group of students is responsible for earning a reward for the group) group contingencies.

Step 6: Provide Prompts for the Expected Behavior

This step involves creating a plan for systematically reminding students to engage in the appropriate replacement behavior. This often involves a system of least-to-most prompting, where teachers provide less intensive prompts before moving on to more intensive prompts. An example includes: (a) ignore initial instances of the problem behavior, (b) provide a general verbal reminder to engage in appropriate behaviors (e.g., ''Remember to talk quietly and keep your hands at your sides''), (c) provide verbal reminders to specific students (e.g., ''Jennifer, remember to talk quietly and keep your hands at your sides''), and (d) provide physical guidance to specific students (e.g., teacher guides Jennifer's hands to her sides with her finger tips pointed down). These prompts serve as reminders for what behaviors are expected of the students and focus on the appropriate replacement behavior rather than the undesirable behavior.

Step 7: Monitor Student Progress

The final step involves developing a plan for monitoring student responses to the precorrection intervention. As with any intervention, evaluation of the precorrection plan's effectiveness is essential. While precorrection has demonstrated success in reducing problem behaviors in multiple settings (e.g., Colvin et al., 1997; Haydon & Scott, 2008), it is important to evaluate whether or not a plan is successful in your classroom or school after a predetermined period of time (i.e., a month, a grading term). If ODRs or minor classroom incidents previously were used to determine the occurrence of problem behaviors, this method can be continued.

In addition, other measures may need to be added such as direct

Figure 1 SCHOOLWIDE EXPECTATION MATRIX FOR BUCCANEER MIDDLE SCHOOL

	Classroom	Hallway	Restrooms	Lunchroom	Assemblies
Be Respectful	• Listen while others are talking • Keep hands to self • Follow teacher directions the first time	• Walk on the right • Keep body to self • Follow teacher directions the first time	• Leave the facilities in the condition you found them • Consider the privacy of others around you • Flush	• Leave the facilities in the condition you found them • Talk in a low voice to those around you • Follow teacher directions the first time	• Be considerate of the speaker and those around you • Follow teacher directions the first time
Be Responsible	• Use planner daily • Take ownership of behavior • Take ownership of education	• Move quickly and quietly • Walk to the next location • Take ownership of behavior	• Move quickly and quietly • Notify staff/faculty of situations that need their attention • Take ownership of behavior	• Move quickly and quietly through the food line • Take ownership of behavior • Exit quickly and quietly upon dismissal	• Notify staff/faculty of situations that need their attention • Listen to the speaker • Take ownership of behavior
Show Your Best Effort	• Arrive on time • Have all materials ready • Complete all assignments the best you can • Have a positive attitude!	• Be aware of surroundings • Have a positive attitude!	• Enter/exit in a timely manner • Wash hands	• Arrive on time • Have a positive attitude! • Eat food on tray • Exit on time	• Arrive on time • Have a positive attitude! • Exit on time

observation of student behavior, where teachers and/or staff observe students interacting in the context and record whether or not they observe instances of the problem behavior during a set period of time. Finally, if the reinforcement provided in Step 5 is contingent on student progress over time (e.g., three consecutive days of engaging in appropriate behavior while using manipulatives in the classroom) then progress toward reinforcement goals also will need to be monitored. This can be done by having teachers and/or staff observe lunch transitions on a daily basis or on predetermined days/times (e.g., three days per week during lunch transitions).

In addition, it is important to collect information on treatment integrity (how well the intervention is being implemented as designed), which can be measured by having an outside observer (i.e., an administrator or PBIS team member) observe teacher behavior during intervention implementation. During treatment integrity observations, observers are looking for teachers to implement all aspects of the precorrection plan (i.e., context modification, behavior rehearsal, reinforcement, prompts). Also, it is important to collect information on social validity (how acceptable are the intervention procedures to faculty, staff, and students), which can be assessed using interviews and/or questionnaires (Ennis & Swoszowski, 2011). During social validity assessments, the team is seeking to gain information on whether or not participants (teachers, staff, and students) approve of the intervention methods and outcomes.

When Mrs. Perinka met with her PBIS team to discuss the problems in the lunchroom, together they reviewed the lunchroom ODR data and discussed the problem with the lunchroom monitors. Upon reviewing the ODR data, the team observed that 10% of the students in the lunchroom across lunch periods were responsible for over half of the referrals and the majority of referrals were

generated during the transition to and from lunch, often when there were a larger number of students in the lunchroom at once.

