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# Improving Interactions Between Teachers and Young Children with Problem Behavior: A Strengths-Based Approach

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Young children who exhibit problem behavior are at-risk for a host of negative developmental outcomes. Early intervention at multiple ecological levels is crucial to interrupt what can be a detrimental transactional cycle between children and their caregivers, including their teachers. In this article we promote a strengths-based approach to improving teacher-child interactions, which may serve as a protective factor for children with early-onset problem behavior in early childhood classrooms. Specifically, we describe how increases in targeted teacher behaviors can foster the desirable behavior of young children by capitalizing on skills the children already possess while enhancing those skills necessary for social competence and pre-academic success.

Young children who exhibit problem behavior present significant challenges to their adult caregivers, peers, and others with whom they come into contact. Unfortunately, the demonstration of problem behavior early in a child's life is predictive of a host of negative developmental outcomes such as drug abuse, juvenile delinquency, violence, and school dropout in the later years of schooling (Patterson, Capaldi, & Bank, 1989; Webster-Stratton, 2000). Moreover, young children who lack social, emotional, and behavioral competence receive less mental health service and, when coupled with the potential for serious negative outcomes, are at a significant disadvantage in classroom settings (Markowitz, Carlson, & Frey, 2006).

Theorists and researchers alike have discussed the complex array of factors—and interactions among them—that impact the development of problem behavior. One useful framework for examining the development of problem behavior is the ecological model of child development (Bronfenbrenner, 1979). In this model, Bronfenbrenner describes human development as a set

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of nested systems. There are a variety of influences on human development, including but not limited to biological factors, family processes, socio-economic status, and neighborhood characteristics. In addition, the impact of the school and, particularly, classroom influences are of increasing interest to researchers (Birch & Ladd, 1996; Myers & Pianta, 2008), and teacher-child relationships have emerged as an important factor associated with downstream school adjustment (e.g., Hamre & Pianta, 2001; Henricsson & Rydell, 2004). Unfortunately, children who exhibit problem behavior are more likely to develop negative relationships with their teachers (Ladd & Burgess, 1999), and poor teacher-child relationships tend to be stable over time (Henricsson & Rydell, 2004). Developing negative relationships with teachers early in school can be harmful, as difficult relationships as early as kindergarten are associated with academic and behavioral problems through eighth grade (Hamre & Pianta, 2001). One important aspect of teacher-child relationships is the moment-to-moment interactions that occur; these interactions serve as the basis for academic and social learning in the classroom and influence subsequent teacher and child behaviors. Transactional theory (Sameroff, 1995) is one way to conceptualize how teachers and children influence each others' behavior over time (Sutherland & Oswald, 2005).

### Transactional Theory

Transactional theory describes child development as an ongoing series of reciprocal relations, with a child's environment exerting influence on behavior, and the child's behavior in turn influencing the environment (Sameroff, 1995). Perhaps the most well-known empirical application of this theory has been Patterson's research on coercive interchanges between parents and children, whereby the noncompliance of young children is negatively reinforced by their parents withdrawing task demands in order to avoid their child's aversive behavior (Patterson, Reid, & Dishion, 1992). Sutherland and Oswald (2005) used the transactional model to describe how teachers and children with emotional and behavioral disorders (EBD) might influence each others' behavior over time, particularly related to child problem behaviors. Specifically, they described how low rates of desirable teacher behaviors, such as praise and opportunities to respond (OTR) to academic requests, may in part be a product of the teacher avoiding instructional interactions with children who exhibit high rates of problem behavior. In addition, Gunter and colleagues (Gunter & Coutinho, 1997; Gunter et al., 1993) described instructional interactions between teachers and children with EBD as representative of Patterson's coercive interaction cycle. Arnold (1997) found similar interaction patterns in early childhood classrooms, whereby young children with problem behavior received less teacher instructional behaviors than children who didn't exhibit problem behavior.

A recent study (Doumen et al., 2008) examined conflict between teachers and kindergarten students and supports the use of the transactional model to describe teacher-child interactions. These researchers found that students' aggressive behavior at the beginning of kindergarten was associated with increases in teacher-student conflict midyear, which subsequently was associated with increases in aggressive behavior at the end of the school year. Doumen et al. noted that "when children enter kindergarten, it seems to be particularly the child aggressive behavior that starts the accumulation of negative processes throughout the year" (p. 596). From a transactional perspective it is probable that students carry forward transactional processes

cultivated in prior developmental environments, including early childhood classrooms and interactions with their teachers.

