

Autism Spectrum Disorder and Alexander Technique

Using the Alexander Technique to Help People with ASD

By Caitlin Freeman, M.AmSAT

Pittsburgh, PA

www.AlexanderTechniqueGuide.com

caitlin.freeman@gmail.com

cell: +1 215.280.0339

Purchase my book at:

www.AlexanderAutism.com

Copyright © Caitlin Freeman, 2015

AUTISM AND ALEXANDER TECHNIQUE



Using the Alexander Technique to Help People on the Autism Spectrum

Presentation Overview

20 minutes: I will explain Autism Spectrum Disorder (ASD) as I do for parents, teachers, and service providers who work with people with ASD.

20 minutes: Adapting the Alexander Technique for ASD. I will provide information on how to adjust your teaching studio and teaching methods for students with ASD.

20 minutes: Modifying Alexander Procedures. I will teach specific Alexander Technique activities – Push Hands, Yo-Yo, and Walking – as adapted for people with ASD.

45 minutes: Alexander Technique Lab. We will break into pairs, and practice Push Hands, Yo-Yo, and Walking, using modified Alexander Technique methods and language. This time will be structured in three fifteen-minute segments; each person will work with their partner for seven minutes, and then they will switch.

15 minutes: Questions and Comments. We will conclude this workshop with a question and answer period to recap what we have covered.

Four Important Ideas

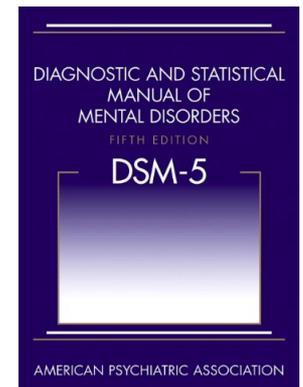
1. Autism Spectrum Disorder (ASD) is a genetic predisposition with an environmental trigger.
2. ASD is a neurological condition, and not a psychological one. People with ASD behave the way that they do because of differences in their neurology, not because they have psychological problems.
3. Among the neurological changes that ASD causes are sensory processing delays and a heightened stress response.
4. Alexander Technique training, specifically Inhibition and Direction, can help people with ASD integrate the experience from their senses, and can reduce the stress caused by the differences in their neurology.

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)

The Diagnostic and Statistical Manual of Mental Disorders (DSM) is the standard classification of mental disorders used by mental health professionals in the United States. The first edition was published in 1952, and since then it has had five major editions and two text revisions.

In 2013, the American Psychiatric Association published the fifth edition of the DSM. One of the major changes to the DSM-5 was the removal of Autistic Disorder, Asperger's Disorder (Asperger's Syndrome), and Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS). These conditions are now reclassified as part of a new diagnosis of Autism Spectrum Disorder (ASD).

Social (Pragmatic) Communication Disorder was added to diagnose individuals with social skills deficits, but none of the other major characteristics of Autism.



Autism Spectrum Disorder (ASD) in the DSM-5

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by deficits in social communication and social interaction, and by the presence of restricted, repetitive behaviors.

Social communication deficits include impairments in social reciprocity; challenges in the use of verbal and nonverbal communicative behaviors for social interaction; and difficulties in developing, maintaining, and understanding relationships.

Restricted, repetitive behaviors, interests, or activities are manifested by stereotyped, repetitive speech, motor movement, or use of objects (i.e. stimming); inflexible adherence to routines; restricted interests (also called "special interests"); and hyper- and/or hypo-sensitivity to sensory input.

The diagnosis includes three severity levels: "Requiring support," "Requiring substantial support," and "Requiring very substantial support."

If you think I'm
PUZZLING

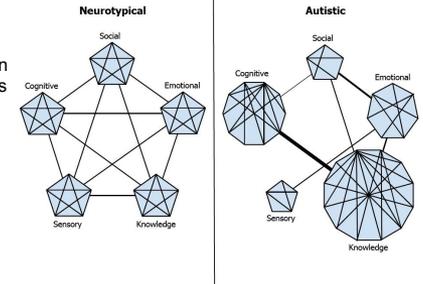
Imagine what the
WORLD
is like for me!

Autism Is Neurological, Not Behavioral

Autism Spectrum Disorder (ASD) is the result of changes in the neurological structuring of the brain that can cause delays in processing speed and problems with sensory integration. These neurological differences may result in characteristic Autistic "behaviors." These neurological changes happen early in a child's life, before the age of three. This restructuring has been both medically and behaviorally documented.

Psychologists who only treat Autistic behaviors without addressing the neurological and sensory needs of the individual may teach the Autistic person to repress their behaviors, but this does not help the person become more "normal." The Autistic person's neurology will remain the same.

