

TEACCH Model and Children With Autism

by Nicole Blubaugh and Joanne Kohlmann

Welcome to Ms. Cantor's classroom. Looking around the room, one immediately notices some things you might not see in a "regular" elementary school classroom. First, it seems that every child has a schedule. Some schedules have pictures showing various things the child will do during the day, while others have schedules that have words. It also is interesting to see the various shapes (e.g., purple triangle, yellow diamond, orange circle) that seem to cue children to particular places around the room. Then there are the unique work areas that are partitioned off with refrigerator boxes to make a little cubby-shaped area. In each work area there is a shelf with activities and a desk with a basket to the right and another to the left. The organization of the room seems to visually cue children on the plan for the day, where to go, and what to do when they get there.

Ms. Cantor teaches children with autism, and she follows a structured teaching model known as TEACCH. TEACCH is a very popular model for educating children with autism in public schools in the U.S. It has many features that can be effective in physical education. The purpose of this article is to describe key components of the TEACCH model, benefits of these key components to

children with autism, and examples of how these components can be implemented in the classroom as well as physical education.

What is TEACCH?

In the early 1970s, Eric Schopler founded the Treatment and Education of Autistic and related Communication Handicapped Children (TEACCH). TEACCH does not use any one particular technique; instead, teachers create a program based on each individual child's skills, interests, and needs. The basic idea is to first understand how autism affects each particular child, make appropriate modifications that take advantage of the child's strengths while accommodating his weaknesses, and then continually and systematically build on skills the child already possesses as well as things that interest him (Mesibov, 2006). You must teach to each child's strength rather than trying to eliminate it. For example, a first grade student with high-functioning autism (HFA) "obsesses" about United States presidents. Rather than trying to curtail his interests, his teacher has built upon it. She created a notebook for the child to teach him to read and to correctly pronounce the letters in the alphabet. For example, her student points to the letter A, identifies it aloud, says "Adams," and then makes the short "a" sound. He does this with all the president's last names. Because of his obsession with the presidents, his schedule is named "Thomas Jefferson," and he has been instructed to "check Mr. Jefferson" when it's time to check his schedule throughout the day. The physical education teacher also uses this child's obsession with presidents to her advantage. When it comes time to play a tag game for warm-ups, she tells the child the tagger is President Lincoln and he needs to tag confederate generals. While this may seem strange, it's very motivating for this child.

Visual organization of work station going from left to right.



Individual Assessment

TEACCH believes that children with autism are part of a distinctive group with common characteristics that are different, but not necessarily inferior, to children with-

out autism. As a result, TEACCH does not try to help a child with autism become “normal.” Rather, the focus is on building upon each child’s unique strengths and differences to help him/her become successful (Mesibov, 2004, 2006). While children with autism have common characteristics that set them apart from children without autism, these characteristics affect each child in a unique way. Remembering the first article in this feature, autism is a *spectrum disorder* with some children having very mild characteristics while others have very severe characteristics. Therefore, individualized assessment is necessary in order to understand each child’s unique abilities, weaknesses, and learning style. The ultimate goal of assessment is to not only find what a child needs to learn but also how best to present material and teach each child (Mesibov, 2006).

For example, children with autism have problems with communication, but these problems vary from child to child. Some children understand verbal cues if they are delivered in 1-2 word sentences, some children can understand written words, and still other children may only understand picture cues. Assessment allows the teacher to understand how best to communicate with each child and then create a program that meets each child’s unique needs. Similarly, a physical educator learns to which children he can say “kick ball,” which children need that cue written down, and which children need to see a picture of a ball to understand the direction to kick a ball to a target.

Structured Teaching

The most key and recognizable feature of the TEACCH model is structured teaching, which includes organization of the physical environment, development of schedules and work systems, clear expectations, and the use of visual materials (Mesibov, 2006). Structured teaching also relies on a wide variety of teaching or treatment strategies and principles, which again, are based on the understanding and respect for the “culture of autism” and each child’s unique abilities, weaknesses, and learning style (Mesibov, 2004).

