Utilizing Antecedent Strategies in Early Childhood Settings

n school, when Luke, a 7-yearold boy with Down's syndrome Lin an inclusive second-grade classroom, is asked to complete a task (e.g., puzzle, coloring, block building), he begins to throw materials and hits other children until an adult comes over and removes him to time out. This behavior occurs at least once a day and, at least weekly, can escalate to the point of stopping all classroom activities. The classroom teacher, Ms. Jillian, has tried to minimize this behavior by asking Luke to do fewer tasks but has had little success. She finds herself frequently being reactive and responding after Luke has begun throwing materials because her attention is on other children in the classroom.

At daycare, during circle time, Clare, a 3-year-old girl identified with a developmental delay, screams and runs around the classroom each day until she is seated away from other children in the circle and given a book to look at for the rest of circle time. Teachers in the room have been responding by trying to coax Clare to circle time but usually end up taking Clare to the reading corner and giving her a book so that the rest of the class can complete the circle activities.

During center time, Angel, a 5-year-old boy diagnosed with autism spectrum disorder, often wanders away from where he is playing, grabs toys, and hits his friends who are playing near him until he gets a toy he really likes. Teachers have tried to have Angel return the toy and apologize to his peers, but this has resulted in Angel refusing to give up the toy or returning a few moments later to take the desired toy away.

What Are These Children Trying to Tell Us?

Each child in the preceding examples is trying to communicate something to the adults around him or her. Their communication attempts are in their disruptive behaviors (e.g., Luke's throwing and hitting, Clare's screaming and running away, Angel's grabbing and hitting). Once we can determine what the child is trying to tell us through his behavior, we can begin to design interventions to decrease the challenging behavior but still allow the child to gain access to what he or she needs. This determination is made after careful observation and analysis done in a functional behavior assessment. For the purposes of this article, we may determine Luke's behavior as a means of communicating a need for

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Diane Sainato, PhD The Ohio State University adult attention and assistance, Clare's screaming and running may be a means of communicating a desire to leave (or escape) circle, and Angel's behavior may be a means of communicating a desire to get a preferred toy. Children use challenging behavior as a way to communicate, as shown in the examples, and as teachers, parents, and caregivers, the goal is to teach children more appropriate ways of communicating their wants or needs.

How Can I Address Challenging Behavior?

Much has been written on challenging behavior in young children (i.e., Conroy, Dunlap, Clarke, & Alter, 2005; Dunlap & Fox, 2011; Hemmeter, Ostrosky, & Corso, 2012; McEvoy & Reichle,



2000; Neilsen & McEvoy, 2003), and we know that teaching new skills, particularly appropriate ways to communicate, is important when reducing challenging behavior. We have many strategies that address both what occurs before and after the behavior happens (Conroy et al., 2005; Cote, Thompson, & McKerchar, 2005). Strategies that focus on what occurs before the behavior happens are known as antecedent strategies. Strategies that focus on what occurs after the behavior happens are known as consequence strategies.

How Can I Increase a Child's Independence?

Teaching children appropriate ways of communicating their wants and needs is very effective. In addition, using strategies that change the events before and after the behavior occurs can help reduce challenging behavior in the future. After the intervention has been successful for some time, it is useful to consider how control of the behavior might be transferred to the child, resulting in less reliance on adult prompting and increasing the child's independence and selfreliance (i.e., Odom & Watts, 1991; Sandall et al., 2008; Southall & Gast, 2011; Strain, Kohler, Storey, & Danko, 1994). Interventions exist that support children in learning how to manage their own behavior (i.e., learn self-control). Indeed, these interventions have demonstrated effectiveness for children as young as 3 years old (i.e., Sainato, Goldstein, & Strain, 1992; Strain et al., 1994). In this article, we describe three strategies that can assist teachers, early

childhood providers, and parents/ caregivers in moving successful interventions to the control of the child across a variety of target age groups. These strategies are selfmonitoring, activity schedules, and correspondence training.

What Do I Need to Know About Teaching Self-Management Strategies?

