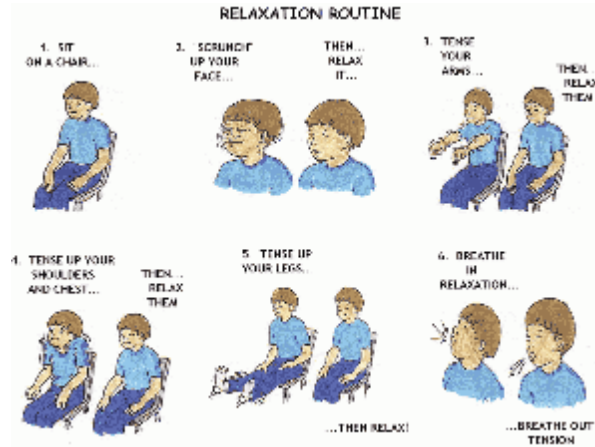


What is Progressive Muscle Relaxation?



Progressive Muscle Relaxation (PMR) is a technique that was developed by Doctor Edmund Jacobson as an easy to use stress reduction method. PMR is well suited for the classroom, and practicing the techniques can help to reduce performance or test related anxiety. Teachers can easily lead students through the exercises, and any student would benefit significantly from learning how to reduce their own physical and mental stress.

For the student with Autistic Spectrum Disorder, PMR can help to calm their anxiety by providing them with a ritualistic routine that can double as a diversion. By including PMR into the classroom routine the teacher can allow all students to benefit from stress reduction techniques; more importantly, by including all students in a relaxation routine the teacher can avoid stigmatizing students that need additional support with managing their anxiety.

How does it work?

PMR includes both physical and mental components of anxiety reduction. Students should sit comfortably on a chair with enough space to stretch out their arms and legs. Teachers can talk the students through the tensing and relaxation of each of the muscle groups until the students learn the routine for themselves.

Begin with the face: instruct the students to scrunch up their faces for 3 – 10 seconds, inhale deeply and then slowly relax their face and breathe deeply for 20 seconds. Then repeat with the shoulders, the arms and hands, and the legs. Then the students can end with a minute or two of deep breathing. Students should try to keep their eyes closed throughout the relaxation session and teachers can instruct them to concentrate on the sensation of the repeated tension and relaxation of the muscles.

The technique should be practiced at least once or twice a day for the students to master the ability to relax and learn to overcome their anxiety. With repeated performance of the technique, all students should be able to better focus on class assignments and tests that might usually provoke an anxiety response.

Using Proprioceptive Sensory Stimulation in the Classroom

A sensory system is a part of the nervous system responsible for processing sensory information; one such sensory system is the proprioceptive system. The proprioceptive system provides us with the unconscious awareness of body position; this sensory system helps us to orient ourselves in space. It helps us to understand the position of our body parts, their relation to each other and our relation to others and to objects around us. We rely on our proprioceptive system to help make sense of the world and our sensory experiences.

Exercises that provide Proprioceptive stimulation are an excellent addition to the classroom environment; sensations that provide proprioceptive stimulation are rarely over stimulating, and in fact they have the benefit of working to regulate the nervous system.

Consider jogging for example: joggers will often report that they will either go for a jog to get themselves energized, or to de-stress at the end of the day. Both statements are examples of how the proprioceptive feedback from the intense effort provided by jogging works to calm or alert the nervous system. We all seek proprioceptive input to block out objectionable sensations that set us on edge: how often have you experienced the unpleasant sensation of chalk scraping on a chalk board or heard the screech of feedback from a speaker, causing you and all around you to squint, tense your shoulders, arms and hands, and clench your jaw? This is an automatic search for proprioceptive stimulation to regulate the body and reject unwanted stimulation.

