ABSTRACT: Teachers’ successful provision of levels of support to prevent and reduce problem classroom behaviors requires skillful application of research-based classroom and behavior management strategies. Among others, 2 teacher-centered strategies have been shown to decrease students’ inappropriate behaviors and increase their appropriate behaviors: the delivery of teacher praise as positive reinforcement for students’ appropriate behavior and the provision of high rates of opportunities for students to respond (OTR) correctly to academic questions, tasks, or demands. Consistent and appropriate use of teacher praise and increased OTR may serve as an important 1st step to establish predictable and positive classroom contexts that promote successful primary, secondary, and tertiary prevention and intervention supports. The authors present guidelines for increasing teachers’ effective use of praise and OTR as a preventative measure for reducing problem behavior and increasing appropriate behavior in urban classroom settings.

KEYWORDS: classrooms, prevention, problem behavior, praise, self-monitoring

IN RECENT YEARS, THE PREVENTION of problem behaviors in school settings has become both educational policy and a populous “rhetorical darling” (Kauffman, 1999, p. 448). At its core, prevention involves the establishment of school environments that promote and maintain appropriate student behaviors while allowing for more targeted prevention and intervention supports for students who continue to exhibit problem behaviors (e.g., Kauffman, 1999; Lewis & Sugai, 1999). In theory, prevention of problem behaviors in schools involves the implementation of proactive strategies across multiple levels of support. Primary supports prevent problem behaviors at a schoolwide or classwide level and establish an effective context for more focused interventions. Students who have not responded favorably to initial preventive efforts or who present significant risk factors receive secondary support while teachers implement tertiary interventions to minimize the effects of challenging behavior (Lewis & Sugai, 1999). In practice, however, the nature of prevention (with the goal of preventing the occurrence of problem behavior) makes it difficult to assess educators’ success in providing purposeful positive behavior supports at the primary level (see Kauffman, 1999; Kern & Manz, 2004), and data from descriptive studies suggest that provision of appropriate and successful secondary and tertiary positive supports in many school settings has yet to be achieved.

Results from descriptive research indicate that school environments, typically classrooms, are not supportive of appropriate behaviors for students who have been identified to exhibit problem behaviors irrespective of disability status or educational setting and may actually promote inappropriate behavior. For example, researchers have long recognized the prevalence of negative interactions between teachers and students who exhibit problem behaviors (e.g., Gunter & Coutinho, 1997; Shores, Gunter, & Jack, 1993). In general, direct observations of classroom interactions reveal that students identified as having or being at risk for emotional or behavioral disorders encounter high rates of negative or neutral interactions with their teachers and receive high rates of teacher commands (Lago-Dellalo, 1998; Shores et al., 1993; Wehby, Symons, & Shores, 1993).
Establishing Classroom Environments that Promote Appropriate Behavior

Gunter, Denny, Jack, Shores, and Nelson (1993) argued that although many school-based interventions rely on control or reactive tactics to reduce problem behavior, perhaps a more logical approach is to purposefully establish classroom environments that support appropriate behavior through preventive tactics. If applied, this approach establishes the teacher as an active agent of prevention who influences and regulates the classroom environment to promote and maintain appropriate student behaviors. Through interactions with students, the teacher establishes a classroom environment that supports and encourages appropriate academic and social behaviors while consistently recognizing and reinforcing those appropriate behaviors. The provision of purposeful and positive teacher attention to promote appropriate classroom behavior may be particularly relevant for teachers working with students in urban educational settings. Despite external factors that are likely to negatively influence students’ behavior in urban school settings such as poverty and limited resources, teachers may incorporate proactive, teacher-centered strategies as inexpensive and easily implemented methods to positively influence student behavior in their own classrooms and schools.

Results from intervention research suggest at least two empirically based, teacher-centered strategies to both increase appropriate student behaviors and decrease inappropriate behaviors: (a) the skillful and consistent use of teacher praise as contingent on, or as a consequence of, appropriate student behaviors; and (b) the provision of increased opportunities for students to respond correctly to instructional questions, tasks, and commands (Lewis, Hudson, Richter, & Johnson, 2004). Increasing teachers’ knowledge and use of these two strategies to shape stable and supportive classroom contexts is a logical first step in providing multileveled prevention and intervention supports in urban school settings.

