PIE-R²: The Area of a Circle and Good Behavior Management

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Abstract

When teachers consider behavior management issues in the classroom, they often focus primarily on student behavior. Nevertheless, managing inappropriate student behavior can often be improved by altering teacher behavior. Discussed in the present article are four components of teacher behavior that can lead to more effective management of student behavior. The four components are represented by the acronym PIE - R2. Each component is discussed in terms of its contribution to more effective behavior management.

Keywords

teacher behavior, teacher expectations, behavior management, planning,
student-teacher interactions

SUGGESTED CITATION:

Public perception of education is based on many factors, such as academic achievement, character development and managing student behavior. Rose and Gallup (2004) found that many within the general public viewed managing student behavior as one of the most significant issues faced by schools. Perhaps this public perception is enhanced by media reports of violence, bullying and highly publicized school shootings. Despite the media and public focus on rare, yet dramatic, violent events, the greatest threat to academic productivity and the behaviors teachers tend to struggle with the most are nuisance behaviors, such as off-task and minor disruptive behaviors (Nelson, 1996). Frustration associated with managing these types of behaviors leads many teachers away from the education profession (Manning & Bucher, 2005).

Classroom disruptions usually require teacher attention, which can take considerable time away from academic instruction. Cotton (1990) suggested that teachers lose approximately 50% of instructional time dealing with inappropriate classroom behaviors. With increased teacher accountability through legislation, teachers are under pressure to meet state- and district-wide standards to ensure that adequate yearly progress is attained; therefore, the amount of time available to address problem behaviors is lessened. Although time for dealing with problem behaviors has decreased, the frequency of these behaviors has not.

There are times when teachers can become so involved in trying to maintain a pace to complete academic standards that they lose sight of their responsibility for establishing the academic and behavioral atmosphere of the classroom. Maximizing content coverage and student behavioral success can be improved as teachers effectively manage their own behavior.

Four practical strategies are presented in this article to assist teachers in adapting their behavior to improve their classrooms’ academic success and behavior management. The senior author coined the acronym PIE-R^2 (i.e., Preparation, Initiation, Expectation, and Reinforcement Ratio) in order to help his students remember these four effective strategies. Each will be discussed in terms of its purpose, its value and how it can be cultivated.

**Preparation**

On any given morning, a common place to locate Mr. Brown is in the copy room, trying to make copies for the day. As Mr. Brown waits his turn, his anxiety increases because students are arriving and the copier is not working properly. After his copies are completed, Mr. Brown rushes to his classroom to write the daily lesson on the board and begin the first lesson of the day. Throughout the day, Mr. Brown cannot understand why he feels as if he cannot “get ahead.”

On any given afternoon, one can find Mr. Mathis in the copy room, making copies for the next school day. He completes his copies, places them in student folders, and writes the daily lesson on the board. The following morning, you can find Mr. Mathis sitting in his classroom patiently awaiting student arrival.

Preparation is defined as “the action or process of making something ready for use or service or of getting ready for some occa-
sion, test, or duty” (Merriam-Webster, 2005). In education, preparation can be defined as organizing classroom materials and schedules for the academic day. Preparing for the academic day enables teachers and students to be better suited to manage expected and unexpected situations that may arise throughout the school day.

Though the value of preparation is often acknowledged, but underappreciated, preparation is a key to effective instruction. Research clearly documents how to prepare and deliver a lesson effectively (Searcy & Maroney, 1996; Vaughn & Schumm, 1994). When teachers think of preparation, they often think of the lesson planning component; however, it is important to remember that preparation extends beyond lesson planning into maintaining structure of the academic day. Marchesani (2007) noted that lesson preparation is a trait of an effective teacher.

Why Be Prepared?

Being prepared helps teachers to control as much of the academic day as possible. There are numerous situations that arise throughout the day that are either unplanned or disrupt the classroom structure (e.g., student assemblies, various safety drills, student misbehavior). When these situations arise, well-prepared teachers are better suited to control the situation while maintaining classroom structure.

Preparation can help to improve academic success in many ways. When a teacher can avoid spending class time locating required materials, academic engaged time should increase (e.g., Rosenberg, O’Shea, & O’Shea, 2006). A brisk lesson pace can be kept when all materials are prepared and time has been spent reviewing the lesson. Maintaining a brisk lesson pace can decrease the opportunity for student misbehavior.

