



Guide to Understanding and Supporting Praxis Skills

**Expert advice designed to help you
empower children with dyspraxia!**

By Aubrey Schmale, OTR/L



From My Sensational Toolbox to Yours!

I am so excited to bring this resource to you. My name is Aubrey Schmalle. I am a pediatric occupational therapist specializing in evaluation and treatment of sensory processing disorders. I have been in this field since 2005, and I still feel joy and excitement every time a parent says, "We are so grateful for all you have done. You changed my child's life." But even more rewarding are the words from the children, "Remember when I first came here I was afraid of the swing? Well, guess what? I went on a roller coaster this summer!" and the feeling of success and empowerment when a child knows he has reached a new level of skill and ability, "Can you take a video and send it to my mom?"

The reason for their success and feeling of empowerment is that at my clinic, [Sensational Achievements](#), we treat every child as unique and design programming to meet individual needs. Parents always say that they find out something no one has ever told them about their child and that now their child's behaviors make SO much more sense. Our mission is to provide the hope and help parents of children with sensory processing disorders are desperately looking for.

And your child can get better too! I know that as a parent, your deepest desire is for the happiness and well-being of your children. But sometimes you just need a new lens from which to view your child to support him/her in the best way possible.

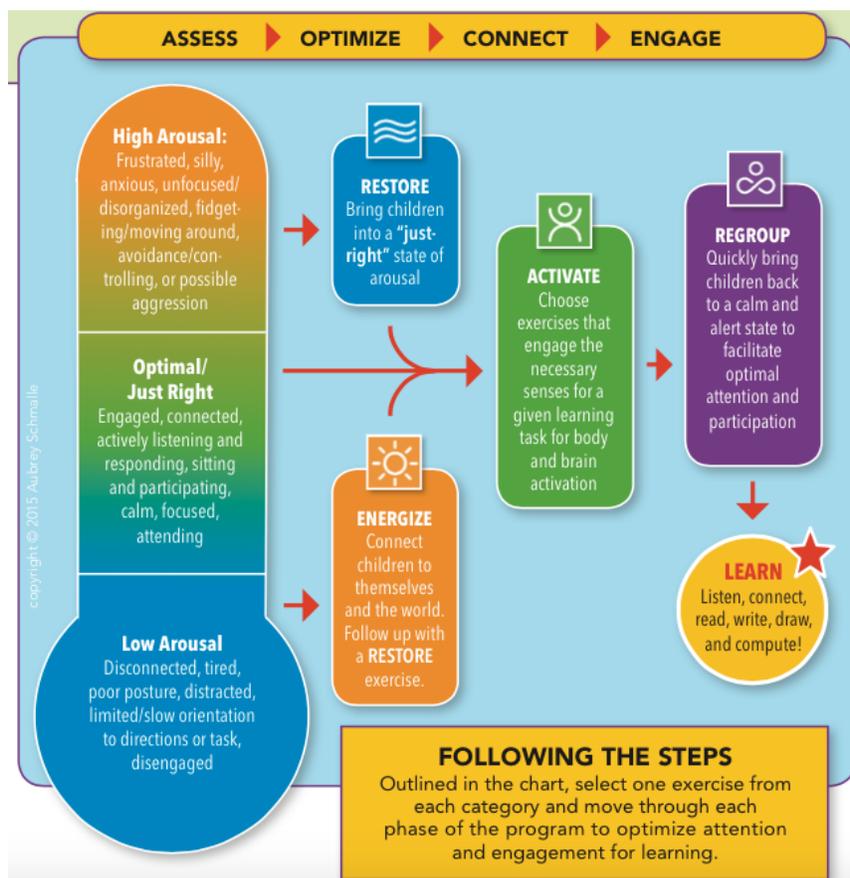
Disclaimer: While I have put together what I feel is a solid guide to understanding and supporting a child with dyspraxia, this should not take the place of professional advice. If you are working with or plan to work with an occupational therapist, please share your observations with your therapist. Together, you can collaboratively develop a treatment and support plan individualized to your child's unique needs.





First, let me orient you to our Body Activated Learning Approach.