Use of Teacher Praise

Teacher praise as contingent on, or as a consequence of, appropriate student behaviors is a classroom and behavior-management strategy with a long and thorough base of empirical support. Across age groups and irrespective of disability, teachers’ use of contingent praise effectively reinforced, or increased, a variety of appropriate student behaviors and academic skills, including following directions (Goetz, Hollberg, & LeBlanc, 1975; Hall et al., 1971), engagement in instruction (Broden, Bruce, Mitchell, Carter, & Hall, 1970), on-task behavior (Ferguson & Houghton, 1992; Sutherland, Wehby, & Copeland, 2000), correct academic responding (Sutherland & Wehby, 2001a), and work accuracy and completion (Alber, Heward, & Hippler, 1999; Craft, Alber, & Heward, 1998). In addition, the skillful use of contingent praise to increase positive behavior has been shown to simultaneously decrease problem behavior. Specifically, praise of positive behavior decreases disruptive behavior (Thomas, Nielsen, Kuypers, & Becker, 1968) and inappropriate talk and turning around in seat (McAllister, Stachowiak, Baer, & Conderman, 1969), whereas praise combined with decreased attention to problem behavior lead to decreases in talk outs and arguing with teacher requests (Hall et al.) as well as other disruptive behavior (Becker, Madsen, Arnold, & Thomas, 1967). Results from these studies suggest that praise that is delivered contingent on a desired behavior leads to increases
in the desired behavior, indicating that teacher praise can be used to reinforce some students’ appropriate behavior. However, all forms of teacher praise are not necessarily reinforcing to all students and in all situations (Brophy, 1981). For example, older students may respond differently (Brophy) or have different preferences for types of teacher praise than younger students (Elwell & Tiberio, 1994). In addition, students with more deviant forms of school behaviors, with long histories of negative forms of attention from adults at school, may respond adversely to occasional expressions of approval from teachers (Brophy; Wehby et al., 1995). Further, the quality of teacher praise is an important determinant of its effectiveness in increasing appropriate student behaviors. In educational contexts, statements of praise should be directly linked to the behaviors or skills that the teacher wishes to increase (Brophy; Skinner, 1953). For this reason, teachers should provide praise that explicitly specifies desirable behaviors and provides sufficient feedback about the correctness of students’ behavior or performance.

Teachers should consider several criteria to consistently and purposefully evaluate the effectiveness of their praise in increasing the desired behaviors for their class as a whole and for specific students. First, is the teacher’s praise contingent on and explicitly linked to class and student behaviors that the teacher wishes to increase? Second, do the teacher’s statements of praise provide informative feedback on the appropriateness and successfulness of specific behaviors or performances? Third, do the teachers’ praise statements provide opportunities for positive and meaningful interactions between the teacher and each student? Fourth, are students’ diverse skill levels considered when providing praise? Just as students require differentiated instruction, a teacher’s praise should be thoughtfully distributed to meet the behavioral needs of each student. Some students may require praise for seemingly minor, or presumed prerequisite skills, as they build their repertoires of appropriate school behaviors and skills. Last, teachers should continually evaluate whether or not their praise is actually reinforcing desired behaviors for the class as a whole or for specific students. This ongoing evaluation may involve collection of basic data on students’ general or specific behavior to confirm that appropriate behavior does, in fact, increase when quality praise is delivered contingent on their appropriate behavior. On the basis of data or their own experiences with particular students, teachers may find that different aspects of praise (e.g., public or private, academic or behavioral, or on the basis of lower or higher skills) may be differentially reinforcing to students.

**Provision of Increased Opportunities to Respond**

Results from intervention research show that increasing opportunities for students to respond (OTR) correctly to academic questions, tasks, and demands also positively affects students’ appropriate academic and social behaviors (see Greenwood, Delquadri, & Hall, 1984). In a review of empirically supported educational practices for students who exhibit problem school behaviors, Lewis, Hudson, Richter, and Johnson (2004) noted the importance of providing appropriate curricular and instructional modifications to promote correct student responding as an effective practice for increasing appropriate engagement in academic tasks, for increasing correct academic responses, and for decreasing inappropriate behavior. From the literature, Lewis et al. then identified instructional strategies and practices that lead to increased opportunities for correct academic responses: the provision of relevant information, modifications, and supports to promote the successful engagement in and completion of academic tasks as well as the rapid pacing of OTR (for a review on increased rates of OTR, see Sutherland & Wehby, 2001b).