Self-control and selfmanagement are difficult skills for young children to learn. These skills need to be explicitly taught. That means, when we want a child to follow a picture schedule, we must teach her what it means to "check your schedule" or see if she finished her work. In most instances, this means explicitly describing the steps and then teaching each step. For example, when we ask a child to "check your schedule" we must systematically teach what it means to "check your schedule." For one child, when her teacher says "check your schedule," the child will go to her picture schedule, look at the activity pictures, and then move to and engage in the next activity. The teacher might do this by using physical prompts and reinforcement. She would teach the child that when she says "check your schedule," she would physically guide the child to her picture schedule, identify the activity, and move to the activity. When the child physically moves to the activity and begins participating, the teacher would provide some form of reinforcement (i.e., social praise such as "good job checking your schedule") for completing the request, "check your schedule." This same teaching strategy can be used in multiple settings, including school, home, and in a variety of community settings. Once a strategy has been taught to the child, it is important the effects the strategy has on the behavior as well as the actual use of the strategy are monitored.

What Skills Does the Child Need to Have?

It is very important that we identify children with whom these strategies may be effective. While teachers may not initially consider the use of self-management strategies for young children, there are many examples of its effectiveness with this population (i.e., Apple, Billingsley, & Schwartz, 2005; Joseph & Strain, 2010; Palmer et al., 2013; Sainato et al., 1992; Stahmer & Schreibman, 1992; Strain et al., 1994). It is important to note that several prerequisite skills are necessary for these strategies to be successful. First, it is important that the child has the skills to identify when the behavior of interest is occurring and when it is not occurring. For example, when teaching a child to self-evaluate whether or not he or she is using a quiet voice or a loud voice, it is important that the child can distinguish between these two behaviors.

In addition, it is important that the child has the skill in his or her repertoire before using a selfmanagement strategy to increase the behavior of interest. That is, if Ms. Jillian is trying to increase Luke's ability to request help, then she wants to ensure that Luke has requested help before. We need to know that a child can perform the behavior independently (e.g., requesting help) before we attempt to have the child self-manage the skill.

Next, we present three antecedent strategies that can be used to increase independence in young children with disabilities while decreasing challenging behavior: self-monitoring, activity schedules, and correspondence training. For each strategy, we describe the strategy, how to design the strategy, how to teach the strategy, and provide an example of the strategy being used with a child.

Self-Monitoring

Self-monitoring is often described as two strategies used together: self-evaluation and selfrecording (Cooper, Heron, & Heward, 2007). Self-evaluation involves the child evaluating his or her behavior by discriminating between whether or not he or she engages in the behavior. Selfrecording is making a record of the number of times a behavior occurs. When a child uses self-monitoring, he or she typically determines whether he or she engaged in the target behavior and then records whether or not he or she engaged in the behavior (Cooper et al., 2007). In some cases, it may be appropriate to also include self-reinforcement, where after the child determines the behavior occurred, the child provides his or her own reinforcement for engaging in a behavior rather than relying on someone else to provide the reinforcement (see Agran, King-Sears, Wehmeyer, & Copeland, 2003; Cooper et al., 2007, for further descriptions of selfmonitoring). An overall goal for

teachers, early care providers, and parents/caregivers is to increase independence. A child who learns to evaluate, record, and reinforce his or her own behavior increases his or her independence while also increasing the available teaching time for the adult responsible for instruction. For children with disabilities, learning how to selfmonitor is often a skill that needs to be taught explicitly and can begin as young as age 3. By learning how to self-monitor, a child with a disability may be perceived as being more competent and may then have access to more settings.

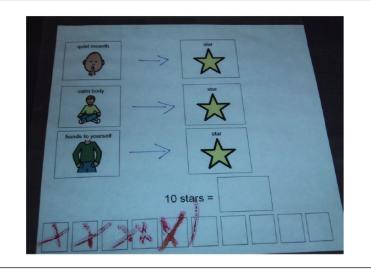
Self-monitoring for young children may take many forms. Teachers may ask children to mark on a sheet of paper whether they got their coat, put on their backpack, and cleaned up their area before lining up to get ready to go home. In another example, teachers may also ask children to put a chip in a container each time they used nice words when asking to play with friends. Figure 1 shows an example of a self-monitoring sheet that may be used for young children. The sheet has been laminated and contains the prompts "quiet mouth," "calm body," "hands to self" as reminders for appropriate behaviors. The child may then be prompted: "Is your mouth quiet? Is your body calm? Are your hands to yourself?" If he or she is able to respond "yes" to each prompt, he or she may mark an "X" or place a token (e.g., sticker, picture) to record his or her behavior.

