



Are my students *IN THE ZONE* for learning?

RED ZONE STRATEGIES to address levels of alertness and sensory needs

Self-regulation is the ability to attain, maintain and change levels of alertness appropriately for a task or situation. Students with Sensory Processing Disorder (SPD) have difficulty reaching their zone of learning, as they are unable to change their degree of alertness. For example a typical student may be able to unconsciously increase their level of alertness during a test or at lunchtime and then calm themselves down to sit quietly during story time.

The purpose of this strategy section is to help teachers provide appropriate strategies for their students with SPD to get in the zone for learning. This is known as co-regulation and with practice the aim is for students to be able to take the strategies of co-regulation and use them independently for self-regulation .

This strategy section has been developed as a tool for teachers and is to be used as a general guide ONLY. Please consult an occupational therapist specialising in sensory processing disorders for assessment and interventions for individual students with complex needs.

When considering which strategies to implement with a student consider:

- Frequency (how often)
- Intensity (how fast)
- Time (when and for how long)
- Type (what activity)

For example; jumping on a trampoline (type) for 5 minutes (time) as high as you can (intensity) before a learning activity (frequency) may help increase the alertness for a student craving vestibular/movement sensory input who may usually be fidgeting and unable to sit still to attend to that task.

Adapted from Northern Territory Dept. of Health and Community Services (2006)

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GENERAL STRATEGIES

- ☐ Use of visual timetables, schedules and routines; visual stories; finished signs, sheets, boxes and timers to indicate the beginning and end of activities.
- ☐ Regular movement breaks incorporating heavy muscle work. This helps release “feel good” hormones such as endorphins, serotonin and dopamine.
- ☐ Colour coded work or curriculum activities placed in different coloured boxes.
- ☐ Respectful, graded exposure to sensations that the student is sensitive to e.g. watching from a distance, watching a video of the activity sitting beside another student who is engaging in the activity, engaging in the activity for a short period of time at the level that is comfortable (e.g. with protective gear such as ear muffs or gloves) etc.
- ☐ Providing the student with their own sensory box/ bag (box or bag can contain such items as chewy tubes, stress balls, fidget toys, liquid timer or other visually motivating item. Items will vary for each student).
- ☐ Providing a safe space for the student to retreat to, for example a beanbag, a corner of the room, a quiet room. For some students marking the zone with masking tape can highlight the area.
- ☐ Make sure the student has access to and/or a way of requesting his or her regulatory tools and equipment.
- ☐ Encourage the student to perform tasks at a suitable pace, e.g. using an egg timer.



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PROPRIOCEPTION (HEAVY MUSCLE WORK)

- ☐ Incorporate whole body heavy muscle work activities:
 - Walking especially upstairs or up hills or while carrying an object
 - Running
 - Swimming.
- ☐ Incorporate pushing and pulling activities:
 - Pushing hands together
 - Standing and pushing against a wall ('wall push up')
 - The 'chair push up' (lifting one's body off the chair with their hands on the sides of the seat and straight elbows)
 - Pushing a trolley of books to the library
 - Pushing a shopping trolley on a school trip to the shops.
- ☐ Give the student jobs that require the student to lift and carry heavy objects:
 - Taking out the garbage or recycling
 - Raking leaves, sweeping leaves
 - Watering herbs and plants with a watering can
 - Holding the door open
 - During cooking stirring big pots and kneading dough
 - Kneading and moulding clay or play dough in a craft activity.
- ☐ Incorporate thera-putty into class activities such as moulding the putty into shapes.
- ☐ Incorporate heavy or weighted toys/ pillows/ blankets.
- ☐ Use large, weighted academic tools such as floor puzzles, weighted counting tools, large lego for building.
- ☐ Check that the student is in the right position for learning, e.g. is their chair and desk the correct height (we can attend longer to tasks if seated in a supported posture).