As is represented here, people on the Autism Spectrum may have areas of their brain with greater or lesser connectivity, as compared to the brain of a Neurotypical person, an individual with typical neurology. They may also have increased or decreased connectivity between these brain areas.



People with ASD Operate at a Higher Level of Neurological Activity

Because Autistic people have difficulty processing sensory information, it may take less stimulus for them to feel overloaded than it does for a Neurotypical person. For people with ASD, this state of overwhelm can result in a heightened stress response.

To understand this stress response, imagine a person's ability to manage stress as a container of water. This container of water represents a person's finite capacity to handle stress and the water in the container represents a person's stress level. Every time a person is stressed, more water is added to their container.



Heightened Neurological Activity Results in a Heightened Stress Response

When a Neurotypical person starts their day, their stress level may be only **2 or 3 out of 10**. For this person, it will take stressful events of **8 or more** to overflow their water container.

When an Autistic person starts their day, their stress level may already be **6 or 7 out of 10**. For someone with ASD, it will take stressful events of only **4 or more** to overflow their water container. This may cause a stress response commonly known as a "meltdown."

As a person with ASD, it has been my experience that the Alexander Technique has given me tools to manage my stress response on a daily basis.



Stimming

Stimming is one way that Autistic people manage the stress of overwhelming sensations. Stimming activities, like rocking or hand flapping, may appear to increase stimulus. For someone with ASD, however, they help reduce stress by allowing the person to be in control of the stimulus they receive.

To be effective in helping the Autistic person reduce their stress, these stimming activities need to create a high degree of sensation to surpass the uncontrolled stimulation they are experiencing from their environment.

As an analogy, if a person hears jackhammering outside their house, they may choose to listen to loud music to block out the construction noise. By increasing the auditory sensation that they can control, they are able to manage the auditory sensation that they cannot control.



Do Not Discourage Stimming

Do not discourage an Autistic person from stimming. Stimming is the way that people with ASD manage their stress response. If you prevent a person with sensory challenges from stimming, you will be taking away their means of controlling stress. Without this release, their stress may increase to the level of them having a meltdown.

Instead of telling the person not to stim, work with them to reduce the stress in their environment.



With reduced stress, the individual will not need to use stimming to manage their neurology. It may be helpful to recognize that stimming is not limited to Autistic people. Neurotypicals also stim when they are stressed in order to feel more in control. Common Neurotypical stims include foot tapping, chewing gum, and smoking cigarettes. Think about the situations where you stim. This will give you some understanding of situations in which Autistic people stim.

Meltdowns

Like stimming, meltdowns are not unique to Autistic people; in other contexts they are called panic attacks. Meltdowns occur when a person becomes emotionally or physiologically overloaded beyond their ability to process what is happening.

The term “meltdown” is unfortunate, because it trivializes the experience of the individual’s stress response.

People with ASD may become overwhelmed more easily than Neurotypicals because of their delayed processing ability.

Meltdowns are not temper tantrums. When a person with ASD is having a meltdown, they are not being willful or spoiled; they are being overwhelmed past their ability to communicate.



The Cause of Meltdowns

Meltdowns tend to be triggered more by people than by objects or environments. An object getting broken may not cause a person to have a meltdown, but an object getting broken combined with the fear of another person’s reaction may.

Because interaction with other people can cause intense stress responses, individuals with ASD often learn to avoid people as a way to keep from being overloaded.

When working with Autistic people, you will first need to help them manage the stress in their environment. This stress management includes controlling your responses to them.



Handling Meltdowns

To stop a meltdown, separate the person from whatever is causing them to feel stress, such as turning off any distracting sound or leaving a high stimulation environment.

To communicate with someone having a meltdown, talk slowly in a calm voice using simple and direct phrases. Remember that you are also a source of stimulus in the person's experience. If you are agitated, they will become further stressed by your behavior.

Have a calm-down procedure worked out in advance, and rehearse it with the person when they are not stressed.

For some Autistic people, it may help to pull a weighted blanket or weighted vest around them. What I have found to be particularly useful to reduce stress is the Alexander Technique Whispered Ah, as well as semi-supine and prone.



Understand Social and Emotional Delays

People with ASD have a sensory processing delay, which over time can add up to years of social, emotional, and sometimes academic delay.

An Autistic person's social development may be **delayed by one third of their age or more**. If the person is 27 years old, they may still be functioning at the level of a teenager.

The developmental discrepancy caused by Autism becomes less significant when the person becomes older. A 45-year-old functioning at the level of a 30-year-old may not have as noticeable a deficit, even though their sensory processing delays persist.

Outside Age	→	Inside Age
9	→	6
15	→	10
21	→	14
27	→	18
45	→	30

Be Aware of Neurological Differences

For Autistic people, larger areas of their brain fire for each sensory experience. For them, each sound, light, and touch may feel more intense.