All students and teachers too, can benefit from the regulation of arousal states through proprioceptive exercises. Some students with Autistic Spectrum Disorder may have difficulty receiving or processing information from their sensory systems, and some may seek extra sensory stimulation in order to self-regulate their arousal states; other students with ASD will find the classroom environment over stimulating, and may try to escape from the over stimulation of their senses. Proprioceptive stimulation can help all students with ASD to process the sensory stimulation from their environment, as the input will help to regulate their arousal level, and will allow them to better process information from their environment. By including exercises in the classroom that provide proprioceptive stimulation, teachers can create a more inclusive classroom environment for students with ASD.

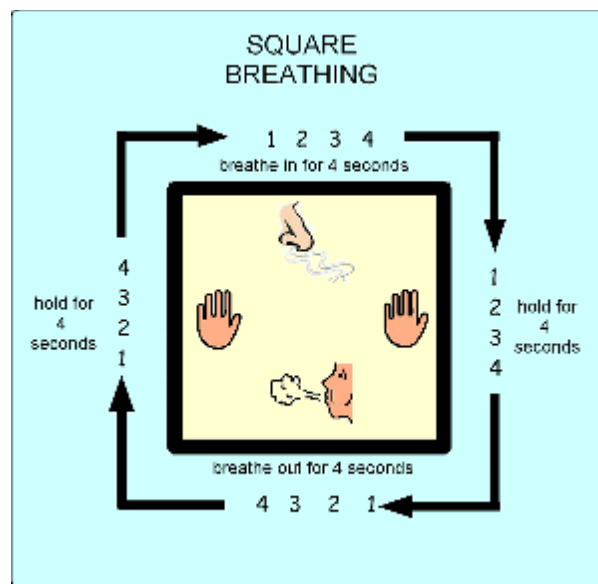
Proprioceptive Activities to try at school:

- Stair climbing
- Crawling on all fours
- Pulling/pushing items in the classroom (tidy up activities like sweeping can provide proprioceptive stimulation)
- Carrying heavy items (lunch bins, garbage cans, recycling bins!)
- Silly animal walks/ alternate walking, skipping, walking in slow motion
- Running on the spot
- Body Stretching
- Calisthenics – jumping jacks, push ups

Especially with small children, it is fun and useful to provide a story to go along with the activity. For example, at the end of a class where the students have to leave the room, challenge them to try and make the room bigger for when they come back. Have them line up along the wall and push the wall with their arms as hard as they can to make the room bigger. Then have them lean against the wall and push the wall with their legs and back. Then tell them that they need to push the floor down to make the ceiling higher; have them stand in the center of the room and get them to push the floor down with big, repeated jumps.

With my class of 1st graders, I tried connecting the exercises to the book they were reading that week. With *Jack and the Beanstalk*, I had them climb an imaginary beanstalk, urging them to reach higher for the next leaf, lift their knees to pull themselves up, stretch as high as they could for each new branch, etc. With *Three Billy Goats Gruff*, they would trip-trap over the bridge in the style of each of the three goats. This way the students could engage their imagination and their dramatic expression through the exercises, and receive proprioceptive feedback at the same time.

Square Breathing



Square breathing is a ritual breathing technique that reduces anxiety and helps to visualize and separate the actions of deep breathing. Square breathing works extremely well in conjunction with PMR.

Square breathing can be used to relax students after a highly stimulating activity, or to prevent stress before an anxiety inducing test or performance. Students that suffer from high anxiety, such as many students with ASD, will be able to use square breathing whenever they feel overwhelmed. All students can benefit from learning how to overcome their anxiety; making stress reduction techniques a regular practice in the classroom can help to better include students with ASD and avoid stigmatizing them for the anxiety reduction support they may require.

The concept of square breathing is simple: each inhale and exhale of breath is counted to four, with a four count hold for each inhale and the exhale. The hold is important to calm the anxiety and to prevent hyperventilation. The teacher can help the student to relax by showing a representational picture of square breathing, by drawing the square in the air, and/or by counting out the sequence of breaths and holds.

For example: inhale slowly to the count of four. Hold for four beats. Exhale slowly to the count of four. Hold for four beats. Repeat at least four times or for as long as desired.

Sources:

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