

What is *Speak, Move, Play and Learn with Children on the Autism Spectrum*?

Occupational therapists work with those who possess, or are at risk of developing, physical or cognitive disabilities, psychosocial dysfunction, developmental or learning disorders, and other disorders or conditions. Occupational therapists use tools such as sensory-motor, neuro-developmental, and visual motor and perception techniques in treatment. They adapt or alter tasks and activities to promote a person's health and wellness (American Occupational Therapy Association (AOTA) 2008). Speech and language pathologists (SLPs) or speech and language therapists (SLTs) address speech and vocal production, swallowing difficulties, and language needs through speech therapy in a variety of different settings including schools, hospitals, and private practice. They work with patients on a number of specific speech issues including intonation and prosody, articulation, content, and the facilitation of conversational skills. The activities in this book all combine tools and ideas from speech and language pathology and occupational therapy. Each field possesses a unique perspective on clients' needs and brings a specialized point of view to the treatment or education plan.

This book is brought together by speech and language pathologists and occupational therapists working in a non-public school with children with autism and other developmental disorders. These children present challenging behaviors that interfere with their daily functioning, and therefore we are sensitive to the need to structure activities so that any child can succeed. We have combined aspects of speech, assistive technology, sensory integration, and motor planning in all the activities in this book. We find that creating lesson plans with fun and exciting activities peaks our students' interest and maintains their attention.

Historically, speech and language therapists have addressed communication and language issues, while occupational therapists focus on motor and sensory integration issues. Watling *et al.* (1999) examined the current practice patterns of occupational therapists and found a high frequency of collaboration with other professionals in various therapeutic settings. They stated that 98 percent of respondents collaborated with speech therapists in school settings for both evaluation and intervention.

Speech and occupational therapists both have a responsibility to communicate and educate family members, caregivers, and others to best assist the child (AOTA 2008). Collaboration between various professional fields, as well as including parents and caregivers, appears to be the key

in finding the most efficient means in helping kids with their struggles (Briesmeister and Schaefer 1998).

Why it works

Kielhofner (1992, p.15) suggested that active engagement in a variety of occupations promotes and maintains physical, cognitive, and emotional health while, conversely, lack of engagement in occupations leads to deterioration and dysfunction. We believe the blend of speech, assistive technology, and occupational therapy in meaningful activity is a productive means of facilitating learning and development. Learning is achieved through experiencing situations and interacting or reacting in a multi-sensory environment. In order to generalize learned experience to various contexts or settings, one must attach personal meaning to it. Therefore, it is a school therapist's goal to create an environment in which children can engage in meaningful activities to create experiences from which they then learn. Moreover, these activities foster participation, teamwork, generalization and creativity, consequently improving quality of life and wellbeing. Therapists are skilled at altering or grading an activity to match the child's skill level so that he or she can feel a sense of achievement. As Winnie Dunn (1982, p.745) simply stated, "The therapeutic process attempts to provide a situation that contains enough challenge to allow patients an opportunity to adapt to their environment without the stress that increases dysfunction. This is what therapists refer to as the 'just-right' challenge. Locating this fine line is what I consider the art of therapy."

This book is the result of a collaborative effort to develop creative activities that are enjoyable to our students while meeting the *just-right* challenge. It is well documented that occupational therapists collaborate with other professionals to design and adapt activities that lead to accomplishment, mastery, and a sense of purpose and meaning in life (AOTA 2008). If nothing else, therapists are struggling to find ways to become more and more efficient with the always-increasing caseload. Each discipline must deal with increasing demands for personnel, the shortage of qualified teachers, increasing numbers of students, questions concerning healthcare, and how the services of each discipline may fit into the treatment plan for each student (Nord 1973).

The goal is to obtain skill sets that will allow children to be active participants in their day, through fun and challenging activities. This book offers activities that promote development by structuring opportunities for engagement in activities or occupations while facilitating language

and skilled motor production. “Occupation” is defined as an activity that occupies someone’s attention. Therefore, this book offers a quick reference guide to functional activities that utilize speech, motor, and sensory aspects. The activities are presented with suggested variations that can be used to work with a range of low-level functioning individuals and higher-level individuals functioning with greater independence.