Depending on the extent of the person's Autism, their sensory experiences may be amplified to the point of being debilitating.

It is important to understand that sensory experience can be overwhelming for people with ASD, and that you will need to adapt your Alexander Technique teaching studio and lessons accordingly.



Alexander Technique and ASD

The Alexander Technique can help people with ASD by reducing their reaction to stimuli and teaching them conscious choice in their response to stress.

This process of decreasing the reaction to stimulus is what we call Inhibition. The Alexander Technique method of teaching inhibition helps people with ASD regulate their sensory experience.

When the sensory systems are integrated — especially the tactile, proprioceptive, and vestibular systems — other aspects of the person's experience become easier to manage and control.



How the Alexander Technique Can Help ASD: A Sensory Integration Perspective

Sensory Integration	Alexander Technique
Self-Calming Activities: Inhibitory activities that calm the nervous system and teach the individual conscious choice in their actions.	The practice of Inhibition, especially when combined with constructive rest.
Proprioceptive Activities: Fine and gross motor control and planning, body awareness, spatial awareness, and postural stability.	The practice of Direction, especially when combined with Chair Work, Hands on Back of Chair, and Monkey.
Tactile Input: Becoming accustomed to touch and learning different gradations of touch, both as the recipient and giver of touch.	Hands-on work, starting with deep pressure, and gradually over a course of lessons using a lighter touch.
Deep Pressure: Receiving deep pressure, especially on shoulders, hips, upper chest, and back.	Hands-on work, especially during Table Work and Chair Work.
Vestibular Movement: Becoming accustomed to different orientations of the head and body in relation to gravity, using bending, crawling, rolling, and inversions.	The Dart Procedures sequence, with special focus on rolling and crawling.
Heavy Work: Weight-bearing activities involving pushing, pulling, and other types of joint compression and decompression.	Push Hands, Yo-Yo, Monkey with hands on a chair, and crawling.

How to Adapt the Alexander Technique for ASD

We will now cover how to adapt the Alexander Technique to meet the needs of Autistic people. Later we will learn how to adapt and practice these specific activities for people with sensory challenges.

There are three important ideas to be aware of when you adapt the Alexander Technique to meet the needs of Autistic people.

- 1) Be aware of the sensory experience that you are creating for your student. Start by calming yourself, because you are likely to produce more stimulus in your teaching space than any static part of the environment. As an Alexander Technique teacher, you need to be conscious of the way you move in the environment, the sounds you make, and how you put hands on.
- 2) Be highly aware of the physical environment. It may help to sit quietly in your studio and imagine that every sound you hear is twice as loud, the lights in the room are twice as bright, and every touch is more intense. Then imagine that you had no way that you could filter out those sensations.
- 3) With this awareness, think about what accommodations you can make for your student. Be aware that each person has their unique sensory challenges and that it is important to adapt your teaching studio to the needs of the individual.

Reduce Auditory Distraction

- Close your windows to diminish noise coming in from outside.
- Turn off music, white noise, or mood creating sounds.
- Turn off any unneeded appliances.
- Reduce any other sound as much as possible, such as covering ventilation ducts, turning down noisy space heaters or air conditioning units, and scheduling teaching times during quieter periods of the day.
- If you are going to work extensively with students with ASD, also consider putting down carpet or installing other sound absorbing materials.

Reduce Visual Distraction

- Put curtains over the windows to reduce the glare of direct sunlight and to block visual activity outside.
- Remove clutter and decoration from your teaching studio. Your studio should be as plain and unadorned as possible.
- Remove or cover anything that moves in your studio, such as a swinging clock pendulum or a desktop fountain.
- Dress in neutral colored clothing with minimal jewelry. Since you will be moving, anything that you wear that is shiny or bright in color will be visually distracting.
- If you are going to work extensively with students with ASD, you may want to consider redecorating to avoid bright colors or distracting patterns.

Reduce Olfactory Distraction

- Many Autistic people are highly sensitive to smell.
- When teaching people with these sensory challenges, do not wear perfume or cologne. The smell of these body scents will be distracting for your student, and can give some individuals a headache, cause them to become nauseated, or give them a sore throat.
- Avoid using aromatic soaps, shampoos, and deodorants before you teach a student with ASD. If your student is particularly sensitive to smell, you may also need to use unscented laundry detergent to wash the clothing you wear during their lesson. Also avoid scented dryer sheets.
- Do not clean your teaching studio with heavily scented cleaning products, and avoid air fresheners and scented candles.
- If possible, do not cook immediately before or during your lesson, as the smell of food will be a source of distraction for your student. Further, some people with ASD have food allergies, and inhaling the atomized food particles may cause your student to cough or become nauseated.