This chart is a roadmap to Activating your child for Learning. **RESTORE** activities help your child calm and focus. **ENERGIZE** activities are alerting and help to wake up the body. For a child with sensory processing deficits, a good sensory diet and regular access to sensory inputs that connect a child to their body is a key support to optimizing arousal prior to **ACTIVATING** the senses for motor skill development, praxis, play, and learning.



Let's get started helping your child **ACTIVATE** and **LEARN**





Brief Explanation of Praxis

Praxis develops through adequate sensory processing from the visual, vestibular (movement), proprioceptive (muscles and joints), tactile, and auditory systems combined with higher-level cognitive abilities. It consists of the following components: 1. Ideation 2. Planning and Sequencing 3. Feedforward 4. Execution 5. Feedback.

Motor Ideation:

- Develops out of knowledge of what your body can do (jump, flip, roll, kick, etc) and
- Knowledge of the properties of objects in the environment (ex: a pen doesn't just write. you can flip it, throw it, balance it, chew it, etc)

Planning/Sequencing

- **Within a task:** completing a series of actions combining knowledge of body and knowledge of the object to figure out how to use the objects in a specific manner (ex: washing and drying dishes)
- **Within the environment:** Involves taking into account the spatial organization of tasks, their proximity to see them as a "sequence" (next to each other or spaced out in the room) and often combines serial motor actions that require different motor plans for each step (ex: put your coat away, get a mat, find an open space, select materials from the shelf). It also involves sequential memory and the ability to access plans for activity sequences when there is not an obvious visual cue from the environment about what to do

Execution

- **Feedforward:** initiating a motor plan for a familiar task based on knowledge of body and objects (ex: preparing to catch a small ball by lifting your arms and holding your hands in a rounded shape close together versus extending your arms and hands flat)
- **Execution:** Attempting to complete the task
- **Feedback:** Using internal sensory information as well as external environmental cues to determine if the activity occurred as desired and what you need





Deficits in Praxis may result in the following behaviors:

- **Verbal Praxis Deficits:** Translating verbal information into a motor action. Children with praxis deficits may also have difficulty verbalizing and understanding spatial concepts (over, under, through), which makes it difficult to follow verbal directions to navigate the environment as well as explain to someone else/another peer what you are doing in your activity sequence
- **Daily Routines:** Difficulties recalling and internalizing sequences for daily routines (collecting materials, setting up a task, and completing it) without frequent adult support
- Difficulty sequencing the beginning, middle and end of activities
- Difficulty managing unstructured times (transitions, waiting for an activity to begin, free play with peers)
- Difficulty “walking and talking” at the same time - So much effort is focused on completing the task itself that there is little attention/energy left to focus on social interactions with peers and adults. This can also impact self-regulation when a child can’t manage multiple demands simultaneously
- Easily overwhelmed with skill demands due to difficulty creating novel motor plans, accessing familiar motor plans in busy environments, and exploring and combining activities in novel ways affecting self-regulation
- **Play skills/Approach to Task:** Decreased flexibility in play once a child “learns” the game, increased difficulty integrating the ideas of peers into play and engaging in reciprocal interactions, preference for sedentary and predictable activities (board games vs playground games)

The games below will help your child learn how to use this information to engage in more complex play, develop a “mental picture” of a sequence of events, and have ideas of things to do when he goes to both familiar and unfamiliar places rather than defaulting to familiar play.





Facilitating Execution via Sensory Experiences

Improving Somatosensory Based Praxis

- Start with activities that provide high input to muscles and joints (trampoline, resistance bands, massage, pushing/pulling, crawling on cushions)
- Follow this input with encouraging games that involve body coordination (climbing, jumping, skipping, hopping, rolling, etc)
- Gradually increase to longer sequences and combining different motor plans during play using **Sequencing Games**.

Improving Vestibular-Based Praxis

- Start with activities that provide movement of varying speeds and directions (ex: via swinging). Add in targeting and practicing going from moving to stable surfaces.
- Follow this input with games that involve spatial judgement (jumping down from different heights, targeting games in different locations with varying distances, jumping over objects, etc.
- Gradually increase to longer sequences and combining different motor plans with spatial judgement demands during play using **Sequencing Games**.