How it works

Therapists’ treatment plans focus on evaluating the child and providing interventions to develop, improve, sustain, or restore skills. In the school setting this is achieved by engaging the child in meaningful and purposeful activities. Children engage in play through games, manipulation of toys, interacting with peers, and craft and arts. In order to capture the child’s attention and create a positive experience, we use play as the main modality for therapy. These activities can easily be incorporated into a classroom, home, daycare centre, or vocational training program. The use of activity groups facilitates an atmosphere of socialization and peer interaction. An activity group is an effective tool for self-regulation since it offers a realistic yet structured setting which can be graded and modified (Cermak, Stein and Abelson 1973).

Children with autism and other developmental disorders have significant delays in social skills. One study found that participants who engaged in an activity group developed better interpersonal skills than participants who engaged in a verbal group (Mumford 1974). The goal of this book is to find a balance in each activity to address a variety of functional needs. Each activity contains elements of motor skills and language skills combined with a sensory component.

This book is an attempt to empower teachers, therapists, and parents in structuring meaningful activities that children will appreciate. Collaboration in school-based occupational therapy has not been thoroughly studied; research, however, suggests that school-based practitioners are increasingly consulting with teaching staff in the school (Barnes, Schoenfeld and Pierson 1997; Bose and Hinojosa 2008; Case-Smith and Cable 1996). Bazyk *et al.* (2009) found that school therapists who spent twice as much time collaborating with teachers than in direct “pull out” services had students who made significant improvements in their fine motor skills. By applying a non-directive consultation model, therapists use their time educating teachers in how to apply occupational therapy intervention strategies in the classroom.

Speak, Move, Play and Learn with Children on the Autism Spectrum is also about helping children to work toward skills that will lend themselves to gainful employment in the future. Work offers a sense of accomplishment and contribution to one's life that leads to improved self-image (Capo 2001). It also offers opportunities for socialization and community involvement. The skills promoted through these activities allow individuals to gain control over their internal and external environment through functional communication training. The use of assistive technology and sensory integrative techniques helps to promote self-regulation, which is the key to succeeding in employment. Individuals must be able to control their behaviors as well as communicate their wants and needs in the workplace.

Who should do it?

Anyone who engages in occupation and verbal or non-verbal communication can do this! The goal of this book is to provide teachers, therapists, and parents with a quick and easy reference for well-thought-out activities. As school therapists, we get many requests from parents seeking activities to do with their children at home, during long breaks or summer vacation. A major source of stress identified in families with children with autism was the amount of time the individual with autism required, "from the time the child rises until the time they go to sleep" (Degrace 2004, p.545). The activities presented in this book can be implemented during the natural progression of the day in any typical household. For example, these activities can be done during laundry, cooking, cleaning, grooming, and even leisure time. It is our opinion that allowing children to be part of the day's happenings helps them to develop a positive sense of self and a role in the family. We believe that by engaging children in these activities they can develop skills that may be useful in the family's daily living, thus decreasing the amount of time spent in direct care of these children. The activities outlined in this book help individuals develop independence in activities of daily living. They are also practical when seeking employment for an individual with special needs—for example, sorting, stocking, assembling, collating, and cleaning could be useful to a number of employers (Capo 2001).

Watling *et al.* (1999) found that occupational therapists worked more closely with other professionals when working with children with autism than when working with children with other disabilities. In the school setting, children with autism and other disorders have access to an assortment of intervention services, including early intervention, applied

Simply Sensory

It is important to remember that the main occupation in childhood is play. The activities included in this chapter are geared to maximizing the child's interest by utilizing fun and exciting materials. Providing this motivating element encourages children to engage and participate in structured activities that allow opportunities for success.

You will find a range of novel items used in this chapter, such as shaving cream, noodles, dirt, various scents, and many others. If children appear hesitant to touch certain substances or materials, encourage them to smell the substances or describe how they look while continuing to encourage them to feel the substance. If they display a strong behavioral reaction, provide them with a utensil, such as a paintbrush, or protective clothing, such as gloves, to minimize their hesitation. Tactile reactions are typically strongest for those children who are defensive; therefore, it is crucial to engage them in a playful environment while allowing and respecting their choice to say "no." This will help build their trust in you so next time you challenge them they are more willing to engage.

The olfactory sense has a strong link to our emotional state and there are various scents that elicit different reactions. Some scents are calming. Calming scents can be used in times of behavioral breakdowns when the child is not responding to verbal instruction. Allowing the child to take a few deep breaths of a calming scent pillow may help pacify him or her enough to transition to a safer or quieter area. If you have children who are difficult to engage, switching between different scents may help. Explore various strategies to find one that works best for that particular student. However, a word to the wise: after working with these children for many years, we have come to learn that they are not always consistent in their wants and needs.