The Evidence

A long history of research on self-monitoring demonstrates selfmonitoring to be successful with

Figure 1

Laminated self-monitoring recording sheet



young children (ages 2-7 years old) for behaviors such as responding to social questions (Koegel, Koegel, Hurley, & Frea, 1992), initiating play (Strain et al., 1994), increasing social interactions (Sainato et al., 1992), engaging in independent, unsupervised play (Stahmer & Schreibman, 1992), and evaluating independent work (Sainato, Strain, Lefebvre, & Rapp, 1990). In addition, self-monitoring research has documented successful outcomes for behaviors such as giving compliments (Apple et al., 2005), varying verbal responses (Newman, Reinecke, & Meinberg, 2000), sharing (Reinecke, Newman, & Meinberg, 1999), increasing problem-solving skills (Joseph & Strain, 2010), and increasing selfdetermination skills such as choicemaking and self-regulation (Palmer et al., 2013). Furthermore, Mithaug and Mithaug (2003) studied the effects of teacher-directed versus child-directed instruction, where either the teacher or the child set

goals, selected assignments, and recorded and evaluated results. Their study found that when young children with disabilities (ages 5-6 years old) directed their instruction, they engaged in self-management behaviors (e.g., correctly recording what they were going to do and what they did do during independent work) more frequently (Mithaug & Mithaug, 2003). Selfmanagement strategies taught in early childhood may also set the stage for later increased selfdetermination skills (Palmer et al., 2013). Strategies for selfmanagement are also easily implemented in inclusive settings (Koegel, Matos-Freden, Lang, & Koegel, 2012). Indeed, selfmanagement strategies have been listed as an evidence-based practice for early childhood through high school ages by the National Professional Development Center on Autism Spectrum Disorders (NPDC-ASD; http://autismpdc.fpg.unc.edu/ content/self-management).

Designing the System

When first beginning a selfmonitoring strategy, the teacher must ensure the child can perform the target behavior (e.g., playing with toys appropriately, hang up a coat) and is able to discriminate between what the target behavior looks like and what it does not look like. This may take some direct teaching. For example, a teacher who has been working with a child to join a group of friends on the playground instead of walking the perimeter may have to describe to the teacher what he or she will say when joining a group. A teacher might also describe a situation in which the child is not with a group and have the child identify if this is "joining a group" or not. Next, it is key to consider the environment or context where the self-monitoring will occur. For instance, a paperand-pencil approach, where a child marks on a sheet of paper whether he or she performed the behavior or not, may not be feasible for the playground. Instead, the teacher might consider having the child monitor behavior on the playground by moving pennies from one pocket to the next. It is also important to consider the other contexts in which the behavior is to be performed and how the strategy might transfer to those contexts. For instance, a child may need to engage in appropriate play at school, at home, and at the babysitter's house. A strategy should be developed that can carry across all contexts. The final step in individualizing this strategy for the situation is to decide how the child will be signaled to evaluate his or her behavior-will there be an audible sound? Will the teacher give a cue?

Teaching the System

With all skills, it will likely take some time to directly teach the child how to self-monitor his or her behavior. The steps to teaching a selfmonitoring system include identifying the situation in which you will want the self-monitoring to occur, teaching the child to discriminate between when the behavior occurs and when it does not occur, teaching the child to record when the target behavior occurs, providing reinforcement, and periodically checking to be sure the self-monitoring system is still effective.

System in Action

Following his or her intervention to decrease Luke's throwing and hitting behaviors, Ms. Jillian is interested in increasing 5-year-old Luke's independence during work tasks. Ms. Jillian begins by determining whether Luke is able to recognize when the behaviors (e.g., throwing, hitting) occur and when they do not. Ms. Jillian does this by working with Luke one-on-one, asking him to show her yelling and not yelling. Ms. Jillian also ensures that she has data demonstrating the tasks Luke has mastered and can complete independently. Once Ms. Jillian determines Luke is able to discriminate between the appropriate and inappropriate behaviors (e.g., yelling and not yelling), she sets up a self-monitoring system for Luke to use during independent work time. Ms. Jillian decides that a recording will be played during independent work time that sounds a tone every 2 min. Luke is taught to ask himself, "Am I working nicely?" which includes talking in a normal voice and