### Early Intervention in the Preschool Classroom

Early intervention appears to be critical to ameliorating problem behavior. There are many interventions that target young children with problem behavior, including but not limited to *Second Step* (Grossman et al., 1997), *Parent Child Interaction Therapy (PCIT)* (Bell & Eyberg, 2002), *First Steps to Success* (Walker, Kavanagh, & Stiller, 1998), *Regional Intervention Program* (Strain & Timm, 2001), *Fast Track* (Conduct Problems Prevention Research Group, 1999), and *Incredible Years* (Webster-Stratton, 2000). These programs emphasize two primary components: (1) parent-child interactions (i.e., *IYS*, *PCIT*, *RIP*) or (2) specific child skill instruction (i.e., *IYS*, *Fast Track*, *First Steps to Success*, *PCIT*, *Second Steps*). Moreover, interventions targeting problem behavior amelioration tend to be deficit-based—there is a focus on reducing problem behavior and/or teaching the child a replacement, prosocial behavior. While this approach can decrease problem behaviors (e.g., Strain & Timm, 2001; Walker et al., 1998) it may not influence the transactional processes between children and their teachers. If child behavior change is not coupled with teacher behavior change, desirable intervention effects may be limited. For example, if transactional processes are not modified, teachers may inadvertently support children's problem behavior (e.g., through negative reinforcement) or not recognize and reinforce children's performance of desirable behaviors. Additionally, even if children learn desirable replacement behaviors the environment may not be conducive to the sustained maintenance of these behaviors.

An alternative method to early intervention involves using a strength-based approach (Epstein, Synhorst, Cress, & Allen, 2009; Rashid & Ostermann, 2009) in which an individual's strengths and developmental system contribute to his or her well-being in ways similar to the contribution of deficits, or risk factors, to psychopathology (Rashid & Ostermann, 2009). While the focus of the strengths-based approach has emphasized assessing child strengths (e.g., *Preschool Behavioral and Emotional Rating Scale*; Epstein et al.), we would like to extend this discussion to include using child strengths to improve transactional processes between young children with problem behavior and their early childhood teachers. From our standpoint, all children regardless of risk status demonstrate desirable behaviors; children with problem behavior just tend to do this less frequently. Moreover, occurrences of problem behavior, particularly those that are intense, may affect teachers' ability to recognize and capitalize on child strengths. Unfortunately, as the work of Doumen et al. (2008) indicated, children's problem behavior can serve as a setting factor for negative transactions with their teachers; thus early identification of school readiness and social competence skills can help teachers build on these relative strengths. The purpose of this article is to describe early childhood teaching behaviors that capitalize on the strengths of young children with problem behavior using a strengths-based framework. Specifically, we describe desirable behaviors that, while occurring infrequently, can be encouraged, expanded, and reinforced to increase their likelihood of future occurrence. Moreover, by focusing intervention on strengthening the behaviors of both the teacher *and* the child this approach may have a greater likelihood of positively influencing downstream transactional processes.

## Young Children's Strengths

Resilience is a predictor of future success (Sameroff & Chandler, 1975). A variety of factors influence a child's resilience to challenges, including developmental status, family, and community protective factors. The stronger a child's protective factors the more likely he or she will be able to succeed in school, work, and community settings. For example, the social competence domain of child development is a key factor in determining children's success in school, community, and life. Although difficult to measure, social competence has been defined as one's ability to successfully engage in social interactions and relationships with other individuals (Brown, Odom, & McConnell, 2008). Additionally, social competence in classroom settings is pivotal for developmental progress in pre-academic and academic skills, communication, cognition, and adaptive behavior. Classrooms are social contexts with rules and expectations to regulate behavior, and young children who learn the rules and respond with relevant social skills may make greater progress across all developmental domains and participate more effectively in the academic and nonacademic social contexts in which learning occurs.