Reduce Tactile Distraction

- Carefully regulate the temperature of the room. If the room is even slightly too hot or too cold, it may make it difficult for your student to focus on what you are teaching.
- You can ask that your student remove their shoes, but do not require that they take them off if they do not want to. People with ASD tend to have sensitive feet. If they do take off their shoes, suggest that they wear heavy socks to reduce the sensation on their feet.
- If your student takes off their shoes, be aware of how the floor feels; it should not be too rough or too cold. You may wish to place a smooth mat or carpet where your student needs to stand.
- Specify that your student wear long sleeved clothing that is comfortable for them during their lessons, such as sweatpants and a long sleeved T-shirt, to reduce uncomfortable sensations against their skin.
- An important part of a student's tactile experience will be how you touch them. We will discuss the need for firm touch and deep pressure later in this text.

Reduce Proprioceptive and Vestibular Distraction

- People with ASD frequently become disoriented when they move too quickly. They may also experience vertigo when they shift rapidly from a vertical or horizontal posture.
- When you talk to your student, try to keep your face level with theirs so that they do not have to crane their neck too far up or down to look at you. If they need to tip or move their head too quickly, it can cause vertigo.
- Be especially careful when guiding the student into and out of Monkey, as any sudden movement of their head in relation to gravity may cause a vestibular disturbance. Also take extra time when you help the student onto and off of the table, and when you take them into and out of the chair.
- Slow down every Alexander Technique procedure that you teach, or your student may become distracted and unfocused due to their inability to process the movements at the speed that you are teaching them.

Reduce Your Stress Level

- The experience of other people's stress is often overwhelming for Autistic people.
- If you are stressed, it is likely that your student with ASD will feel your stress, and will have fewer tools than you or your Neurotypical students to manage their emotions.
- It is important that you do not become impatient during the lesson. People with ASD may perceive emotional changes more slowly, but because of their overactive nervous systems, when they do experience emotions, they often feel them very intensely.
- Your tranquility will help your student remain calm so that they can learn most effectively.

Use Firm Touch and Deep Pressure

- For many Autistic people, a light touch can be a difficult sensation to process and can cause a stress response.
- When working with an Autistic person, always use firm touch and full hand contact.
- Never lightly brush the student's skin. For people with ASD, light touch can feel like an electrical shock.
- Deep pressure is calming for people with ASD. The deep pressure of your hands-on work will calm your student's nervous system and help them release tension so they can learn new ways of moving.

Temple Grandin, an Autistic person who is noted for working with livestock, created a "squeeze machine" for herself based on the squeeze chutes used to calm cattle. She describes that she understands cattle because, like people with sensory processing issues, they have a high stress response. Her "squeeze machine" applies deep pressure to the sides of the torso, and can be very relaxing for people with ASD.

Be Flexible with Social Conventions

- The sensory difficulties that many Autistic people experience can make it difficult for them to learn social skills.
- This means that social conventions such as shaking hands and making eye contact can be difficult for people with ASD.
- Be tolerant with your student's sensory needs, and do not require them to interact with you in a way that makes them feel uncomfortable, as their distress will likely interfere with their ability to learn.
- I have suggested that you reduce as many sensory experiences from your teaching space as possible. However your student may hum, tap, or engage in other forms of stimming. Accept that these activities are the way that Autistic people manage their stress.
- I recommend that you don't ask your student to stop stimming; this will make them self-conscious and increase their stress level, and possibly even make them stim more. Instead trust that over time, the Alexander Technique will reduce their stress level so they won't need to stim as much.

Be Prepared for Learning to Take Longer

- Due to processing speed delays, it may take longer for an Autistic student to learn the principles of the Alexander Technique.
- When working with Autistic students, it may help to cover less material than you normally would during each lesson. Alternatively, you can schedule longer lessons for your Autistic students if they have the energy and attention span.
- It may take time for your student to transition into and out of the Alexander Technique lesson. Leave ten minutes at the beginning of each session for your student to become acclimated to the teaching experience, and then give them at least ten minutes at the end to relax and process what has happened. If you don't give your student enough time, the beginning and end of the lesson may feel jarring to them.
- It is likely that it will take some time for students with ASD to understand the ideas that you are teaching. Expect this delay, and do not become impatient.

Tell Your Student What You Will Do Before You Do It

Because of their heightened sensory systems, Autistic people are easily startled by sudden changes.

- When you interact with a person with ASD, tell them exactly what you are going to do before you do it so that they are not surprised by your actions.
- Also tell them what actions they should do in response, if any.
- Be clear in your language without talking too much. Think out what you are going to say in advance. Be both specific and concise.