completing the work, when he hears the tone. Ms. Jillian also gives Luke rubber bands to wear on his right wrist. She then teaches Luke that when he can answer "yes" to the question "Am I working nicely?" Luke is to move one rubber band to his left wrist. This way, Luke is recording his own behavior. Ms. Jillian uses this strategy at every independent work time for about a week (or 5 data points), reminding Luke before independent work to ask himself, "Am I working nicely?" and reviewing what working nicely looks like. After each independent work period, Luke has at least five rubber bands on his left wrist (which would be equal to approximately 10 min of appropriate work), Ms. Jillian gives Luke access to a highly preferred toy (e.g., an iPad) for 5 min. Ms. Jillian observes and gathers data on Luke's behavior. Her data show that Luke's inappropriate behavior has decreased and his "working nicely" behaviors have increased. Ms. Jillian leaves the strategy in place, observing and recording data every other day to ensure that the strategy is continuing to work for Luke. Ms. Jillian continues to provide Luke access to a highly preferred toy each time he has at least five rubber bands on his left wrist. Gradually, Ms. Jillian increases the number of rubber bands Luke needs to have to access his highly preferred toy, ensuring that the goal is always achievable for him. When data demonstrate that Luke's disruptive behaviors (hitting and throwing) have decreased, Ms. Jillian reexamines the use of the self-monitoring strategy and considers a means of fading the use of the strategy. She might begin by increasing the amount of time between check-ins (i.e., increase the time between tones). She might then

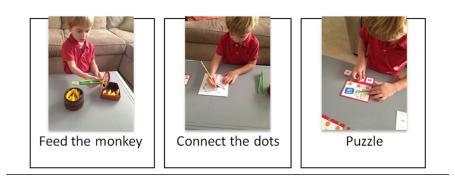
decide to have Luke check-in at the end of independent work times. For Luke, he may need to continue using the self-monitoring strategy for several months, or it may only be needed for a few weeks. The data Ms. Jillian collects related to Luke's disruptive behaviors will determine the length of time the selfmonitoring strategy will remain in place. As long as the self-monitoring strategy is effective in reducing Luke's disruptive behaviors, Ms. Jillian will likely decide to keep the strategy in place to support Luke's independence in the classroom.

Activity Schedule

Activity schedules are sequenced visual cues, such as pictures or photos, that help a child complete complex tasks or a series of tasks or activities independently. In essence, an activity schedule provides children with a "to do" list to help them stay on task and complete steps and activities, much like a "to do" list an adult might have. Activity schedules can be displayed in a number of ways, such as in a three-ring binder with a picture of one activity or step in a task on each separate page of the notebook, or on a strip of paper with a picture of each activity or step in sequential order, which can then be removed and placed in a "finished" envelope. More advanced technology can also be utilized, such as a PowerPoint® with each step or activity (Stromer, Kimball, Kinney, & Taylor, 2006), or a digital activity schedule using iPad or iPod applications may be used with older children (e.g., aged 6 and above; that is, Carlile, Reeve, Reeve, & DeBar, 2013). In addition, activity schedules can be utilized

Figure 2

Photographic activity schedule



both across activities and within activities. Across activity schedules may be utilized to provide children with a schedule across different daily activities, such as a daily schedule. Within activity schedules (Figure 2) may be used to increase a child's independence in completing a specific task. In addition to increasing independence and reducing challenging behaviors, choice-making skills can also be introduced into activity schedules (Mason, McGee, Farmer-Dougan, & Risley, 1989). For example, a teacher may ask a child to choose two activities to engage in during playtime with the goal of increasing the child's engagement during playtime and reducing the child's problem behaviors (e.g., hitting other children to obtain a toy). The child may be photographed doing different activities, and then the photographs can be arranged in the order that the child is to complete the activities.

Designing the System

Activity schedules are typically not used to teach children new skills but to increase a child's independence in completing mastered tasks. For example, a teacher may have a child who knows how to complete puzzles, play with Legos, and look at books; however, the child may wait for adult prompts before engaging in the behaviors. An activity schedule would help the child initiate and transition between activities without assistance from an adult. The goal of an activity schedule is typically to increase engagement and decrease disruptive behaviors (such as stereotypy) but can also be used to increase social interactions by including cues for social interactions on the schedule (i.e., placing a picture of the child interacting with another child on the schedule). The objective of the activity schedule is for a simple verbal prompt, such as "check your schedule" or "go play," to become the cue for a child to check his or her schedule. Once the schedule has been taught, a teacher would then be able to say the prompt and the child would know what he or she needs to do next, without further adult assistance. It is also important to ensure that the child has certain prerequisite skills, such as picture-object correspondence and mastered activities (i.e., knows how to put a puzzle together).