When the issue of student misbehavior arises, the prepared teachers can effectively and efficiently manage the behavior because of thorough lesson preparation. Often, students come to class without materials necessary for the class period. The prepared teacher can quickly provide students with materials without forsaking valuable learning time.

Teacher planning periods are important to academic success. Utilizing planning periods for preparation for the following school day or reviewing the upcoming lessons allows teachers to leave school at a more reasonable time. When teachers can spend the hours after school taking care of their personal needs (e.g., exercising, spending time with family, etc.), these teachers may perform better when in the classroom.

Recommendations

One simple recommendation to improve preparation is to plan ahead. It is unreasonable to expect teachers to foresee every potential problem that can arise within a classroom; however, it is reasonable for teachers to anticipate and plan for disruptions to the classroom routines (e.g., announced fire drills, student assemblies, etc.). By planning ahead, teachers can thwart many potentially stressful situations.

A second recommendation is that teachers should self-impose the general rule that they will remain at school until prepared for the next school day (e.g., Marchesani, 2007). Often, after school is dismissed, teachers become involved in non-academic conversations with colleagues. Though usually pleasant, these conversations take away valuable time that could be used for planning and frequently lead to teachers leaving school unprepared for the following school day. Monitoring the use of one’s time after school can lead to more efficient preparation for the fol-
The following day, and can reduce the anxiety associated with not being prepared.

Another important component of being prepared is having all necessary materials ready for the day. Shellard and Protheroe (2000) (as cited in Henley, 2006) suggested that well-planned instruction leads to more engaging instruction. When students are academically engaged, they are usually not participating in inappropriate behavior. When teachers can walk into their classroom with all materials prepared and in a central location, they increase the chances that both teacher and students will have a productive day.

**Initiation**

Carrie and Jennifer were sitting in the back of the classroom talking loudly to each other. Mrs. Morgan, sitting at her desk, calls the students by name and instructs them to get back to work. Shortly after her redirection, Carrie and Jennifer begin talking again, which prompts Mrs. Morgan to increase the volume and sternness of the instruction, and she adds “or else” to the end of her directive. Carrie becomes disrespectful toward the teacher and says, “Or else what?” This upsets Mrs. Morgan, who writes an office referral and sends Carrie out of the class while stating, “You will not talk to me like that; I am the adult in this class.”

After the period ended, Mrs. Morgan asks Mrs. Norris, who also teaches Carrie and Jennifer, “How do you manage those two? They never seem to give you any trouble.” Mrs. Norris replies, “I try to greet them at the door, which gives them a positive start to their time with me. While I am teaching, I move around the room to make sure they are on task. If they ever get too loud, I simply move closer to them while I am teaching. I also try redirection, by asking them a question that pertains to the lesson. This always seems to get them back on task. The more I can keep them engaged in the lesson, the less time they have to talk to each other.” “I will have to try some of these strategies. Maybe they will work for me,” says Mrs. Morgan.

The example exhibited by Mrs. Morgan occurs, in various forms, in classrooms. In many cases, this type of teacher/student interaction can be avoided. Frequently, teachers wait until a behavior has become problematic before responding. In the given example, the Mrs. Morgan might have known that the students were inclined to talk to each other while she sat at her desk; however, she waited until the students increased their conversational volume before she responded. Had Mrs. Morgan taken the initiative to stop the behavior before it escalated, then all parties could have avoided a negative interaction.

For the purpose of the present article, initiation is defined as a teacher controlling the flow of interactions within the classroom. The flow of interactions can either be student driven (i.e., teacher reacting to student behavior) or teacher driven (i.e., students reacting to teacher behavior). For example, when teachers move around the room, initiating many teacher/student interactions, students typically respond by being more alert toward classroom activities.

Initiation could be compared to the behavioral term *antecedent intervention*. With antecedent interventions, teachers try to stay aware of situations that are ripe for misbehav-
ior to occur and they take steps to try to prevent misbehavior from occurring. Research has shown the effectiveness of antecedent interventions on behavior (Allday & Pakurar, 2007; Cote, Thompson, & McKerchar, 2005). Though not guaranteed, well timed antecedent interventions can prevent misbehavior before it occurs and can lead to improved student accomplishment.

Why Take the Initiative?

Wynne and Ryan (1997) suggested that classroom atmosphere and teacher as well as student spirits are diminished when teachers are unsuccessful in stopping disruptive behavior. Often, academic engaged time ends when teachers are dealing with inappropriate student behavior, which leaves much of the class disengaged in academics and an audience to confrontation (Hewitt, 1999). When students observe teachers appropriately intervening with problem behaviors before they escalate (i.e., showing initiative), a more academically rich environment is created, and many of the behaviors that can lead to teacher and student stress are diminished.