Ample research has provided evidence of a relationship between social competence skills and developmental progress or academic achievement. In 1993, Wentzel found that prosocial behavior significantly predicted achievement among early adolescents. More recently, Malecki and Elliott (2002) found that social behavior predicts concurrent and future academic achievement among elementary-aged students. Earlier correlational studies also provide evidence connecting social behavior and cognitive development (DiPerna & Elliott, 1999; Feshbach and Feshbach, 1987). For example, academic achievement has been linked to social competence in longitudinal studies (Lambert, 1972; Safer, 1986). As early as 1972, Cobb observed that behaviors such as attending, talking positively with peers, compliance, volunteering, and self-stimulation accounted for about half of the variance in math achievement. Similarly, Teo and colleagues (1996) concluded that socioemotional adjustment at grades 1, 3, and 6 predicted standardized reading achievement, after controlling for cognitive differences.

Although the research clearly supports the importance of social competence in children's future success, building social competence is not always targeted for instruction in early childhood settings. Many early childhood teachers lack the training, knowledge, and skills for fostering children's social competence—particularly with high-risk children who present behavioral challenges (Hemmeter, Santos, & Ostrosky, 2008). It is not unusual for early childhood teachers to provide generic instruction in social competence according to a commercially available curriculum (e.g., *The Creative Curriculum*), but providing direct instruction in individual skills related to social competence with children at high-risk for problem behaviors does not occur as commonly. Teachers may lack the knowledge of *what* social skills to teach and *how* to teach them to individual children who present significant problem behavior. Rather than increasing skills that develop children's social competence and building their resilience, teachers often focus on decreasing or eliminating these children's problem behaviors through punishment techniques—many of which may be misapplied or overused; and thus, are ineffective. Building on children's existing strengths to promote and teach social competence is consistent with the pedagogical approaches used in other instructional areas, such as early literacy, which cultivate and build on foundational knowledge and skills. In addition to building new skills related to social behavior, teachers should also employ strategies that strengthen existing social skills that can persist in difficult social situations and maintain over time.

## Promoting Child-Strengths in the Classrooms

Two principles within the applied behavior analyses field are applicable when identifying skills to increase or decrease: the “fair-pair rule” and the “dead man’s test.” The fair-pair rule (White & Haring, 1980) suggests that when decreasing a problem behavior (e.g., disruption), an adaptive behavior (e.g., active student responding) should be increased to serve as a replacement for the problem behavior. The dead man’s test (Lindsley, 1991) suggests targeting behaviors that occur (e.g., compliance), rather than a non-behavior (e.g., non-compliance). Although behavior analysts have been applying these rules for years, in classroom settings we often see interventions targeting only problem or no behaviors rather than focusing on teaching or strengthening an adaptive behavior. Simply put, teachers commonly focus on decreasing noncompliance or disruption rather than on increasing compliance or task engagement.

Many young children who exhibit problem behaviors simply have not learned social competence skills or are not in environments that support their use. That is, they either demonstrate a social competence deficit (have not learned the skill) or a performance deficit (environmental contingencies are not in place to strengthen the skill). Regardless, strengthening skills and behaviors related to social competence is critical to decreasing and replacing problem behaviors in classrooms settings and should be targeted for instruction. Promoting and strengthening children’s social skills may serve as a setting factor for decreasing the probability of future occurrences of problem behaviors, setting the stage for positive interactions between children and their teachers, and ultimately increasing a positive classroom atmosphere. If teachers practice instructional strategies that promote social competence behaviors, teach new social skills, and focus on strengthening existing skills, then the child is more likely to engage in these positive behaviors rather than demonstrate problem behaviors. In turn, teachers are more likely to respond positively rather than engaging in coercive interactions, which may increase problem behaviors. A number of teacher behaviors and strategies have been associated with increasing social skills for children in classroom settings.

## STRATEGIES

Behavioral principles (Skinner, 1953) serve as the foundation for key instructional strategies that occur during teacher-child interactions. Accumulated evidence indicates the importance of antecedent instructional behavioral stimuli (e.g., providing frequent OTR during instruction) as well as behavioral reinforcement (e.g., feedback and contingent praise) for increasing desirable academic and social behavioral responses (e.g., students’ correct responses and compliance) (e.g., Brophy, 1981; Sutherland & Wehby, 2001). Consequently, increases in the use of these strategies can promote positive teacher-child interactions, enhance child engagement, increase learning, and decrease the occurrence of problem behaviors (e.g., Werts, Wolery, & Holcombe, 1991; Sutherland & Wehby, 2001). Four empirically documented strategies that emphasize and bolster existing child strengths include providing OTR, instructive feedback, corrective feedback, and praise. While these strategies may occur naturally at low rates in most early childhood classrooms, increases in their purposeful, consistent, and effective use could more fully support the behavioral and pre-academic strengths exhibited by young children with challenging behaviors.