Teaching the System

The activity schedule can be taught using systematic prompting. The key is to teach the child how to use the schedule before expecting the child to use the schedule on his or her own. A prompt system called "graduated guidance" can be used to teach the activity schedule. Using graduated guidance, a teacher would start by gently physically prompting the child through the motions of following the schedule. For example, the teacher might place her hand on Jane's hand to point to the picture of the activity or step, then lead Jane to the activity. As the child starts to learn the routine of following the schedule, the teacher gradually uses less and less physical prompting until the child is doing the schedule independently. It has been suggested that verbal instructions not be used when teaching the child how to use the schedule (McClannahan & Krantz, 1999). Experience has shown that verbal instructions may become embedded in the routine, making it difficult for the child to independently use the activity schedule.

The Evidence

Research on activity schedules for young children has included using visual activity schedules to increase initiation skills (Johnston, Nelson, Evans, & Palazolo, 2003), increase sociodramatic play (Dauphin, Kinney, & Stromer, 2004), increase social interactions (Nelson, McDonnell, Johnston, Crompton, & Nelson, 2007), and increase task engagement (Massey & Wheeler, 2000). Visual supports have also been included as part of an intervention package that involved use of a structured work system, visual schedules, and a

predictable routine to increase on-task behaviors in preschool children and to reduce stereotypic behaviors (e.g., waving strings in front of eyes, loud vocalizations, hand-flapping; Bennett, Reichow, & Wolery, 2011). The use of visual supports, which includes the use of activity schedules, has been listed as an evidence-based practice by the NPDC-ASD (http://autismpdc.fpg .unc.edu/content/visual-supports).

System in Action

At the daycare center, Mr. Jay has worked with 4-year-old Clare for the past 3 months to find ways to decrease her screaming and running behaviors during circle time. Mr. Jay reads about and talks to a couple of other teachers about using activity schedules to reduce certain behaviors. He is interested in the strategy because it can also be used to increase independence in young children. Mr. Jay begins by assessing activities with Clare's picture-object correspondence. As Mr. Jay is interested in using the strategy during circle time, he checks Clare's understanding of pictures related to circle time and even decides to use pictures that feature Clare performing behaviors, such as sitting on her carpet square and putting her hands on her lap. Mr. Jay also assesses what Clare will work for (i.e., reinforcer preference) and determines that Clare highly prefers activities on her own, such as looking at a book, completing a puzzle, and playing a game on an iPad. Based on these assessments, Mr. Jay creates a laminated sheet that has pictures of each circle time activity followed by a picture of an activity Clare enjoys. The activity schedule allows Clare to remove a completed circle activity, which allows her to monitor steps

toward her preferred activity. Mr. Jay teaches Clare how to use the activity schedule by pointing to completed activities. Mr. Jay slowly fades this support as Clare begins to recognize each circle time activity ending. After about 2 weeks, Mr. Jay sees a change in Clare's behavior; she is more engaged in circle time and is not engaging in inappropriate behaviors. Mr. Jay has plans to begin using activity schedules for more activities throughout the day for Clare and a few other children.

Correspondence Training

It is very common for teachers or parents to ask children, "What are you going to play with next or what did you do today at school?" However, some children are not able to recount their past behavior or predict their future behavior accurately. This is an important skill to learn, especially as a child enters school.

"Correspondence" is the relation between what the child says and what the child does (usually a nonverbal behavior). The sequences can vary from "say-do," in which the child forecasts playing with a ball and then actually chooses a ball, or "do-report" such as playing with a ball and then being able to accurately report back to the adult. Correspondence training can increase the accuracy of the verbal "promise" to engage in a behavior as well as the "reporting" back of a behavior (Lloyd, 2002). In this way, correspondence training for children may facilitate children's engagement in a variety of social and adaptive behaviors across numerous settings (Bevill, Gast, Maguire, & Vail, 2001). This strategy becomes particularly

useful in situations where having an activity schedule may be too cumbersome. For instance, on the playground, it may not be practical to have a child carry an activity schedule, but instead, you may incorporate correspondence training in the form of having the child say what she is going to do on the playground.

Designing the System

In correspondence training, the teacher praises the child for saying or "forecasting" his or her intent to engage in an activity. Praise is provided again if the child engages in the corresponding behavior (Baer, 1990). If the teacher wants the child to report back, then praise can be provided for that as well. Statements such as, "You said you were going to play with the blocks and you did!" might be paired with the opportunity to engage in a favorite activity. The teacher should observe the child during a work or play time to choose an appropriate activity with which to use correspondence training. The teacher should be careful to use words the child has in his or her repertoire to explain the steps in the task. For example, if the teacher is trying to have the child rotate among three areas during center time, he or she should be careful to use the names of the centers the child responds to when asked to go there.