Teach Visually and Kinesthetically

One of the ways that Alexander Technique is taught is through the use of language. However, students with ASD may be better able to learn the Technique visually and kinesthetically.

Many people with ASD have language deficits, and may have difficulty understanding metaphor. Further, many Autistic people are visual and kinesthetic learners who understand information most readily when it is presented to them in a way that they can see it and do it.

- When teaching the Alexander Technique to students with ASD, don't rely solely on words.
- Use a mirror to provide visual feedback so that the student can see themselves as their body alignment changes. Use visual aids, such as a teaching skeleton, and images of people demonstrating good and poor use. These images will help the student identify the quality of their own use when they observe themselves.
- Provide kinesthetic feedback, using your hands to position the student's body into an aligned relationship.

Modifying Alexander's Directions

For any communication to take place, there are challenges from both sides.

- There is a challenge on the part of the person speaking to describe ideas in words. There is also a challenge on the part of the person listening to understand what is being said.
- These challenges are made worse if the person speaking is expressing ideas that are uncommon.
- These challenges are also made worse if the person listening has difficulty understanding metaphorical language, and applying it to their body.

Let the Neck Be Free

- Alexander Technique teachers typically teach Direction using a variation of the following instructions: **Let the neck be free. Let the head go forward and up. Let the back lengthen and widen. Let the knees go forward and away.**
- As an example: "**Let the neck be free.**" To a person with ASD who understands language literally, it may not be clear what a "free neck" is. Does this mean that their neck should move freely from the rest of their body? Does this mean that you will work on their neck free of charge?
- Clearer language for someone with ASD may be: "Release unneeded tension in your neck." While you give the student these directions, use your hands to give them tactile and proprioceptive feedback of what their neck being free feels like.

Let the Head Go Forward and Up

- Like "Let the neck be free," "Let the head go forward and up" is both uncommon and metaphorical.
- A person with ASD trying to follow the instruction, "Let the head go forward and up," might first thrust their neck forward and then crane their face upwards, in a literal interpretation of these words.
- Clearer language for someone with ASD may be: "Allow your head to balance gently on your neck."
- Again, use your hands to give the student tactile and proprioceptive feedback of what their head going forward and up feels like.

Let the Back Lengthen and Widen

- For a person with ASD, “Let the back lengthen and widen” is likely to cause them to hold their back straight and to pull their shoulders back, which is exactly the opposite of what this direction is intended to convey.
- Clearer language for someone with ASD may be: “Use only the muscles in your torso that you need to stay upright. There is no need to pull your shoulders back or forward.”
- Again, use your hands to give the student tactile and proprioceptive feedback of what their back lengthening and widening feels like.
- As with the instruction “Let the head go forward and up,” the most important word is, “Let.” This is a direction to allow the person’s body to achieve a dynamic relationship not shaped by unnecessary stress. In each case, it may be useful to explain these instructions as releasing tension held in the body.

Let the Knees Go Forward and Away

- For a person with ASD, this direction will likely result in them bending their knees forward.
- Clearer language for someone with ASD might be: “Don’t lock your knees back. Allow your knees to be gently aligned, not pulled back or bent forward.”
- Again, use your hands to give the student tactile and proprioceptive feedback of what their knees going forward and away feels like.
- Remember that people with ASD need repetition as part of their learning process.
- Once you have covered Alexander’s Directions with your student, make sure to review them several more times during the lesson, and to revisit them at subsequent lessons.

Do the Opposite

One activity that I find useful when teaching Direction to students with ASD is to have them do the opposite of the direction first, so they can have a concrete experience to contrast with the actual direction.

- For instance, when teaching “Let the back lengthen and widen,” you can first instruct the student to pull their shoulders backwards so they have the experience of shortening and narrowing their back, and then have them pull their shoulders forward so they have the experience of rounding their back.
- Then, once the student has felt these two extremes, you can help them move their torso into a balanced relationship, which will now make more sense to them.
- Likewise with the instructions of “Let the neck be free,” “Let the head go forward and up,” and “Let the knees go forward and away,” first have the student do the opposite of each activity so they can have something concrete with which to contrast the direction. Once they have the feeling of being out of alignment, they will more easily understand the experience of being aligned.

Teaching Inhibition

- When you teach Inhibition, it is important to reduce the stimuli in the teaching environment. It will help the student learn more easily if they are not being asked to process too much new information.
- The challenge of teaching Inhibition to people with ASD is to provide them with literal instructions. The goal is to help them form a **cognitive understanding** of Inhibition while also giving them the **experience** of Inhibition. It will help the student learn if they can understand the rationale behind what you are teaching them.
- It is also useful to practice the same procedures in the same way many times during each lesson. This will help the student know what to expect, providing them with a safe environment in which to learn. Neurotypical students may get bored with repetition, but students with ASD will appreciate this practice because for them, consistency is comforting.