Teachers who provide frequent OTR help children in their classrooms experience success, and support positive teacher-child relationships. When teachers give frequent OTR to behavioral and pre-academic requests, children become active participants in the instructional process. When responding to OTR, children can practice new skills and demonstrate their mastery of learned skills and content. The frequent use of OTR can enhance children's levels of engagement in pre-academic tasks, increase the frequency of correct responding, and lead to decreases in disruptive behavior (Sutherland, Alder, & Gunter, 2003; Sutherland & Wehby, 2001).

In early childhood classrooms, opportunities for increasing OTR are unlimited. Teachers can use songs, questions, choral responding, dances, and games to engage children and provide them with opportunities to demonstrate their skills and understanding. All activities and routines represent chances to increase OTR and support behavioral and pre-academic strengths. For instance, during transitions teachers can provide OTR by asking children to select a favorite animal and move like that animal to the next area, or by initiating a familiar transition song that requires children to sing along and imitate motions as they line up. During center time children can be given OTR as teachers circulate among centers by asking children to explain what they are doing, demonstrate an action, ask a peer to play, or create a product. When considered in these ways, increasing the frequency of OTR is as basic as remaining thoughtfully engaged with children and thinking of creative ways to provide them with frequent opportunities to demonstrate their learned skills and knowledge. From a strengths-based perspective providing OTR can also be used in a manner that can contribute to improved teacher-child interactions. For example, rather than reprimanding a child for not meeting behavior expectations (e.g., "James I told you to sit down") a teacher might provide a behavioral OTR (e.g., "James, can you show me how you sit on your chair?") thereby capitalizing on a child strength (i.e., ability to follow directions) that might otherwise be overlooked.

A second strategy, instructive feedback, can be used to expose children to additional learning opportunities after they have responded correctly to an OTR. Instructive feedback involves giving children related or novel information directly after they have demonstrated a correct response or an appropriate behavior (Werts, Wolery, Holcombe, & Gast, 1995). This type of feedback can enhance learning of non-target information, keep children engaged, and expand opportunities for positive teacher-child interactions. The use of instructive feedback builds on children's knowledge and increases learning by exposing them to additional instructional information (Werts et al., 1995).

Teachers can provide instructive feedback by acknowledging a child's correct response or behavior (e.g., "You pushed in your chair.") and then providing additional related or novel information. This additional information can expand on the child's response or behavior (e.g., "After I push in my chair I check to make sure the table is clean."), draw a parallel between the child's response and another target requiring the same response (e.g., "People also push their chairs in when they are finished eating at a restaurant."), or provide new information from a different conceptual class (e.g., "You had the small blue chair today."). Effective instructive feedback is intentional, prompt, and does not require or reinforce a response (Hattie & Temperley, 2007; Werts et al., 1995).

Another type of feedback, corrective feedback, can be used to support children's learning and success following incorrect responses or behaviors. Corrective feedback, also called error correction, can increase the likelihood that children will learn from their mistakes and provide correct responses (Barbetta, Heward, Bradley, & Miller, 1994). Teachers give corrective feed-

back by (1) stating the incorrect behavior (e.g., “You did not push your chair in.”), (2) describing and/or modeling the appropriate behavior (e.g., “We push our chairs in before leaving the table.”), (3) providing another OTR (e.g., “Why don’t you show me how you push it in.”), and (4) praising the child’s attempt to comply (e.g., “Nice work pushing the chair in all the way under the table!”; Colvin, Patching, & Sugai, 1993). This sequence helps the child learn to differentiate between correct and incorrect responses, reminds them of expected behaviors or responses, gives additional opportunities for success, and reinforces correct responding. Effective corrective feedback is intentional, prompt, specific, and positive. Within the context of a supportive classroom atmosphere, corrective feedback can help children learn from their errors and gain new skills and knowledge (Barbetta et al., 1994).