Teaching the System

Some classrooms may find it useful to begin correspondence training by creating photographic activity schedules. Morrison, Sainato, Benchaaban, and Endo (2002) implemented activity schedules in which the children chose four pictures depicting corresponding play areas following the question, "Where do you want to play?" The child was told to follow his or her schedule. At the end of the session, the child was directed back to the table where he or she had initially chosen the four play areas. The teacher then verbally reviewed the "match" between the child's predicted play selections and his or her actual choices. The teacher provided reinforcement if the child matched his or her "forecasted" schedule. The use of pictures as visual cues may also help the children perform the desired skill across the day or in other settings.

The Evidence

Correspondence training studies from the late 1970s demonstrated that correspondence between verbal and nonverbal behavior could be trained to match one another through reinforcement (Baer, 1990). Lloyd (2002) provided additional guidelines and procedures to be used with correspondence training. Correspondence training has been shown to increase engagement and play skills of children with autism and other disabilities (Bevill et al., 2001; Morrison et al., 2002). Correspondence training has also been used to promote toy play, social behavior, and clean-up (Odom & Watts, 1991; Osnes, Guevremont, & Stokes, 1986). The literature on correspondence training suggests that there is a connection between what individuals state they are going to do and what they actually do (Morrison et al., 2002).

System in Action

The following is an example of correspondence training with a

preschool child: Mrs. Patton points to the photographic activity schedule and asks Angel, "Where are you going to play?" Angel responds, "I am going to play with the block and trucks." The teacher can reinforce the verbal statement by saying, "You said you are going to play in the blocks and trucks. Remember to follow your schedule." Angel goes off to play. After playtime, Mrs. Patton asks Angel whether he played with the blocks and trucks. If the child actually did play with the forecasted toys, Mrs. Patton says, "You said you were going to play with the blocks and trucks and you did!" Reinforcement is not provided, if the child played in a different area. Prompts can be used if the child is off-task or disruptive to redirect the child during the activity. Prompts may also be used to direct a child to the forecasted play. For example, a child who states he or she will begin play in the blocks area but then goes to the dramatic play area might be prompted to go to the blocks area. Angel's forecasted and reported behavior may be made more salient, when the photographic activity board is employed to help Angel see whether or not he correctly reported his behavior. In this fashion, Mrs. Patton might place an icon representing the child's choice over the forecasted play or social behavior and then place a second icon over the reported behavior in the setting.

Including Families

The Division for Early Childhood of the Council for Exceptional Children (DEC; 2014) recommended practices include best practices for gaining information 66

When working with young children, it is especially important to involve the family in developing strategy

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Once self-management strategies are learned, children's increased independence may allow them to access their environment appropriately without direct teacher intervention

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activities outside the school/center in home and community settings and for involving families in ways that honor and respect the unique characteristics of each family. When considering the strategies described, it is no less important to incorporate child preferences and family needs into planning the use of these strategies. It is widely accepted that culture has an immense impact on development in early childhood (DEC & National Association for the Education of Young Children [NAEYC], 2009), which leads to emphasizing the importance of considering the cultural and linguistic diversity of the children practitioners work with every day. Each strategy described can be adapted to include cultural and linguistic diversity into its use. For the self-monitoring strategy, collaborating with parents on cultural expectations for independence (i.e., when and where independence might be expected for children of the same age) may lead to use of the strategy across environments (e.g., center, home, church). The activity schedules and correspondence training can both be adapted to include multiple languages to honor the linguistic diversity of young children. When working with young children, it is especially important to involve the family in developing strategy that may be used across multiple settings and to honor the diversity (e.g.,

about a child's daily life, including

ethnic, linguistic, cultural, racial, family system) of each family (NAEYC, 2009).

Conclusion

Self-monitoring, activity schedules, and correspondence training are excellent techniques that can be used to increase independence in a classroom setting. It is critical to remember that the skills you target for teaching self-management strategies are in the child's repertoire before you attempt to use any of these strategies focusing on independent performance. Once selfmanagement strategies are learned, children's increased independence may allow them to access their environment appropriately without direct teacher intervention, whereas consequent strategies tend to be timeconsuming and require staff support. If children engage in behaviors communicating a potential need for teacher attention, a change in routine, or a desire to obtain certain toys and materials, they may be good candidates for the use of selfmanagement strategies, to increase their independent behavior and decrease challenging behaviors in the early childhood classroom. Children who are able to manage their own behavior may be perceived to be more competent learners and may be better able to engage their environment.

Authors' Note

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