A second reason for taking the initiative is that students are less likely to become off-task when the teacher is initiating interactions with them. As teachers initiate interaction with students, they are actually promoting positive behaviors rather than trying to eliminate negative behaviors (Barbetta, Norona, & Bicard, 2005).

Recommendations

The first opportunity teachers have to gain control of the flow of interaction is when students are entering the classroom. Allday and Pakurar (2007) reported that a positive teacher-initiated interaction that occurred when students first entered the classroom increased on-task behavior by as much as 35% during the first ten minutes of class. In other words, teachers can initiate quick, simple, yet positive interactions to promote positive behaviors.

Typically, misbehavior begins small and grows until it is addressed by the teacher. Interventions that occur after misbehavior has escalated can lead to that behavior being reinforced (Lalli, Casey, & Kates, 1995); however, initiating interactions at the early stages of the behavior can reduce the likelihood of unintended reinforcement and a heated student/teacher exchange (Shukia-Mehta & Albin, 2003). In this type of situation, it is better for the teacher to be an “initiator” than a “reactor.” Perhaps one of the most beloved television characters of all time, Barney Fife, stated it best when he said that some problems ought to be “nipped in the bud.” In terms of teacher initiation, this refers to addressing misbehavior at its earliest stages (i.e., bud nipping); therefore, reducing the effort and stress involved in ending misbehavior. It is far more desirable to prevent misbehavior than to have to intervene once the misbehavior has occurred.

A final recommendation for taking the initiative is to move around the room. Proximity control has been suggested as an effective deterrent to misbehavior (Anguiano, 2001). Moving around the classroom helps to keep students on-task through proximity control and also provides opportunities for more frequent interaction with students (Shores, Gunter, & Jack, 1993).

Expectation

As Mr. Baxley’s class is waiting in line to use the water fountain, he notices that Hudson has chosen to turn around and face backwards. Mr. Baxley quickly notes that, “I have told you a hundred times, this is not the way that we stand in line. Turn around now!”
Hudson faces forward but seconds later is facing backwards again. Mr. Baxley quickly notices this behavior and exhorts, “Get out of the line; you never listen to anything I say. You are always causing some type of disruption! You will never learn.”

Later that day, Ms. Kilgore’s class is waiting to use the water fountain. Mr. Baxley walks by and sees Hudson standing correctly. Mr. Baxley says to Ms. Kilgore, “I bet you have a hard time getting him to stay in line correctly?” “Not really,” states Ms. Kilgore, “at the beginning of the year, I taught my students how to stand in line appropriately, and each day before we leave the class, I remind them of appropriate hallway and line behavior. Each student knows the positive and negative consequences for their behavior. Hudson has not been a problem for me.”

Expectation is defined, for the purpose of this article, as a teacher informally communicating his/her perception of student potential as exhibited through verbal and nonverbal teacher/student interactions. In other words, as teachers perceive their students to have potential to be successful adults, they are more likely to respond to students in a positive and supportive manner. In contrast, when teachers perceive their students as potential failures, they are more likely to respond to students with impatience and callousness. Henley (2006) concluded that “teacher expectations shape teacher behavior, which in turn influences student behavior” (p. 32).

Why Set High Expectations?

Most students will live up to or down to the expectations that have been set for them. Espinosa and Laffey (2003) noted that teachers often underestimate academic potential for students who display challenging behaviors. This underestimation can lead to additional academic failures. All students should be expected to achieve to the best of their ability, not to do just enough to get by (Lumsden, 1997).

A second reason to set high expectations is to improve student achievement. Effects of teacher expectation on student achievement have been well documented (Arabsolghar & Elkins, 2001; Gill & Reynolds, 1999; Jussim and Harber 2005). Teachers who expect academic success can inspire students to achieve higher levels of performance. When teachers show concern about students’ success, students may be more likely to feel a sense of commitment to task completion.

Recommendations

A simple recommendation is to establish behavioral expectations early and to remind often. We often spend weeks teaching a mathematical concept, but we might only spend the first day of school teaching behavioral expectations. It is important that expectations be explicitly communicated to reduce confusion or misunderstanding (Darch, Kame`enui, & Crichlow, 2003; Emmer, Everton, & Worsham, 2006). Once the expectations have been taught, practice and reminders are needed to ensure mastery and understanding.