One final type of feedback that teachers can use to capitalize on child strengths is praise. Teachers can use praise to communicate positive evaluations of performance or effort (Henderlong & Lepper, 2002). Like the other strategies, praise can be used to support both behavioral and pre-academic performance. Research suggests the use of effective praise can increase intrinsic motivation, promote appropriate behavior, and decrease disruptive behavior (Henderlong & Lepper). Effective praise is sincere, specific, changes over time as children develop new skills, and is related to effort or performance rather than ability (Brophy, 1981). Sincere, specific praise can be used throughout the day to promote positive interactions among children and teachers. For example, teachers might praise children for exhibiting appropriate behaviors (e.g., “Its wonderful how you all stopped to listen as soon as I clapped my hands!”) or for demonstrating effort (e.g., “Terrific job, you worked very hard on that painting!”). The effective use of praise is a simple strategy that can be used to promote the increased likelihood of occurrence of children’s desirable behaviors (i.e., strengths) that occur in all early childhood classrooms.

Increasing the effective use of presenting OTR, instructive and corrective feedback, and praise can contribute to a positive classroom atmosphere and build on children’s strengths. The intentional and thoughtful use of these strategies lays the foundation for a strengths-based approach to supporting children who exhibit challenging behaviors.

## DISCUSSION

The purpose of this article was to present a strengths-based approach to ameliorating challenging behavior of young children in preschool classrooms. We described four strategies—OTR, instructive feedback, corrective feedback, and praise—teachers can use to promote, expand, and reinforce desirable behaviors that all children exhibit. Teachers who use these strategies frequently and effectively are more likely to see increases in the prosocial behavior of the children in their classrooms. Moreover, as children’s desirable behaviors increase, so does the likelihood of improved teacher-child interactions, which may, in turn, lead to improved downstream transactional processes.

Classroom environments are dynamic, interactive systems. Coercive interaction patterns between teachers and children with problem behavior have been shown to have a detrimental effect on teacher-child relationships, and conflict between teachers and children has been associated with lower teacher-reported social competence (Garner & Waajid, 2008). Conversely, positive teacher-child interactions have been associated with academic and social gains of young children (Mashburn et al., 2008). Thus, teachers who use OTR, feedback, and praise



in thoughtful, purposeful ways have the opportunity to utilize existing child strengths such that they not only buffer children from the detrimental effects of coercive interaction patterns but also promote pre-academic and social development. Not only will children with problem behavior benefit from these improved interactions, but all children might benefit from the improved classroom atmosphere, increase in quality of instructional interactions, and increased instructional time resulting from decreased disruptive behaviors. Furthermore, if teachers are reinforced (e.g., disruptive behavior decreases, task engagement increases) for using evidence-based instructional practices with children with problem behavior they may be more likely to use these strategies with all children, resulting in improved learning outcomes for everyone.

Extant research supports the instructional strategies described in this paper for promoting desirable academic and social behaviors of school-aged children with and without disabilities. We combine these strategies into an instructional model that has potential for affecting teacher-child interactions in a powerful way. This model goes beyond traditional methods (i.e., increasing the base frequency of specific teaching behaviors) for affecting teacher-child interactions by capitalizing on teachers' moment-to-moment decisions in response to child behaviors. Our model provides an inter-related framework to help guide teachers' responses to increase the likelihood of occurrence of effective, desirable instructional behaviors. For example, the first step in this model might involve a teacher attempting to increase his or her OTR to children, the second step (see Figure 1) involves a quick-decision response (e.g., type of feedback; praise; another OTR) based on a child's correct or incorrect response. In this way, our model combines both the art (i.e., teacher decision-making, experience) and science (i.e., evidence-based practices) of teaching in ways that appeal to administrators, practitioners, and policymakers.