Together, the team developed a precorrection plan using a checklist to address all seven precorrection steps (see Figure 2). The plan involved defining appropriate behavior using the school's primary PBIS expectation matrix, which they felt accurately defined desired behavior in the lunchroom. Then next step was modifying the context by altering the dismissal schedule and strategically positioning lunchroom supervisors. Mrs. Perinka and the PBIS team presented the data and the plan to the entire Buccaneer Middle School faculty at a faculty meeting. Teachers who have a 4th period class (the period within which lunch falls) were instructed to have their students practice transition to and from lunch prior to dismissal. If there was a student in a teacher's 4th period class who had received an ODR during lunch, the teacher was given their name and instructed to have that student state the expected behaviors. Lunchroom supervisors were given signs with the words "Be Respectful, Be Responsible, and Show Your Best Effort in the Lunchroom" to hold up prior to and during transition. Lunchroom supervisors also gave out "Buccaneer Bucks" during transitions to students displaying appropriate replacement behaviors. Mrs. Perinka and the PBIS team decided to use an interdependent group contingency (with each lunch period serving as a separate group). They posted a poster at the entrance to the lunchroom displaying the progress of each lunch period (A, B, C). Lunchroom supervisors gave a point to the best lunch period each day. At the end of the month, the period with the most points earned the opportunity to eat a meal from an outside restaurant partnering with the school's PBIS team in the gym or outside, weather permitting.

The teachers implemented the plan consistently because they agreed it would reduce the number of ODRs generated from the lunchroom and in turn improve student behavior as they returned to class following lunch. The students worked

hard to earn the group reinforcer and Buccaneer Bucks provided, and increasingly engaged in the appropriate behavior. The competitive aspect of the reward also resulted in students prompting one another to engage in appropriate behavior. At the end of the second month of implementation of the precorrection plan, lunchroom ODRs had decreased by over 70%.

Implications for Practice

Precorrection plans, like the one discussed in the example above, have the potential for success in schools across the country because they include both preventative components to occasion appropriate behavior and reinforcement components to acknowledge appropriate behavior. Precorrection procedures include effective teaching practice for students with and at risk for E/BD (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). One aspect to be mindful of is that precorrection, as described in this case study, requires cooperation across multiple faculty and staff members to be successful. PBIS teams and administrators interested in implementing precorrection in common settings should take necessary steps to ensure teacher buy-in, and convey to teachers that the plan will not require them to work harder, only smarter. For example, the plan used in the case study above did not require more lunchroom monitors, just repositioning of and providing posters for the existing monitors. Although the precorrection plan required teachers to rehearse appropriate behaviors with their students before going to lunch, it inevitably saved teacher's time after lunch because they began spending less time processing ODRs and redirecting students who returned from the lunchroom disruptively.

One way to increase faculty and staff buy-in is to use schoolwide data to make decisions about how to use precorrection within the school. For

Figure 2 PRECORRECTION CHECKLIST FOR LUNCHROOM PLAN

Precorrection checklist	
Setting(s):	Cafeteria
Time(s):	Lunch (all periods A, B, & C)
Teacher(s):	Lunchroom Supervisors/All 4th Period Teachers
Student(s):	All 6th, 7th, and 8th Graders (target students identified by teacher)
Date:	12 / 04 / 11
☐ 1. Context	Students transitioning into/out of the lunchroom
Predictable behavior	Students shouting, laughing, horse playing, failing to properly dispose of waste, and failing to respond to teacher/staff directions.
☐ 2. Expected behavior	Following school-wide expectations for the lunchroom setting (see expectation matrix); Enter/exit the lunchroom quietly, dispose of waste, and follow/staff teacher directions
☐ 3. Context modification	Teacher/staff posted at both entrances to the lunch and at the front and rear of the lunchroom during transition; students from lunch A exit one minute prior to students from lunch B entering the lunchroom (likewise for transition from lunch B to lunch C)
☐ 4. Behavior rehearsal	Teachers verbally state expected behaviors just before lunch; Teachers have target students from each class verbalize and demonstrate the expected behaviors
☐ 5. Strong reinforcement	Administrators announce monthly prize for the lunch period that is the most successful in displaying the expected behaviors; One lunch period earns a point each day
☐ 6. Prompts	Teachers/staff on lunchroom duty hold up signs at the entrances/exits to the lunchroom as a reminder of expected behaviors 1 minute prior to transition and during transition; teachers/staff will provide behavior-specific praise statements and award "Buccaneer Bucks" to those students displaying expected behaviors
☐ 7. Monitoring plan	Administrators post a poster detailing each lunch's points throughout the month