Explaining Inhibition

- When I explain Inhibition to my students with ASD, I describe that we often use too much mental and muscular effort to carry out the activities that we do. This inefficient use of our bodies creates stress, which can be harmful to us in the long term.
- Inhibition is the process of learning to use the appropriate amount of effort to complete a given task.
- I explain that everyone has habitual ways of moving, and that many of these habits are inefficient.
- I also tell my students that they have a conscious choice to do an activity differently than their habit.
- Teaching conscious choice is especially helpful for people with ASD because they may struggle with impulse control. Learning to have conscious choice helps them recognize their habits and decide not to do them.

Adapting Inhibition

- As an Alexander Technique teacher, I understand that Inhibition is a complex process, however I have found that explaining Inhibition as an efficient use of mental and muscular effort makes it easier for literal thinkers to grasp the concept.
- When I teach Inhibition, I guide the student through different movements. As I do, I ask them to use less muscular effort, and not to focus their attention on the sensation of their body moving.
- My experience is that if they focus on their body moving, this will tend to cause them to repeat their habits.
- If the student begins to use more muscular effort than they need for the action, I pause and again ask them to do less before I resume the activity.
- By teaching the student to do less and not be overly focused on sensation, they are able to learn new ways of moving without returning to their old habits.

How to Adapt Push Hands, Yo-Yo, and Walking

- We will now cover ways to adapt three common Alexander Technique activities: Push Hands, Yo-Yo, and Walking.
- The focus will be on how to use these activities to help Autistic people develop and integrate their sense of kinesthesia (movement) with their tactile and vestibular senses (touch and balance).
- These three aspects of proprioception (movement, touch, and balance) form an important sensory foundation for all people, but especially for people with ASD. When people with ASD improve their proprioceptive functioning, it reduces their overall level of stress.

The following slides explain hands-on activities that you can do with your students. We may not cover all of these slides in this presentation.

Joint Compression and Decompression

- In order to develop proprioception, it is important for Autistic people to experience both joint compression (activities that provide gentle joint loading) and joint decompression (activities that provide gentle stretching through the musculoskeletal system).
- Joint compression helps the student experience where their body is in relation to itself and in relation to the environment.
- Joint decompression helps the student experience a new and greater range of motion through their muscles and joints.
- Push Hands, Yo-Yo, and Walking all contain elements of joint compression and decompression.

Push Hands

- Push Hands is a Heavy Work exercise that provides joint compression. The loading of the arm and leg joints and the integration of the torso musculature while doing Push Hands will help the student develop their sense of proprioception.
- The Push Hands exercise can be very simple, with the student pressing their hands against the teacher's hands to promote muscle and joint loading. Ideally, both teacher and student should step forward into a lunge to provide stability. The exercise can be made more challenging by asking the student to push one hand forward and move the other hand back, while maintaining palm contact.
- During the lesson, you can also have the student do Push Hands against a wall. This will allow you to apply deep pressure to the student's torso, arms, legs, hands, and feet as needed. It will also provide the student with an activity that they can practice at home to develop their proprioception between lessons.



Benefits of Push-Hands

- Push Hands is useful for students who are Sensory Avoidant (over-responsive to sensory stimuli), because it loads the joints, which is calming.
- Push Hands is useful for students with Dyspraxia (people with difficulty conceiving, planning, and executing movement), because it requires movement coordination. It also offers a stretch for the calf muscles, which is beneficial since some people with ASD walk on the balls of their feet (toe walking).
- Push Hands is useful for students with Postural Disorder (low muscle tonus and difficulty coordinating upright posture), because it requires that the student maintain alignment through their torso and develop muscle tonus while they move their arms and legs.
- Push Hands also allows the teacher to maintain eye contact, physical contact, as well as verbal contact with the student to develop a social connection in addition to good use.

Yo-Yo

Yo-Yo is another form of Heavy Work, and is a joint decompression exercise. Yo-Yo provides a gentle stretch to the arms, back, and legs, while helping the student develop proprioceptive awareness.

- Begin by facing the student and standing at an arm's distance from them.
- Ask your student to extend their arms in front of them, palms down, and then raise your own hands, palms up.
- Firmly grasp the student's hands or their wrists and then slowly move together from a standing position to a full squat and back to a standing position, counterbalancing each other's weight.



