Strategies for Teaching Children With Autism in Physical Education

by Melissa Groft-Jones and Martin E. Block

The previous articles in this feature highlighted unique characteristics associated with autism as well as unique educational models (ABA, TEACCH, PBS) designed to specifically address the needs of children with autism. The purpose of this final article is to summarize information presented in the prior articles into practical strategies physical educators can use when teaching children with autism. We have divided the article into three areas: structuring the environment, accommodating communication challenges, and preventing challenging behaviors. It should be noted that each child with autism presents unique strengths and weaknesses, so not all these suggestions will be appropriate for all children with autism.

Setting up the Environment

As noted in the previous articles, children with autism have difficulty understanding their environment and often get upset when confused or faced with a change in routine. Therefore, the first thing to consider is creating a clear structure and routine as well as establishing an environment that utilizes students’ visual strengths. The following are some examples of how to establish structure and routine in physical education.

Physical Layout

The physical layout of the setting is important for children with autism. Whenever possible, the environment should provide visual cues on where to go and what to do. The environment should not be too distracting, and specific areas for performing certain skills should be clearly marked (e.g., taping a picture to the wall of a person throwing indicates a throwing station). Also, establish clear boundary markings to help children with autism know where they may and may not go. For children with autism who need to do some activities away from their peers, create a quiet area free from distractions and stimulation where they can go to calm down. For some, this could be as simple as allowing the child to sit in a corner facing away from his peers for a few minutes.

Establish a Routine

Although physical educators need the flexibility to introduce new activities and units throughout the school year, children with autism do best when a consistent routine is followed every time they enter the gym. They seem to experience less anxiety about “what is coming next” if they know exactly what is expected of them and have a specific routine to follow. This can be as simple as
having a student report to an assigned spot on the floor for attendance and performing a simple, consistent warm-up activity. After the warm-up, new activities and teaching styles can be introduced. The key is to let the child with autism experience some consistency and familiarity in the gymnasium.

### Have a Clear Ending to Your Class

Just as it’s important to have a routine for the beginning of class, make sure the activity portion of the session ends early enough to accommodate a clear ending to the class. The "end-of-session" routine should be the same each day for any participant with autism. The clear ending helps the child with autism transition from physical education to his next activity. For example, routinely ask that the child help clear some equipment, sit in a designated spot or with his squad, or do a simple ending stretching routine. A calming activity at the close of class (lying down and doing breathing exercises or yoga-type positions) is probably good for students without disabilities as well.

### Use Visual Schedules and Visual Cues

In addition to an established routine, Blubaugh and Kohlmann noted in their article that many children with autism benefit from visual schedules. Children with autism often use a schedule during their school day, and it is relatively easy to apply schedules in physical education as well. A physical education schedule might be as simple as a manila folder with pictures and words to describe the routine and the daily activity. To help the student keep track, format the schedule in two columns. In one column, list or place pictures of activities to be completed. In the other, check off the activities as they are completed. Or, if using pictures, the student moves each picture to the "finished" side of the chart to show what he has completed in physical education. Schedules help the child become familiar with the daily physical education routine, which calms and reduces anxiety and confusion and gives the child a sense of accomplishment. The child’s teacher assistant or a peer can help the child use his physical education schedule, freeing the physical educator to instruct and supervise the entire class.

### Communication

Block, Block, and Halliday, in this feature, noted that communication is a major area of concern for children with autism. Some children with autism are able to speak and understand many verbal cues, while other children with autism seem to be mute and respond only to pictures or sign language. In either case, the physical educator has to explore how best to communicate with the child with autism. Utilizing a communication system similar to what the child’s special education teacher or teacher assistant uses is a good place to start. The following are some general suggestions related to communicating with students with autism.

#### Get the Student’s Attention

Make sure you have the child’s attention when giving directions, especially when giving demonstrations. Also, use a multisensory approach, such as extra colors to highlight critical components [e.g., red tape on your left leg and right arm to emphasize opposition when throwing]. Be aware of distractions that may catch the child’s attention. Position the child with his back to those distractions as he receives directions.

#### Simplify Verbal Directions

Understanding verbal directions is an issue for most children with autism. Be prepared to simplify verbal directions and supplement them with extra demonstrations and physical assistance. [Talk to the child’s speech therapist, parents, or special education teacher for more ideas.] Simplifying directions can be as easy as saying “Watch me” prior to demonstrating what you want the child to do; then, end the demonstration with “Sarah’s turn.” Note: Pronouns can be particularly confusing for some children with autism. Instead of saying "It is your turn," try, "It is Sarah’s turn."

#### Minimize Jargon

Physical education lingo is likely to confuse the child with autism. So, try to minimize it. Saying something like “Keep your eye on the target” might cause the participant with autism to approach the target and actually place her eye on it! Lingo such as “run like the wind,” “freeze,” “try and touch the ceiling when you jump,” or “hit the cover off the ball” may be motivating to children without disabilities, but it simply confuses children with autism.

#### Use Alternative Forms of Communication

Many children with autism rely on alternative forms of communication. These alternative forms of communication include pictures [e.g., picture of a ball], real objects [e.g., a real ball], and sign language [signing the word “ball”]. As noted above, it is important for the physical educator to find out which form of alternative communication each child uses and then consistently use this system when interacting with the child. For example, learn simple signs that relate to physical education [e.g., sit, stand, run, more] and use them to communicate with a child who relies on sign language.

One advantage that physical educators have over other disciplines is that so much of what is communicated to children in physical education can be presented via demonstration and physical assistance. After verbally explaining something to the class, it’s likely children
with autism will benefit from a demonstration or being physically assisted in their initial attempts. This can be done either by the teacher or an assistant.