It is important to encourage the children to complete as much of the activity as possible independently, providing just enough support for them to be successful in the task. For example, if a child struggles with scissors, provide self-opening scissors or an alternative adaptive scissor, instead of cutting for the child. Know your children and their capabilities. If they are too young or cognitively impaired to manipulate common classroom tools, focus on the assembly or steps of the activity.

When setting up the activity, strategically place materials and tools so that children will have to share and/or initiate conversations with each other. It is important to encourage them to look one another in the face and use names if possible. Encourage the children to maintain appropriate “personal space” within the group setting, and model asking a peer to share materials. Provide a visual demonstration of the expectations in the group setting, and explain how they should manage their body, eyes, and ears during the activities. In this chapter, emphasis is placed on the social interactions and communication between the students, and their ability to engage in a natural conversation. Encourage the children to comment on each other’s work and ask questions about each other. Attempt to minimize visual distractions and clutter in their workspace. Pick a child who is exhibiting appropriate behavior to pass out materials or gather others’ work.

Some behavioral and social difficulties may be a manifestation of an underlying sensory processing issue. It is therefore important to teach our children how to recognize their own body’s needs, and also how to manage them in a socially appropriate way. For example, it would not be appropriate for a 25-year-old to carry a chewy toy all day to fulfil his oral motor needs; however, we can incorporate crunchy, hard foods into his daily routine. The same concept applies to providing children with tactile, vestibular, and proprioceptive input periodically throughout the day to help maintain an optimal level of arousal.

Try to take note of a child’s behavioral responses and energy levels during and following a largely gross motor activity. Does she spend her time engaging in unstructured play, such as hand flapping, spinning, or twirling, during a structured activity? Does she exhibit behavior that could be characterized as “seeking movement?” Is it difficult for the child to transition? Is she able to maintain safe hands and body with her peers? Does she seem more calm or focused after recess or sports? Observing these types of behavioral trends will help you to learn how to encourage the child to engage in various activities that will help with self-regulation.



Oral Motor Fun

Purpose: This activity will help students to organize oral motor sensation and coordination, and to strengthen blowing, chewing, sucking, and diadochkinetic skills. Oral Motor Fun also supports labeling, verb+ing, fine motor, and group pragmatics. This activity works well individually and with groups.

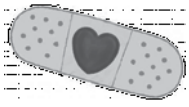
Materials: You will need an assortment of blowing and sucking tools such as; horns, whistles, bubbles, balloons, straws, toy or real wind instruments, a cup and a large ziplock bag per student and instructor. Suckers, frozen juice pops, lollipops, gummies and/or licorice are great oral motor stimulators as well as motivators. Unbreakable mirrors provide excellent visual feedback and are a good addition to this activity if available.

Description: Prepare a zipper lock sandwich bag for each student with two or three blow toys, straws, suckers, and/or balloons. Have each student write their name on a bag. Have the students place mirrors in front of themselves before choosing a cup and filling it with water to about half full. Students should be sitting at a table so that they can see each other and themselves in the mirrors.

The instructor announces, "It's time for Oral Motor Fun." Students open and remove the items from their bags. The instructor picks up a whistle, demonstrates blowing, and encourages all students to follow along and blow their whistles. When students have practiced for a few minutes, the instructor says, "Five more blows and then in the bag. Ready, Blow 1, Blow 2, Blow 3, Blow 4, Blow 5, and now put all the whistles into the bag."

Provide the same routine for all items in the bag; allow a few minutes to practice structured blowing or sucking and then put the item back into the bag. Any edible items or liquids via a straw should be the last activities in Oral Motor Fun. Every week add one more item to the bag for more practice and a fun surprise.

When this activity is complete all the items will be put back into the bags. Students can zip close the bags and return both the bag and cup to a specified drawer or box.



Be aware of your students' limitations. If a student bites plastic, then use cardboard and always keep a hand on the toy or food item. If choking is a challenge, then do not give gummies or large pieces of chewy food.

Variations:

- Add music and have the students blow horns or whistles to the music.
- For more of a challenge when sucking, use apple sauce, milkshakes, or pudding.
- Students can blow ping pong balls, cotton balls, feathers, balloons, or paper balls across the floor or table with or without straws. They can have races or play a soccer-type game while blowing the balls and having fun.