Yo-Yo Tips

- One or two repetitions of Yo-Yo is enough for most students to begin with, because many people do not have the flexibility through their legs to go into this deep knee bend more than a few times in a row while maintaining good use.
- Make sure that the student remains aligned through their torso so that their back does not arch backwards or collapse forwards.
- Also make sure that the student keeps their heels on the floor to achieve a stretch through their calves and hamstrings.
- It is important that the student does not go up onto their toes at the bottom of the movement.
- It will be useful if the student is positioned in front of a mirror so that they and the teacher can both observe the student's use during the activity.

One Person Yo-Yo

Students can prepare for doing Yo-Yo with another person by first practicing this exercise while holding onto a door knob or door frame.

- It is easier to do Yo-Yo with a door than with another person, because the door provides more stability.
- For a greater degree of difficulty, the student can practice Yo-Yo while holding a rope attached to something sturdy.
- Using a rope provides neither horizontal nor vertical stability, and so offers the greatest challenge to the student's stabilizing muscles and vestibular system.



Incorporating Yo-Yo into Chair Work

- You can also incorporate Yo-Yo into Chair Work. Like traditional Yo-Yo, this is a Heavy Work exercise that involves pulling activities.

- Begin by bringing the student into the chair using conventional methods.
- Stand in front of the student and ask them to extend their arms in front of them, palms down, and then raise your own hands, palms up. Firmly grasp the student's hands or their wrists.
- Start to move your torso backwards, bending at your leg joints, so that your arms and the student's arms become taut. Once your shoulders are level with the student's, ask the student to stand.
- It will be more challenging for them to stand if they slump forward through their shoulders or tuck their pelvis forward, so remind them to maintain a relatively vertical alignment through their torso.



Yo-Yo in Chair Work (Continued)

- Once you and the student are standing, reverse the process.
- Together with the student, move your torso backwards, bending at your leg joints.
- Remind your student to maintain a vertical alignment through their torso.
- Continue lowering yourself until your student is again sitting in the chair.
- It will be useful to repeat this exercise several times while ensuring that the student maintains good use.
- This aspect of Chair Work incorporates joint decompression, as the student gains proprioceptive feedback by gently stretching through their arms, legs, and back while they sit and stand.

Benefits of Yo-Yo

Similar to Push Hands, Yo-Yo provides benefits to a wide range of people:

- Yo-Yo is especially useful for people with Postural Disorder, because it helps them learn to maintain spinal integrity and muscle tonus while lengthening through their arms, legs, and back.
- Yo-Yo is useful for people with Dyspraxia, because it helps them coordinate the use of their muscles and joints.
- Yo-Yo is useful for people who are Sensory Avoidant, because it helps them learn to habituate to movement that they may at first find overwhelming.
- As with Push Hands, Yo-Yo helps the teacher develop a social connection with the student in addition to teaching good use.

Teaching Ambulation to Students with ASD

Important Ideas to Remember:

- The following techniques are similar to the methods that you would use for any student. Your task is to customize the specifics of walking to the movement patterns of the individual.
- With every step of this process, tell the student what you are going to do before you do it. This is necessary to avoid triggering the student's startle response.
- As we have discussed, use deep pressure when touching the student.
- Students with ASD will take longer than their Neurotypical peers to learn to walk with good use. Be patient, and use repetition.

Coordinate the Torso Musculature

- One common challenge for many Autistic people is that they tend to be collapsed forward through their torso.
- Occasionally, individuals with ASD may instead be overly extended through their lumbar spine, and so experience significant lordosis.
- To help the student prepare for walking, begin by asking them to stand. Observe your student and notice how they are coordinating.
- While the student is standing, give them verbal instructions to help them organize their torso. Also provide hands-on guidance by placing your hands on their stomach/chest and back.
- This touch needs to be firm and deep. The touch on their torso prepares them for further contact on their head and neck.



Coordinate the Head and Neck with the Back

People with ASD often have a downward pointing gaze, which tends to pull their neck forward in relation to their back.

- Once you have worked on the student's torso, place one hand bridging the student's head and neck and the other hand on their forehead. This will help the student bring their head and neck into an aligned relationship with their back.
- Explain to the student that the position of their head affects the coordination of their spine, which ultimately changes how they walk. Without this understanding, your student may not place as much importance on the work that you do with their head and neck, because they may not connect how the balance of their head affects their walking.
- Help the student coordinate their head and neck musculature by asking them to look out in front of them, so that their gaze is horizontal to the ground and not pointing down towards the floor. Explain that adjusting their gaze will help them align their body and improve the way they walk.

Coordinate the Pelvis with the Legs

- It is important for the student to recognize that their back extends from their neck down to their pelvis.
- Once you have helped the student balance their head on their neck, help them locate their hip joints.
- Explain to them and demonstrate that the articulation of their hips is separate from the articulation of their back.
- It may be useful to bring the student into Monkey at this point to show them where their back ends and their legs begin.
- It will be especially helpful if you have a demonstrator skeleton or other visual aid to show the student the functioning of their body.