TOUCH

- ☐ Offer the students touch (tactile) input that is comforting and soothing, e.g. deep pressure touch through massage or constant deep pressure touch through a weighted cushion or blanket.
- ☐ Use different textures such as wool, silk or felt to give the student opportunities to explore these materials in a safe and predictable way, e.g. during art and craft times.
- ☐ Try reading the student books that involve tactile involvement (such as touch and feel books). For older students, develop book boxes which incorporate different textures as part of the story.
- ☐ Offer the student time away from others, away from physical touching, e.g. safe area such as the computer room.
- ☐ During activities such as craft, cooking, gardening, offer the student the choice of wearing gloves or an apron, using cutlery, using tools, watching from a distance, watching peers/teachers completing the activity before their turn. Provide easy access to be able to wash or wipe their hands when needed, practice and reinforce the routine of washing hands immediately after messy activities.
- ☐ Consult with an Occupational Therapist in regards to using garments/deep pressure, e.g. calming clothing, weighted vest.



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VESTIBULAR (MOVEMENT)

- ☐ Encourage linear (e.g. up and down or forward and back) predictable movements (which provides a steady rhythm and can be calming), e.g.:
 - Swinging,
 - Jumping on a trampoline,
 - Bouncing or rolling on a fitball.
- ☐ Regular movement breaks will help to release “happy/ feel good hormones” and maintain a regulated state (In the zone for learning).
 - Plan for whole class movement breaks, e.g. thera-band exercises, dancing, finger push ups.
 - If possible, have a dedicated space for individual movement breaks for the student, e.g. If your classroom has a withdrawal room it can be set up with an exercise bike, mini tramp, boxing bag , so they do not distract other students.
- ☐ Involve the student in classroom jobs that involve movement:
 - Wipe the board or desk,
 - Carry the drink bottles to the sports field,
 - Take the lunch orders/messages to the office
- ☐ Allow regulating and organising movement (some students require constant movement in order to tolerate other sensations such as sound):
 - Allow the student to pace,
 - Give them access to a move and sit cushion, a ball chair or a vibrating seat/cushion whilst seating,
 - Give them access to a swivel chair, rocker chair – seating that provides non-disruptive movement in a safe way,
 - Elastic around chair or table legs the student.



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AUDITORY (SOUND)

- ☐ Provide earmuffs or a beanie to block out sounds and to control the volume of sounds.
- ☐ Offer the student access to their own music using headphones and their own music device.
- ☐ Reduce background noise or find a quiet time or space to teach this student.
- ☐ When a student is noticing sounds and getting distracted it sometimes helps to name the sound and then move them back onto the task at hand.
- ☐ Dampen sound in the classroom:
 - Carpeting/rug on hard flooring,
 - Room dividers,
 - Closing windows that open onto busy roads.
- ☐ Use visual cues and prompts and physically model actions to reinforce auditory instructions.
- ☐ Allow extra time to process instructions and information rather than repeating the verbal input several times and potentially overwhelming the student who is trying to process the information.
- ☐ Background music with a steady beat of 50 to 70 beats per minute can help to create a calming and organising atmosphere.
 - Use appropriate visual (i.e. real object, photograph or pictograph) to prepare/support student for certain sounds/noises.
 - Use respectful, graded exposure to the sounds/noises they are sensitive to.



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VISUAL

- ☐ Reduce glare and bright lights that could be visually painful or distracting, e.g. offer hats and sunglasses when student is outside (providing there are no tactile sensitivities towards wearing these).
- ☐ Visual borders/physical barriers, e.g. masking tape on table, dividers between tables, room partitions/dividers, can be helpful.
- ☐ Some students with visual sensitivities may focus on the glare and shine of laminated pictures rather than the picture itself.
- ☐ Seat the student in the least visually distracting position, for example away from the window where they may be distracted by leaves on trees or people moving outside.
- ☐ Natural light is preferable to fluorescent light.
 - Using natural light as much as possible has known positive effects,
 - Light filters can be fitted onto fluorescent lights or replaced with full spectrum globes to dampen the glare/reduce the flicker,
 - Be aware of glare/sun - knowing where the sun/light/glare is coming from/relocating to another space if appropriate.
- ☐ Introduce something calming to look at such as a bubble column.
- ☐ Use a timer (gel timers and sand timers) instead of auditory instructions to indicate time required for classroom tasks.
- ☐ Present routine activities in the same place every time.
- ☐ Reduce the amount of visual stimuli on a worksheet, e.g. spreading a one page worksheet across two pages.
- ☐ Reduce visually distracting elements in the classroom
 - Remove posters and pictures on the wall that are in the line of sight of the student, e.g. display work in the hallway on display boards you can turn around instead of using classroom walls.
 - Reduce clutter on the student's desk, e.g. use organisation systems such as cubby/tub spaces to declutter work areas/reduce visual distraction. Curtains can be placed over cubby spaces, you can turn cubby's around.
- ☐ To reduce eye strain and encourage focus: use a feature wall, frame the area you want students to focus on.
- ☐ Have different colour walls for different focus areas. Use colour coding within a classroom/school, e.g. reading/quiet area- colour coded green. Coloured mat for group time.
- ☐ A student may find making eye contact less intense/ awkward after a movement activity which has released feel good hormones.