Improving Visuopraxis

- Start with activities that provide increased tactile feedback such as using bean/ rice/sand sensory boxes, burying hidden treasures, finding shapes/objects by feel to increase tactile perception of the qualities of materials.
- Follow this input with games that involve finding specific materials and using them to build a 2, 3, or 4 part object/design
- Gradually increase to longer sequences/more materials. And then practice replicating the "built" designs on paper. Simple ideas include using shapes like triangles, circles, lines, and squares to "build" a balloon, truck, sailboat, steps, etc. (Think Tangrams Jr and other such building-based visual perception games)





Ideational Praxis and Exploration

- Take turns modeling movements and imitating what your child is doing
- Give your child an object (ball, rope, clip) and ask: What else can you do? If they attempt something, label it (ex: yes! you can flip it!). You can also use turn taking to model different ideas and help them expand their object exploration. Think about what the object is "able" to do - flip-able, bend-able, etc.
- Have the child find something in the room that is bounce-able; jump over-able; climb on-able. If they struggle, demonstrate how you would search for things in the room that meet that parameter and even model/verbalize failed attempts - "Nope! This is too hard/small/wobbly"
- On the playground, experiment with different ways to slide down a slide or get to a piece of equipment if there is a "road block" at the entrance he typically uses to get on a climbing structure or ways to get on/off things without using a particular body part or instead of jumping.
- Make a game out of seeing how many "tricks" you can do on a piece of playground equipment. (ex: jump off, spin, balance, lay down, etc)
- Give SPECIFIC praise (ex: I really like how you used your legs to....)





Sequencing Games

Figure It Out:

- Pick 3 items, and have your child figure out a way to cross the room without their feet touching the ground.

Body Move Games:

- Have your child move across a room using only one repeated motion of their arms or legs, walking does not count! (Ex: Touch opposite knee with hand)
- On the way back, alternate between two repeated motions of their arms and legs. (Ex. touch opposite knee with hand, hop on right foot).
- Progress to a sequence of 3, 4, 5 different motions adding one unique movement each time until the room is crossed with a single unrepeated sequence of movements.

Obstacle Course Sequences:

- Have the child choose 2 items in the environment with certain properties (ex: find something you can climb on, jump over, walk on, etc) while you choose 1-2 items.
- "Stick your equipment together" to make a sequence/obstacle course.
- Start with objects that can be lined up close together but require different motor plans (climb, jump, balance, crawl, etc)
- As skills improve increased the distance between obstacles to improve spatial navigation and judgement. You can also set up the challenge in a circle, zig zag pattern, etc.

Body Telephone:

- In a small group, choose a 4 count body movement (ex: clap 4 times, jump with legs open/closed 2 times, march 4 steps, etc.)
- Have the next child repeat that 4 count movement and add their own.
- The third child repeats the first two and adds a third. Try to see how many you can come up with before you start forgetting the sequence!





Language for Praxis: Strategies for Teaching Kids with Praxis Deficits

It can sometimes be frustrating for children who have praxis deficits to describe what they want to do, where they want to start, how they want to complete a task, what part of a task is hard for them, and what they want the end result to be. However, with thoughtful and precise words which a parent, caregiver, or sibling can model and help them find, a child's idea, plan, and purpose can be happily and easily shared and successfully achieved.

In general try not to use the verb (jump, crawl, swing, go over, go under, go on top etc) when beginning and activity or task. Instead, when doing an activity or task, ask them in a question.

For example, putting on a coat, you could start by saying, "What do you do first?" "Where does the sleeve go?" If your child is having difficulty labeling actions or figuring out the sequence, you can then describe what you are doing to put their coat on such as, "First you slide the sleeve on, then you slide the next sleeve on, close it, hook the zipper, and pull up the zipper."

Using these strategies helps to facilitate their ideas and labeling of actions with their own experience.

Here are some other helpful strategies to help your child find the words needed to complete a task, share an idea, or solve a problem to achieve their goal.