Coordinate the Pelvis with the Legs (Contd.)

- Assist the student in bringing their pelvis towards a neutral alignment. As with the general population, people with ASD may have an anterior, posterior, and/or lateral pelvic tilt. However, due to their diminished proprioceptive awareness, they may be even less conscious of this than the average student.
- Help the student coordinate their legs, with their feet spaced a hip distance apart. Make sure that their weight is balanced evenly on both legs and that they are not locking their knees back.
- Many people with ASD tend to walk on tiptoe or have their weight shifted forward towards the balls of their feet, so make sure that the student has their weight evenly distributed through their feet.

Standing into Walking

- Now that you have helped the student towards a state of coordination while standing, return to their head and neck. Stand behind the student and place your hands on either side of their neck.
- Shift the student's weight onto their dominant leg and ask them to take a step with their non-dominant leg. Shifting the student onto their dominant leg will stabilize them as they take their first step.
- Help the student return to good use if you notice them repeating their previous ambulatory patterns. Practice patience and be prepared to repeat this sequence.
- As the student starts to walk, keep your hands on their neck for the first few steps. Then move your hands to the backs of their arms and from behind, gently but firmly push their arms so that they swing in a contralateral pattern with their legs.

Walking Coordination

- Alternate between helping the student coordinate their head and neck so they are looking forward and helping them move their arms contralaterally with their legs.
- If the student is toe walking, encourage them to land on their heel with each step and center their weight over their feet.
- In doing this, the student may attempt to overly dorsiflex their feet to compensate. If this happens, encourage them to free through the tops of their feet so that their ankles are able to release with each step.
- Demonstrate to the student that their feet should have some plantarflexion when their knees are bent, but that their feet should not be plantarflexed when their knees straighten. This will allow them to land on their heels instead of on the balls of their feet.
- After the student has experienced walking with your guidance, encourage them to walk on their own. Alternate between putting hands on and helping them walk with verbal guidance alone.

Practice Session and Questions

We will now break into pairs, and have 45 minutes of practice time.

Our practice session will be divided into three 15 minute segments. During these segments, each partner will have an opportunity to practice being both the teacher and the student.

The goal will be to practice the modifications to the Alexander Technique that we have covered.

- 15 minutes Push Hands.
- 15 minutes Yo-Yo.
- 15 minutes Walking.

We will follow our practice session with a 15 minute Q&A period.

In Summary

- The Alexander Technique is an educational practice that helps restore balance to the proprioceptive, vestibular, and tactile systems. This training is especially beneficial for students with ASD, who commonly have deficits in these areas.
- The Alexander Technique incorporates six important aspects of Sensory Integration: Self-Calming Activities, Proprioceptive Activities, Tactile Input, Deep Pressure, Vestibular Movement, and Heavy Work.
- From experience, the Alexander Technique is an effective Sensory Integration method for people with ASD, providing that the teacher can make reasonable accommodations for students with these special needs. It is my hope that I have presented a useful overview of these accommodations so that teachers of the Alexander Technique can work effectively with this growing population of people who can benefit from our services.

Resources

Websites:

- Autism Society of America. Improving the lives of all affected by Autism: <http://www.autism-society.org>
- The Sensory Processing Disorder Foundation. Expanding knowledge, fostering awareness, and promoting recognition of Sensory Processing Disorder: <http://www.spdfoundation.net>

Books:

- *The Autistic Brain*, by Temple Grandin, Ph.D
- *Autism and Alexander Technique*, by Caitlin Freeman, M.AmSAT
- *Sensational Kids*, by Lucy Jane Miller, Ph.D, OTR
- *The Out-of-Sync Child*, by Carol Stock Kranowitz, M.A.

About Caitlin Freeman, M.AmSAT

Caitlin Freeman, M.AmSAT is a professional Autism service provider. She is also an individual with ASD. In her private practice in Pittsburgh, PA, Caitlin uses the Alexander Technique to work with children, teens, and adults on the Autism Spectrum. Caitlin has been a featured presenter at the Autism Society of America and other Autism support organizations, where she has lectured on the Alexander Technique as a method of sensory integration for people with ASD. Caitlin is also a faculty member in the Theatre Department at Point Park University's Conservatory of Performing Arts in Pittsburgh, where she teaches the Alexander Technique. Caitlin received her B.A. from Sarah Lawrence College in vocal performance and theatre arts, and graduated from the Alexander Technique School New England (ATSNE), directed by Missy Vineyard. Caitlin's specialty is using the Alexander Technique, voice training, and theatre coaching to work with individuals on the Autism Spectrum.