Proper instruction should encompass behavioral, academic and transitional expectations. Behavioral expectations are often established during the creation and enforcement of the classroom rules (Hardman & Smith, 1999; Rademacher, Callahan, Pederson-Seelye, 1998). Academic expectations provide students with information concerning in-

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class assignments and homework procedures (e.g., where to turn in work, where to write name on paper, etc.). Communicating transitional expectations teaches students how to perform necessary steps to move successfully from one activity or environment to another (e.g., enter/exit the classroom, request restroom breaks, passing out/collection materials, etc.) (McIntosh, Herman, Sanford, McGraw, & Florence, 2004).

Remaining fair, firm and consistent with all students is the second recommendation. “Fair” equates to providing students with expectations that are reasonable and attainable. Giving students directions and/or assignments within their ability promotes active involvement. “Firm” does not equal “mean”; rather, firmness is following through on statements one makes. A firm teacher makes statements of consequences to students, whether positive or negative, which students know will be enforced simply because the teacher stated them. Barbetta, Norona, & Bicard (2005) suggested that students sometimes misbehave due to inconsistent expectations and consequences. Clear classroom expectations and consistent enforcement of classroom rules show students that teacher behavior can be predictable. When students see that the teacher will be predictably consistent, the likelihood of positive interactions increases (Shores, Gunter, & Jack, 1993).

A final recommendation is to never expect more than each student is capable of giving. A common mistake is to set the same expectations for all students, which sets up those students who have difficulty with behavioral self-control to be viewed negatively by the teacher (Lane, Wehby, & Cooley, 2006). Each student will require individualized expectations.

**Reinforcement Ratio**

“Sit down! Shhh! I am not going to tell you again! Stop that!” says Mrs. Curtiss. “I feel like I am always reprimanding my students. My classroom feels negative and I go home tired and frustrated. What should I do?” says Mrs. Curtiss. “It is easy to get into that cycle of too many reprimands,” says Ms. Caroline. “You will always have to use reprimands for students; however, remember that there are always students in your class that are exhibiting positive behaviors. When you see those behaviors, mention them to students. Don’t just say, ‘Good Job’; instead, give behavior specific praise, such as, ‘That is fantastic writing!’ ‘I appreciate you staying in your seat!’ ‘I am proud of you for turning in your homework!’ That should help to make your class not feel so negative and it may reduce your frustration.”

Teachers often use reprimand statements in response to misbehavior. Sometimes the frequency of classroom misbehavior gets teachers into a pattern of verbally reprimanding students many times per day. By the end of the day, many teachers can be emotionally and physically fatigued by all of the negative interactions with students, and negative interactions can appear to dominate the teacher’s memory of the day. This condition could result in increased stress, health problems and a negative attitude toward teaching, possibly leading to teacher “burnout.” Any profession loses attractiveness when characterized by unpleasant interactions.

A similar condition can result from the perspective of the students. They can acquire a view of their school as an unpleasant place characterized by negative interactions. They can also develop a negative attitude toward their teacher because, in their view, the teacher “never” has anything nice to say to them. In general, a negative, unpleasant at-
mopot can characterize the whole learning environment and make it unattractive to both teacher and student.

One way that the teacher can make the classroom atmosphere more positive and pleasant is to focus on his/her reinforcement ratio. “Reinforcement ratio” is the ratio of the number of positive teacher comments to the number of corrective/negative teacher comments. Examples of positive teacher comments include “good work,” “that’s right,” “I like the way you are sitting quietly,” or “I can’t believe how hard you are working.” Examples of negative/corrective teacher comments include “stop that,” “sit down,” “be quiet,” or “I told you not to do that again.” Neutral teacher comments are not counted in the reinforcement ratio. Examples of neutral comments include “turn to page six,” “read the next sentence,” “let’s get out our math books,” or “it is time to line up for lunch.”

Research indicates that classes in which the teacher has a strongly positive reinforcement ratio often have fewer behavior problems (Shores, Gunter, & Jack, 1993). Unfortunately, however, there are many classrooms in which negative or corrective comments are far more frequent than positive comments. In a study by Van Acker, Grant, and Henry (1996), the authors reported a ratio of one positive statement for every four negative/corrective statements. Such a negative ratio indicates that students are receiving more attention for inappropriate behavior than for appropriate behavior.