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TASTE/SMELL

- ☐ Be aware of the odours and fragrances and try to avoid smells that are noxious to the student, e.g. garbage bin, use of chemical sprays.
- ☐ Ensure good ventilation in the classroom.
- ☐ Trial using calming fragrances such as strawberry or lavender to create a relaxing atmosphere, e.g. scented playdough, herb garden
- ☐ Crunchy and chewy foods can help this student (Please follow any diet student is already following).
- ☐ Sucking through a straw or sports bottle can be helpful to regulate breathing and give strong input to the muscles of the jaw.
- ☐ Chewable jewellery or a chewy tubes can be calming through the provision of deep pressure through the jaw and by regulating the breath.
- ☐ Separate lunch boxes for different foods or lunchbox that is divided into sections.
- ☐ Incorporate cooking lessons when possible to encourage new food and taste opportunities.
- ☐ Encourage parents to send in a variety of foods.

IMPROVING RESPIRATION

Many of our students experience low muscle tone, postural weakness and have difficulty regulating their alertness levels. Heart rate and respiration are closely connected with these difficulties. These students will often be breathing in a shallow way which makes it difficult for them to get adequate levels of oxygen to their brain or to be able to take deep centreing breaths to calm themselves down. Some students hyperventilate (take short, shallow, rapid breaths) which exacerbates the panic or fright/flight/fight state they may already be in. Daily respiration (deep breathing) exercises will assist all students to develop an important self-regulatory tool that can help them to calm down, refocus and get in the zone for learning.

- ☐ Encourage deep breathing:
(By encouraging students to extend their exhalations automatically deepens their inhalations)
 - hissing sound
 - humming competition
 - songs with long vowels
 - resistance whistles and breathing exercises
 - heavy muscle work that increases heart rate and encourages deep breathing (e.g. chair push ups, jumping on the spot, bouncing on the gym ball).



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Additional *information* to assist the teacher in understanding their student.

PRAXIS, MOTOR PLANNING AND MOTOR IDEAS

Praxis is the process of forming an idea and creating and executing a motor plan by taking in feedback through the senses. For praxis to occur smoothly all the senses need to be integrating well and providing accurate information. Many of our students experience motor and verbal praxis difficulties; often referred to as dyspraxia.



This student may:

- Have difficulty with tasks with multiple steps.
- Become confused about the correct sequence of steps.
- Have difficulty imitating or copying actions.
- Have difficulty coming up with ideas during play activities or when manipulating objects, e.g. building blocks or drawing.
- Tend to play the same game or interact with the same activity with repeated movements.
- Not seem to be able to figure out what to do with certain objects or how to manipulate them.
- Not notice the impact of his or her actions on others or the environment, e.g. knocked over a tower of blocks or dropped an object but didn't notice.
- Go about a task in an inefficient or awkward manner.
- Seem to need adult help and feedback more than other students.

MOTOR LEARNING STYLES

This student may:

- ☐ Need to be in a quiet environment to learn.
- ☐ Be more successful with one on one teaching rather than within a group of students.
- ☐ Need help to regulate their alertness level before starting the learning process, e.g. be provided with sensory input to alert or calm themselves so they are in the zone for learning.
- ☐ Need multi-sensory input to learn, e.g. touch, sight, sound, taste combined
- ☐ Need more feedback through their bodies as well as verbal feedback, e.g. writing on sandpaper provides a lot more tactile feedback than writing on paper.
- ☐ Need the task broken down to simple steps (including explicit instructions such as bend your elbow, look down etc.)
- ☐ Need repetition of the steps to a task.
- ☐ Need to watch before trying.
- ☐ Benefit from video modelling and a visual sequence.
- ☐ Need help to generalise the skill into different contexts.



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