- "What activity or game will make your body feel good or 'just right?'"
- "Show me..." (have the child do and describe what their idea or plan is)
- "Where is it? Where did it go?" (For example if you are hiding animals behind the couch your child will then hopefully say, "Behind the couch". This gives your child the visual, representational thought, and spatial awareness when experiencing if something is behind something else.
- "Can we move this a different way?"
- "How about this one..."
- "What are you thinking?"
- What can we do with....? It looks like it would be good for scooping - let's test it.





- Model an idea: I could....., what can you do?
- If the child gives an idea but it's not workable, still allow the child to "test it" and use it as an opportunity to explain why it didn't work based on the properties of the object.
- Cooking: Can anyone find me something small on the table that is good for scooping cinnamon? How about something to mix with? This looks like a lot of flour - do we need a big bowl or a small one?

In the process of the game or activity you may want to praise your child. When doing so make sure to use the verb or adjective to describe what they are doing so well:

- "Good, looking with your eyes"
- "Nice, jumping with your feet"
- "Good catching with your hands"
- "What great climbing! I love how you are reaching and looking with your eyes!"
- "Remember - your eyes tell your body where to go...Good looking!"

Here are some DON'Ts when addressing this at home

- Asking your child, "Can you...", "Do you want to..." because it's not your child's original idea. You are giving them the idea and the words that go with that idea.
- Asking your child, "How are you doing that?" or "Why are you doing that?" - Too open ended.





Planning and Praxis Checklist

Attention and Behavior

Limited attention span for activities. Switches activities quickly.	Y	N
Difficulty with organizing and sequencing daily routines eg. morning routine.	Y	N
Always needs adult supervision for every step or it doesn't get done.	Y	N
Has difficulty with transitions because are unaware of the next step.	Y	N
Limited frustration tolerance. Increased frustration with task if their plan doesn't work on the first try and place blame on something or someone else for the event.	Y	N

Motor/Movement

Limited/less exploration e.g. play for 2 minutes and move on or play with the same toy in the same way.	Y	N
Often breaks toys or destroys other's games	Y	N
Does not recognize opportunities for fun or create opportunity for fun, and reverts to pushing toys around or lining them up.	Y	N
Prefers structured games or board games with rules and regulations and becomes upset if the rules change.	Y	N
Has difficulty following motor movement patterns, e.g. "Head, Shoulders, Knees, and Toes"	Y	N
Do everything the hardest way possible	Y	N

Social Interaction

Often says they don't know what to do or they are BORED!	Y	N
Refuse EVERYTHING or always tells adult to do it.	Y	N
Gets stuck in the same play themes or eg. books/movies/characters.	Y	N
Can be rigid, needs to be in control of activity, or leaves the game.	Y	N
Loves being in charge and being the " Director. "	Y	N
Very concrete e.g. A book is a book and nothing else.	Y	N
May ask excessive questions to "figure out" what to do.	Y	N

Totals (5 or more "Yes" responses may indicate need for further evaluation)		
--	--	--





Final Words

I hope this resource provided valuable insight and support into for your child with dyspraxia. Remember that each child has a unique sensory system and needs. Make sure to include your child in the process of finding what works best. This discussion will start a positive collaboration between you and your child so that you can set your child up for success.

Remember: This resource is meant for educational purposes only and not designed to replace the advice of a qualified sensory integrative occupational therapist who knows your child and likely also has a much larger toolbox of activities not listed in this guide.

Be consistent! Change does not happen overnight. Just like we can't lose 10 pounds in a day by cutting out sweets and carbohydrates, changing the brain takes time. We can influence a child's development through movement, sensory tools, and daily routines, and focused activities/games. The key is to create those opportunities throughout the week in play and family time.

If you felt this resource was useful, please email me at: admin@sensational-achievements.com and let me know!

If something was missing or unclear, I want to know that too so I can keep making it better for the families I serve!

Want more resources and advice? Like our [Facebook](#) Page, Subscribe to our [YouTube](#) Channel, and Follow our [Pinterest](#) Boards





Feeling stuck or overwhelmed? No problem! My staff and I are here to help!

To get more individualized guidance and support, please feel free to contact our office for a consultation, evaluation, and/or direct intervention.

Sensational Achievements

1011 High Ridge Road

Suite 300

Stamford, CT 06906

203-200-7256