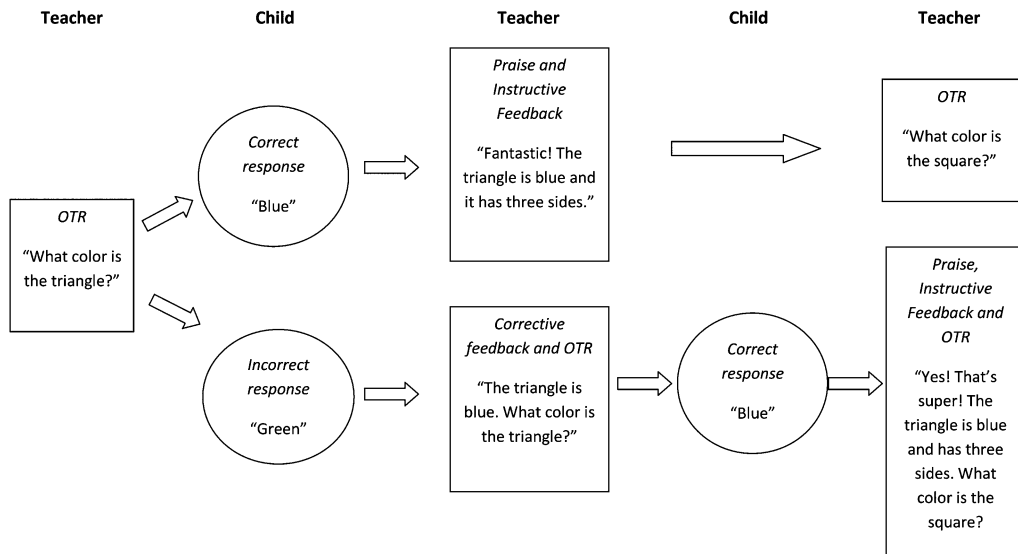


FIGURE 1 Application of teaching strategies.

## Implications for Research and Practice

Implicit in this model is the perspective that (a) the combination of OTR, feedback, and praise has a positive effect on desirable child behaviors, magnifying and enhancing skills children already possess, and (b) teachers are skilled at making quick instructional decisions. These are empirical questions we are currently investigating as we develop and pilot this classroom-based model. Another consideration that is often overlooked is the *quality* of the teacher's instructional behavior. Thus, assessing both the quality of teacher responses as well as the adherence (i.e., frequency of responses) becomes paramount as researchers attempt to measure treatment fidelity. The literature on treatment fidelity, especially research on the implementation of therapies for drug and alcohol dependence, provides important guidance on measurement issues related to the quality and adherence to treatment protocols (e.g., Carroll et al., 2000; Hogue et al., 2008).

Encouraging practitioners to implement interventions with fidelity has long been of interest to school-based researchers, and the science of measuring implementation of remains behind that of the development and identification of these practices (Fixsen, Naom, Blasé, Friedman, & Wallace, 2005). Thus it is critical that researchers not only measure treatment fidelity but also are thoughtful in the development of fidelity measures in order to capture those characteristics that are most related to treatment effectiveness. To illustrate, research on the treatment of drug and alcohol dependence suggests that quality and adherence, while both associated with treatment outcomes, are not necessarily related to each other but are independent constructs (Hogue et al., 2008). From an educational perspective, adherence to a treatment protocol (e.g., base rates of target behavior) and quality (e.g., purposeful use of target behavior) might have differential effects on children's disruptive behavior. Analyses that model the interactions and influence of mediating factors such as quality and adherence can provide important information about the relationship between treatment fidelity and treatment outcomes, thus allowing researchers to develop more targeted and effective interventions. Finally, an additional factor associated with treatment fidelity is the social validity of the intervention. We have validated this model by involving practitioners in the model development at multiple time points while maintaining the research-based integrity of the components. Measuring social validity throughout the development of classroom-based interventions is critical not only to the day-to-day treatment fidelity but also to the sustainability of practices over time. Researchers and intervention developers have a responsibility well beyond that of empirical rigor; a well-conceived, evidence-based practice will not be used by teachers who deem it undesirable or too difficult to implement, and may be actively avoided. Therefore researchers should be thoughtful about how evidence-based practices are presented to practitioners and should consider the supports necessary for implementation.

## SUMMARY

Young children with problem behavior present challenges to teachers aiming to provide high-quality pre-academic and social instruction. These children also demonstrate desirable classroom behaviors, albeit less frequently than their peers. By capitalizing on occurrences of desirable behaviors teachers may improve their interactions with children in a significant

way, and a consistent pattern of improved teacher-child interactions may result in improved downstream developmental outcomes. The strengths-based approach described in this paper appears promising for improving teacher-child interactions as well as the learning environment of all children in the classroom.

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