An increase in the rates of OTR given to students is associated with improved academic and social behaviors. Providing a faster pacing of OTR increases academic responses and decrease disruptive or off-task behaviors for elementary students who exhibited problem behaviors (Carnine, 1976; West & Sloane, 1986). In addition, increased rates of OTR are associated with increased correct reading responses for elementary (Skinner, Smith, & McClean, 1994) and high school (Skinner & Shapiro, 1989) students with EBD as well as correct mathematics responses for upper elementary students with EBD (Skinner, Belfiore, Mace, Williams-Wilson, & Johns, 1997; Skinner, Ford, & Yunker, 1991).

In addition to increases in correct academic responses, the provision of increased rates of OTR leads to increased task engagement and decreased disruptive behavior for students with EBD (Sutherland, Adler, & Gunter, 2003). Further, Armendariz and Ubret (1999) reported increasing OTR as a class-wide intervention to reduce disruptive behaviors in a regular education classroom. Here, the teacher’s use of individual response cards to give all students the opportunity to continually respond throughout a whole class mathematics lecture resulted in decreases in the average disruptive behavior for a class as a whole and for each student.

Because of its effectiveness for increasing students’ appropriate academic behaviors and decreasing inappropriate behaviors, educators should use curricular and instructional practices that increase the likelihood of students’ correct responses to academic demands. Teachers should evaluate their own practices to ensure the provision of an instruction-rich, academically supportive classroom environment in which all students have ample opportunity to appropriately and successfully engage in skill-building tasks. To aid in this evaluative process, the Council for Exceptional Children (as cited in Sutherland & Wehby, 2001b) provided guidelines for optimal OTR rates when
teaching children with high-incidence disabilities. These optimal rates are dependent on student familiarity of the material being covered. During instruction of new material, for instance, teachers should obtain between 4 and 6 responses per minute with 80% accuracy. During activities of previously reviewed material, teachers should elicit between 8 and 12 responses per minute with 90% accuracy. Further, obtaining frequent student responses allows for the teacher to continually assess and evaluate the effectiveness and quality of instructional activities.

**Strategies to Increase Praise and OTR**

Using praise and OTR to alter the classroom environment necessarily involves changing teacher behavior. Although limited, there is evidence of the effectiveness of teachers’ active evaluation of their own teaching practices to increase desirable teacher behaviors. Results from classroom-based, teacher-centered intervention research show the effectiveness of goal setting, continued feedback, and self-evaluation to increase teachers’ rates of praise (Kalis, Vannest, & Parker, 2007; Sutherland & Wehby, 2001a; Sutherland et al., 2000) and opportunities to respond (Sutherland et al., 2003) in classrooms for students with EBD. For example, Sutherland and Wehby (2001a) reported the effects of training teachers to self-monitor their use of praise. Teachers were instructed to audiotape 15 min of their daily instructional activities and listen to a brief sample to count and calculate their estimated rate of praise statements during each instructional session. The teachers then graphed their daily rates of praise and provided themselves with self-praise for evaluating their teaching behavior. During treatment phase, teachers who self-monitored their use of praise exhibited higher rates of praise than did those teachers who received no self-monitoring training.

Building on these findings, elementary school teachers participating in a larger multicomponent intervention to reduce students’ problem behaviors in both regular education and self-contained special education classrooms were recently taught to self-monitor their teaching behavior. As part of their initial examination of the effects of the teacher-centered classroom management intervention package, researchers at the Vanderbilt Behavior Research Center trained teachers from three urban school districts to self-monitor their use of praise and OTR during instructional sessions. All participating teachers taught elementary students who were either receiving special education services in self-contained classrooms for students with histories of emotional or behavior disorders or were identified to be at risk for emotional or behavioral disorders but were being educated in regular education classrooms. Research consultants provided feedback and support during weekly meetings with teachers. As the first stage of a larger study, these teachers monitored their rates of praise statements and OTR once each week for approximately 15 weeks.

Teachers incorporated the self-monitoring procedure in their classrooms using the following steps. First, research consultants informed the teachers of implications of past research supporting the use of praise and OTR to reduce problem classroom behaviors and increase appropriate behavior. During these training sessions, consultants discussed the importance of using specific, contingent, and meaningful praise as well as the importance of providing ample opportunities for all students to respond successfully to academic demands as preventative strategies when working with students with histories of problem behavior.