**Preventing Challenging Behaviors**

Many children with autism exhibit challenging behaviors such as wandering, running away, making loud noises, crying or laughing for no apparent reason, aggressive behavior, and even self-abusive behavior. As noted by MacDonald, Jones, and Istone in this feature, the first step when confronted with challenging behaviors is to consult the child's special education teacher and/or parents. Ask what behaviors to expect, what triggers those behaviors, and what techniques work to prevent or stop the behaviors. In some situations, it is appropriate to brief the child's classmates without disabilities on what to expect. It is less disconcerting to them if they know to ignore certain behaviors, how to help with some behaviors, and when to be careful or ask for help. The following are some suggestions that may prevent a child with autism from displaying challenging behaviors.

**Using Positive Reinforcement**

Try to find reinforcers unique to the child. Again, parents and teachers are a good resource for determining a reinforcer that works for a particular child. It might be as simple as a high five or something more complex or tangible like a penny, sticker, or even food. The idea of the reinforcer is to teach the child cause and effect (If I do something asked of me, I receive a thing I want). Food reinforcement is usually a short-term strategy that is faded into secondary forms of reinforcement (pats on the back or free time to play with a favorite object).

It’s likely a specific reinforcement schedule has been created for most children with autism by their primary teacher or an intervention team. It’s important that the physical educator follow that schedule. Consistency of reinforcers across different settings makes them more effective for everyone involved. It helps that most children with autism are accompanied to physical education by a teacher assistant who can help deliver food reinforcers or remind the teacher of the child’s current status relative to a reinforcement schedule.

**Find Activities That Are Reinforcing**

While food and reinforcers from the classroom (e.g., watching a favorite video or playing with a favorite toy) may be used in physical education, many children with autism will find physical activities that are enjoyable and reinforcing as well. For example, many children with autism enjoy repetitive activities such as bouncing a ball or shooting it into a basket over and over. As the child’s interest in such a physical activity is discovered, it can be used as a reinforcer. For example, explain to a child that if he completes 10 sit-ups and 10 push-ups, he will be allowed to dribble a basketball for 2 minutes.

**Focus and Reinforce Appropriate Behaviors**

Regardless of the type of reward selected, be sure it is used to draw attention to the child’s appropriate behaviors. Try to catch him doing something he is supposed to do; then praise him specifically for that behavior. With a focus on positive behaviors, the student begins to understand the reward is greater when he does what is asked. Therefore, avoid negative commands such as “no” or “do not touch.” Instead, use phrases like “wait” or “hands down.” Keep the focus on the positive to help eliminate the unwanted negative behaviors.

**Teach Appropriate Use of Equipment**

Children with autism often use equipment inappropriately or in stereotypical and even dangerous ways. For example, a child may insist on only bouncing repetitively on an exercise ball rather than using it to do stretching and strengthening. By reinforcing the student when she uses the equipment appropriately, the behavior can be redirected, teaching her the correct way to use the equipment. Classmates can be extremely helpful in demonstrating appropriate use of equipment and cueing the child with autism how to use it. Or, simply asking the child to put equipment away when it is not being used prevents its inappropriate use.

**Dealing With Sensory Sensitivity**

Sensitivity to stimuli in the physical education environment such as sounds (many gyms are quite loud), sights (balls or peers moving quickly around), and touch (being too close to peers) can lead to unwanted behaviors. A child with autism who is over-stimulated by his surroundings may become agitated, suddenly try to escape the setting, or act out toward adults or peers. It is important to find out what types of sensory sensitivity the child has and do whatever is possible to control that stimuli. This may be as simple as substituting a hand signal for a whistle or strongly encouraging peers to reduce yelling or screaming (which shouldn't be happening anyway!).

Unfortunately, there are many noises in a typical physical education class that cannot be muffled: shoes squeaking on the floor, banging of equipment, or echoes produced by movement within a large, open space. Yet, a noise level that goes unnoticed by most children can seem deafening to a child with autism who is sound-sensitive. In such cases, the child with autism should be allowed to wear headphones to physical education that muffle sounds in the gym. Or, allow the child to leave the gym with her teaching assistant for a few minutes,
or even much of the session, if she has trouble dealing with the noise on different days.

**Dealing With Challenging Behaviors**

Even with a routine, a picture schedule, a teacher assistant, the use of reinforcement, and other modifications, a student with autism will still have difficult days. It is, therefore, important to be familiar with any behavior plan created by an IEP team to deal with that child's challenging behaviors. Some children need only hear a key word, or a reminder of a reinforcer she is trying to earn, to be redirected back to appropriate behavior. Others need a quiet place to calm down or to go for a short walk with their teacher assistant. Still others need more support, such as going for a longer walk with the teacher assistant, lying on a gym mat for a few minutes, or receiving deep pressure from the teacher assistant (like a massage). Deep pressure can reduce the student’s tension and refocus her on the task at hand.

While autism represents a spectrum disorder, accommodations to it also occur on a spectrum. So, while one child may only need a few minutes on a mat or in a quiet space, others may need almost the entire class period to calm down and return to “normal” activities. For the teacher to know the difference and respond correctly requires a team approach. It’s important that the physical educator be familiar with and follow the plan created by the child’s IEP team. That includes providing the support (space, gym mat, etc.) necessary to help the child calm down.

**Summary**

It is important to remember when working with children with autism in physical education there is no "one size fits all." Autism affects each child differently. One child might only need some extra visual cues to accommodate limitations in verbal language. Another might need constant support from a teacher assistant. Even more exasperating, a child with autism might behave a certain way one day and be completely different the next. The key is to learn as much as possible about children with autism from each child’s IEP team. Then, be prepared to implement individually determined strategies to structure the environment, accommodate communication challenges, and prevent challenging behaviors.

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