Figure 3 PRECORRECTION CHECKLIST FOR SCIENCE LAB PLAN

Precorrection checklist	Setting(s): Science Labs Time(s): Weekly Lab Sessions (all periods) Teacher(s): Science Teachers (Akin, Edwards, Grant, Hamlin, Jimenez, Johnson, Walker, & Westwood) Student(s): All Science Students (target students identified by teacher) Date: 04 / 16 / 12
☐ 1. Context	Students using manipulatives in the science lab
Predictable behavior	Students talking, breaking materials, not following directions
☐ 2. Expected behavior	Following school-wide expectations for the classroom setting (see expectation matrix); Add additional expectations that are specific to the lab (i.e., respect materials; take responsibility for actions in the lab)
☐ 3. Context modification	Teachers will reorganize the lab materials, so students can more readily find and replace needed items; Teachers will arrange students into lab teams with a rotating team member responsible for materials
☐ 4. Behavior rehearsal	Teachers remind students just before transition of the expected behaviors; Teachers have target students from each class verbalize the expected behaviors and model selecting the appropriate materials and taking them to your designated area in the lab
☐ 5. Strong reinforcement	All students who go an entire month without earning an ODR during science lab, can spend homeroom in the gym on the last Friday of that month (For initial plan implementation, all students going one week without earning an ODR will receive reinforcement)
☐ 6. Prompts	Teachers will award "Buccaneer Bucks" to those students displaying expected behaviors; Verbal reminders will be provided to students failing to engage in expected behavior; Teachers will provide verbal reminders prior to clean up so that students have time and understand the expectations for replacing items used in the lab each day
☐ 7. Monitoring plan	ODRs received during science lab

Note: Adapted from Colvin, Sugai, and Patching, 1993.

example, the PBIS team in the case study showed faculty members' data illustrating the high rate of ODRs being generated from the lunchroom. The team was then able to present data illustrating the precorrection plan's effectiveness after two months of implementation.

Also, PBIS teams and administrators should consider the benefits of implementing precorrection in multiple settings within a school if the data suggest a need. Once faculty and staff have developed and implemented a plan using the seven steps of precorrection, it is easy to adapt those [8] steps to address needs in other settings (*Figure 3*).

Precorrection as a Secondary-Tier Intervention

Precorrection can be used as a STI aligned with the expectations and reinforcement system already in place as a part of schoolwide PBIS. The example detailed above used schoolwide ODR data to confirm the need of an intervention as well as determine which students should be targeted for behavior rehearsal (Step 4) and distributed ''Buccaneer Bucks'' as reinforcers and prompts to engage in appropriate behavior. Other data may be used to identify areas of needed intervention, such as absences, tardies, grades, and systematic screeners. Before the implementation of any STI, schoolwide PBIS should be evaluated to ensure it is being implemented as intended using a measure such as the Schoolwide Evaluation Tool (SET; Horner et al., 2004). The SET uses interviews with and direct observations of administration, faculty, and students to evaluate PBIS plan implementation across seven domains and can be completed within a school day.

If precorrection is used as a STI and other STI are or will be implemented within the school setting, the administration and PBIS team may want to consider the formation of a STI PBIS team made of a group of stakeholders (representative of the school's departments) who are responsible for making decisions regarding the design and execution of STI (Ennis & Swoszowski, 2011). It is recommended that a school only implement 1–3 STI at a time to increase the likelihood that they are implemented with fidelity (Hawken, Adolphson, MacLeod, & Schumann, 2009). Even with this manageable number of STI, it may be important to develop a STI PBIS team that functions in collaboration with the school's PBIS team.

The success of the lunchroom STI precorrection plan prompted the science team to approach Mrs. Perinka and the PBIS team about an issue they were having on lab days. The science classes at Buccaneer Middle School participate in science lab once a week, where the class uses a variety of manipulatives (e.g., microscopes, beakers) to conduct experiments. In recent weeks, the science team had observed an increase in reprimands, wasted lab time, and damaged materials. The science team thought that a precorrection plan, like the one used in the lunchroom, may be appropriate in this context. The PBIS team consulted the ODR database, and found that indeed there was a higher number of ODRs generated from the science lab than in any other classroom, including the science classrooms. The PBIS team worked with the science team to develop a plan that would promote appropriate behaviors (see Figure 3). The teachers all agreed that they would reward students who refrained from receiving an ODR during transitions by allowing them to spend homeroom in the gym as a group once per month with the science team taking turns providing supervision. The students found this reward reinforcing and worked hard to improve their behavior in the science labs.

Precorrection is an effective teaching practice that can be used both classwide and schoolwide. Precorrection includes maximizing structure and predictability by posting, teaching, monitoring, and reinforcing expectations. These are all essential classroom and behavior management skills for effective teachers, especially those who serve students with E/BD and challenging behaviors (Simonsen et al., 2008). Precorrection can also be used as an effective teaching practice within a three-tiered framework as a STI for students with and at risk for E/BD.

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Appendix A PRECORRECTION CHECKLIST

Precorrection checklist	Setting(s): _____ Time(s): _____ Teacher(s): _____ Student(s): _____ Date: __/__/__			
☐ 1. Context				
Predictable behavior				
☐ 2. Expected behavior				
☐ 3. Context modification				
☐ 4. Behavior rehearsal				
☐ 5. Strong reinforcement				
☐ 6. Prompts				
☐ 7. Monitoring plan				

Note: Adapted from Colvin, Sugai, and Patching, 1993

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