Four Purposes of Structured Teaching

Children with autism display behaviors such as not following directions, throwing tantrums, displaying inappropriate behaviors, standing with a blank stare, or continuing what they were doing (Savner & Myles, 2000). In most cases these behaviors are a result of the child not knowing what is expected. Structured teaching can help prevent these types of behavior by guiding the development of each child’s unique program. The four main purposes of structured teaching include the following:

1. *Learning that situations have meaning and predictability* allows children with autism to understand that

the world is an organized and predictable area where they can be successful instead of a place where random events occur that breed nothing but confusion (Mesibov, 2004). Understanding the idea of predictability carries over into daily living routines, the use of communication to have their needs met, and appropriate language labels that link objects, events, and people. Situations that are predictable also make the transition to new activities and expectations easier and much less stressful (Mesibov, 2004). For example, a child learns by checking his daily schedule that he will see “Mr. B” in physical education today. Later that day the child happily walks down to physical education since he knows that today was a “physical education day.” Similarly, his anxiety of not knowing what to expect in physical education is calmed when Mr. B presents him with a list of activities planned for today’s physical education session.

2. *Teaching skills for adult life* to children with autism provides hope that they will utilize them in the future. This is contrary to the norm where children without autism are taught via a developmental sequence. At a young age, children with autism are taught skills related to self-care, daily living, communication, academic and vocational skills, leisure and recreation skills, as well as community living (Mesibov, 2004). How and what is taught is dependent on each child’s age, developmental level, and cognitive potential (Mesibov, 2004). For example, a child with autism might practice changing clothes for elementary school physical education (maybe just his shoes and shirt) even though children in his elementary school do not “dress out” for physical education. However, self-help skills, such as dressing and undressing, are an important part of this child’s education plan, and his teachers take advantage of any appropriate time to help the child practice these life skills.

3. *Using communication* not only spontaneously, but also meaningfully is also essential. Some individuals with autism must learn that communication exists and how it can be used for various purposes (Mesibov 2004). For example, in physical education a teacher may repeat a phrase “turn, reach, step, throw” when teaching a child with autism how to throw a ball. The teacher may then ask the child to either repeat the phrase (if they are verbal) or try to repeat (if they are non-verbal).

4. *Becoming independent* is the fourth purpose of structured teaching. Not only must a child learn how to comply with teacher and parental rules and requests, but he also must learn to become independent. Learning to function independently helps children with autism fit into our culture in adulthood (Mesibov, 2004). For example, one goal for a child might be to independently check his schedule, line up with his class, stay in line, walk to the gym, and then sit in his squad. Through practice with instruction, and then gradually fading cues, the child will become able to use these skills in physical education and eventually transition to using them throughout the school day.

Key Elements to Structured Teaching

Key components to structured teaching including organization of the physical environment, predictable sequences of activities, visual schedules, systems of work/activity, and activities that are visually structured (Mesibov, 2004). The following highlights each of these key components.

Physical layout is very important, especially in self-contained classrooms. Teachers set up their classroom in a way that literally tells the child where everything is in the room. Specific areas might be cordoned off by tape marks, arrangement of furniture, use of dividers, and color-coding with different symbols. For example, the gross motor play area has purple tape on the floor creating a square showing the boundaries of the play space, a purple kite taped to the wall, and a shelf with gross motor toys such as balls and ropes. The physical education teacher creates similar visual boundaries in his gym with different colored lines on the floor and different colored shapes on different parts of the gym. This way the child with autism (and for that matter all the children in the class) knows that on a particular day the circle area is for catching and throwing with a partner, the square area is for push ups and sit-ups, and the diamond area is for jumping rope.

Predictability helps lessen the stress caused by not knowing "what's next?" Having a preplanned sequence of events or activities that the child completes daily is also helpful. As noted earlier, each child in the TEACCH program has a visual schedule that explains a specific sequence to be completed each day. One child's schedule might include work time, snack, recess, speech therapy, work time, book time, bathroom, lunch, physical education, work time, bathroom, and finally bus home. This sequence of events is followed each day of the week to keep the child's schedule predictable. A similar schedule can be created for the child in physical education starting with an activity that the child is familiar with and is easy for him (e.g., identifying body parts and practicing running following a line around the gym). This may be followed by some new activities that are more challenging for the child (introducing new skills such as how to jump rope or how to strike a ball off a tee using the proper technique). Concluding the session with an activity that is familiar to the child cues him the session is over (doing some simple stretches and then singing a little goodbye song).