Next, consultants trained the teachers to identify and self-monitor their use of effective praise and OTR as a class wide intervention to decrease inappropriate behaviors and to increase appropriate behaviors. For the present study, teachers used an audiotape recorder to self-monitor their use of praise and OTR. Each week, the teacher used his or her audiotape recorder to record at least 15 min of an instructional activity. At the end of each week, a consultant met with each teacher to listen to a 5-min sample of the 15-min recorded instructional session. While listening to the audiotape, each teacher, with the support of his or her consultant, used tally marks to count the number of praise statements and OTR during the 5-min sample. The teachers then calculated an estimate of their rates of praise statements and OTR for the instructional session by multiplying the number of praise statements and OTR for each 5-min recorded instructional activity by 3 (see Figure 1). The teachers then graphed each rate for visual inspection. Although teachers counted only the quantity of praise statements or OTR delivered during taped sessions, research consultants also often discussed quality of praise and OTR with the teachers during the weekly meetings. Research consultants provided ongoing feedback and support, such as assisting with goal setting, discussing ways to increase and maintain rates of effective praise statements and OTR, and discussing strategies for considering the amount of praise statements and OTR encountered by their students who exhibited the most problematic behaviors. Consultants praised teachers for their appropriate use of praise and OTR and prompted teachers to praise themselves for evaluating their teaching.

Figure 2 presents a re-creation of one teacher’s rates of praise statements. As seen by her graph, this teacher’s rates of praise increased over the course of the intervention. At the beginning of the intervention, the teacher delivered fewer than 10 estimated praise statements to her class during her initial taped instructional session. However, during the last few weeks of the self-monitoring intervention, her praise rates ranged from between 25 and 30 estimated praise statements per 15 min of instruction, almost 3 times as many.
praise statements per instructional session. Figure 3 shows a re-creation of a teacher’s rates of OTR graph. A similar increase is seen across sessions. This teacher’s estimated rates of OTR increased from between 40 and 60 OTR per 15-min instructional session at the beginning of the intervention to more than 100 estimated OTR per 15 min of instruction in the last weeks of the self-monitoring intervention.

On completion of the intervention, each teacher responded to questions about their satisfaction with self-monitoring as an intervention aimed at improving student behavior through increasing the teacher’s use of praise and OTR. Teachers rated their agreement with positively worded statements about the effects associated with the intervention along a 5-point Likert-type scale ranging from 1 (strong disagreement) to 5 (strong agreement). Ratings from one school district’s participating teachers are presented in this article. This sample comprised 38 teachers (27 regular education teachers and 11 special education teachers) from eight elementary schools. Summative data from 38 teachers’
responses indicated a general satisfaction with the effects associated with the self-monitoring intervention, with mean ratings ranging from 4.00 to 4.16. Specifically, teachers’ mean agreement rating indicated agreement with statements such as, “I believe I will take away lasting benefits from using this program,” ($M = 4.08, SD = 0.67$); “I noticed positive changes in my behavior quickly after beginning to implement this program,” ($M = 4.16, SD = 0.59$); “I am pleased with the behavior changes this program created,” ($M = 4.16, SD = 0.59$); and, “This program improved the atmosphere in my classroom,” ($M = 4.00, SD = 0.66$).

**Conclusion**

Effective prevention involves the establishment of predictable, positive environments that support students’ behavioral and academic needs. The use of teacher praise to reinforce students’ appropriate behavior and the provision of increased rates of opportunities for students to correctly respond to academic demands are two strategies that have been found to both increase students’ appropriate behavior and decrease their inappropriate behavior. Teachers’ self-evaluation of their teaching behavior is necessary to increase the application of these tactics in classrooms. Review of audiotaped instructional sessions to self-monitor rates of praise statements and OTR is one inexpensive example of this type of self-evaluation of teaching behavior that has been implemented in urban school settings and was rated favorably by participating teachers. Teachers working with students in urban educational settings can use this self-monitoring strategy as a template for evaluating their own behavior to establish and maintain positive classroom environments that prevent problem behavior and promote student learning.

**FIGURE 3. Teacher’s graph of self-evaluation of OTR across sessions.**

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