Why do We Need a Positive Reinforcement Ratio?

Assuming that teacher attention is reinforcing for most students, it is logical to assume also that students will engage in behaviors resulting in teacher attention. In a study of preschool classes, Van Der Heyden, Witt, and Gatti (2001) found that there was a greater probability of attracting teacher attention for exhibiting disruptive behavior than for exhibiting appropriate behavior. When this happens repeatedly, students learn that engaging in off-task or disruptive behavior (talk outs, being out of seat, etc.) is more likely to result in teacher attention than being on task. If there is insufficient teacher attention to on-task behavior, then the frequency of inappropriate behavior may increase as a function of teacher attention in the form of negative or corrective statements.

Perhaps teachers verbally attend more to off-task behaviors in the classroom because these behaviors disrupt the flow of the classroom routine and interfere with learning. Nevertheless, consistently negative teacher statements can result in an unpleasant classroom atmosphere and can result in diminished effectiveness of associated punitive interventions. If inappropriate student behaviors persist, it is likely that negative teacher statements would be followed by punitive interventions (e.g., lost recess time, lost computer time, or forfeiting tokens in a token economy). Researchers have demonstrated, however, that in classrooms where teachers consistently implement punitive interventions to address off-task behavior, while never or seldom praising on-task behavior, the punitive interventions lose their effectiveness in de-
creasing behavior (Van Acker, Grant, & Henry, 1996). Once again, the net effect of “punitive” interventions would be the opposite of what the teacher intended.

Recommendations

It is recommended that teachers strive for a reinforcement ratio of at least 3:1 (Shores, Gunter, & Jack, 1993; Sprick, 1981). Taking into account differences from one student to another, the teacher can experiment with the ratio to determine what level of positive statements seems to produce the best results. Some authors recommend that disruptive students should get more positive comments for their appropriate behavior than students who do not tend to be disruptive (Sprick, 1981). Nevertheless, it is strongly recommended that all students receive positive comments and that the class as a whole receive positive statements.

It should be noted that even teachers with excellent behavior management skills will have to make some negative or corrective comments because no group of students has been shown to exhibit appropriate behavior all of the time. In fact, research has demonstrated that use of teacher praise only, to the exclusion of negative statements, resulted in more disruptive behavior than a situation in which the reinforcement ratio was 3:1 (Pfiffner, Rosen, & O’Leary, 1985).

Although numerous recommendations could be made to improve one’s reinforcement ratio, three are discussed below. The first recommendation is that teachers assess their own reinforcement ratio using either of two methods. One method involves having another person monitor the content of teacher comments during a specified time period. Each comment would be categorized as positive, negative, or neutral and the reinforcement ratio would thus be determined. A less disruptive method involves the teacher placing a tape recorder at her desk and recording the class for a specified time period (Hardman & Smith, 1999). Later, the teacher can evaluate the content of her own statements as she listens to the recording.

A second recommendation for improving reinforcement ratio is that, for every negative statement, the teacher should make at least three positive statements. Implementing this recommendation requires the teacher to mentally recognize each occasion in which s/he makes a negative statement, and attempt to state at least three positive comments before issuing another negative one. This strategy requires a heightened awareness of one’s own negative statements.

A final recommendation involves a teacher commitment to “catch students being good” (Brownell & Walther-Thomas, 2001). Maag (2001) suggested that teachers fail to reinforce positive behaviors because those behaviors are expected. Because of this expectation, a teacher of 20 students might attend to the 1 or 2 disruptive students, when there are 18 or 19 students behaving appropriately. Though the disruptive might seem more apparent, there are far more students who are on task and following classroom rules than are causing disruption. Though off-task and disruptive behaviors often seem to “demand” teacher attention, making the effort to acknowledge and praise appropriate student behaviors increases the probability that these positive behaviors will increase because students often find teacher attention to be reinforcing. Students might be motivated to decrease their inappropriate and disruptive behavior once they realize that teacher attention can be received for appropriate behavior.
Summary

Information presented herein indicates that small changes made to teacher routines and behavior may lead to improved classroom management and to better academic achievement. PIE-R² is a simple acronym meant to encourage teachers to prepare for the school day, initiate teacher-student interactions, expect students to perform at their highest potential, and positively reinforce appropriate behavior through the use of verbal statements. Although adhering to these suggestions will not eliminate all student misbehavior, a reduction in these behaviors might help to promote a healthy, positive learning environment.
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