Visual schedules help overcome the communication barrier that many individuals with autism possess. Visual communication enhances comprehension as well as accessibility (Mesibov, 2004). Because transitions are also difficult for individuals with autism, visual schedules help deter behavior problems. Unexpected changes in location (e.g., having to go outside for physical educa-

tion instead of going to the gym) may also result in the child acting inappropriately (Mesibov, 2004). Figure 1 shows an example of a daily schedule created for a child with autism.

As noted, a schedule can be used for a child with autism who goes to general physical education. A simple way to create a physical education schedule is to first find pictures of equipment showing things such as balls, hoops, ropes, etc. These pictures can be cut out from physical education catalogs. Pictures of children actually doing various activities also should be created either by copying pictures from a physical education textbook or actually taking pictures of children in physical education. The pictures can be laminated with a piece of Velcro glued on the back and stored in a folder. Each day, pictures that match the day's activities can be Velcroed to a clipboard or poster in sequence. These visual schedules breed independence because the child learns to check his own schedule, pull off the proper card, and go to a specific area or do a specified activity.

Structured activity/work systems should answer the following four questions (from Mesibov, 2004, pp. 43-44): What task or activity is the learner supposed to engage in? How much work (or how many tasks) is required during the specific work period or how long will the activity last? How will the person know that progress is being made and that the activity is finished? What happens next after the work or activity is completed?

This is fairly easy to implement in physical education. For example, a child is presented with 10 balls facing a small soccer goal. The set-up of the activity (along with a picture of kicking on his schedule) cues the child to kick the ball into the goal. This answers the first question. When all the balls have been kicked into the goal, the task has been completed. That answers the second and third questions. The child's schedule cues him what to do next (the last question). Contrast this with an activity where the child is given one ball and asked to kick it against a wall, retrieve it, and then kick it again. How is he to know if he is kicking successfully or when he has finished the activity?

Visual supports take advantage of the unique visual strength of children with autism. Such supports help them abide by the rules, know the schedule for the day and "what's next," transition from one activity to the next, gain independence by making choices, and comprehend how to finish activities (work or play; Savner & Myles, 2000). In other words, they prevent unwanted behaviors that often result from the child not knowing what to do or when to transition from one activity to another. Many examples of visual supports, and how they can be used in physical education, have been presented throughout this article. They include visual schedules (particularly those that are specific to a physical education session), visual boundaries (clearly marking areas for different physical activities), and task cues (e.g., lining up a set number of balls to kick or throw).

FIGURE 1
Example of classroom visual schedule.

Morning Schedule Date: _____

1. _____ CHECK IN (backpack to teacher, sign up for lunch, hang up things)
2. _____ GAMES _____ choose an activity
 _____ invite someone to play
 _____ play
 _____ clean-up
 _____ start all over if you have time
3. _____ CALENDAR (turn your body to the teacher, look at the teacher, listen, raise your hand if you have a question or want to answer a question)
4. _____ STORY (look at the book, listen to the story)
5. _____ WORK TIME _____

6. _____ SNACK (eat snack, clean up)
7. _____ JOURNALS (PE – Monday, Art – Tuesday)
 _____ think first
 _____ draw the picture
 _____ write a story that tells who, what, when, where, why
 _____ read your story to an adult
 _____ read a book
8. _____ WORK TIME _____



Sample picture schedule for child with Autism.

Conclusion

Children with autism learn in ways that are unique to their peers without autism. While children with autism may have difficulty with comprehending and using language, exhibiting social skills, attending to instruction, and staying on task, they also have strengths that teachers should take advantage of. The purpose of the TEACCH model is to identify each child’s unique strengths, weaknesses, and learning style and then to use this information to build on strengths while modifying activities and creating accommodations for weaknesses. TEACCH has proven effective in the classroom and can easily be transferred to physical education. In fact, many physical educators already use some form of structured teaching to maintain safety and control and to optimize learning for their students without disabilities. The addition of extra structure for children with autism such as visual

schedules, clearer visual boundaries, and more defined task cues will help them to be more successful in physical education.

References

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