

Praxis

Praxis is the neurological process by which cognition directs motor action. Information from the senses (touch, balance and movement, vestibular sensations, vision and hearing) is necessary for good motor planning.

Praxis is composed of 3 components:

1. Ideation – the generation of multiple ideas of how to best carry out a task
2. Planning – the generation of a mental map of how to sequence a task
3. Execution – the coordinated movements required to complete the task effectively.

People with praxis issues often find it more difficult to learn new tasks, but once learnt and practised, they can be performed as part of their daily life with adequate skill. Although people can acquire the reasonable skill to carry out specific activities, the actual skill acquired remains highly specific to the tasks that they have practised, so generalisation to other similar activities is not seen.

Praxis is important to enable children to perform many everyday tasks, such as:

- Walking, running or playing sports
- Self-care activities such as dressing and eating
- Writing, drawing and cutting.

Supporting praxis skills within daily life can be beneficial for children. Below are some general strategies which can be incorporated into daily routines, as well as activity ideas to build on specific skills and challenges your child may have.

General Praxis Strategies for Everyday Use

- Break new tasks into smaller steps wherever possible, even if it seems silly (not only does this offer supported skill development, but also reduces anxiety).
- Repetition: Recognise that additional practice is often required to master a new task.
- Physical guidance: Physically guide the child through new motor tasks so that they learn what the movement feels like.
- Visual cues: to learn new tasks and routines.

- Cognitive planning strategies can be used to talk the child through tasks.
- Strengthen the 'core' (namely the large central muscles) of the body to provide greater body (especially trunk) stability. Yoga and exercise are a nice way for children to do this.
- General muscle strength can be used as a coping strategy where “floppy” muscles are a challenge. Again, Yoga and exercise can be a good way for children to build this
- Break verbal instructions into parts: Instead of “Go and get your lunchbox and your hat and go outside”, say “Get your lunchbox.” When the child has followed that instruction, say “Now get your hat” then “OK, now you can go outside”.
- Repeat the instruction: Ask the child to repeat the instruction to ensure that they have understood what they need to do (e.g. “Go and get your bag then sit at the table. What do I want you to do?”).
- 'First/Then': Use this concept to help the child know what order they need to complete the command (e.g. “First get your jacket, and then put on your shoes”).

Using both hands together to perform the same motion (symmetrical)

This skill is a prerequisite to later bilateral tasks emphasising a dominant and helper hand.

- Putting/pulling apart pop beads, large Legos, and Star Builders.
- Pulling both sides of the jacket to undo snaps or zips.
- Pull up pants with both hands.
- Pull on socks.
- Tearing paper apart.
- Pick up objects/sand in both hands and place them into a container.
- Clapping to a rhythm.
- Use rolling pins (flatten dough, clay, silly putty, crush crackers).
- Playing rolling and catching big balls.

Stabilise and do activities (asymmetrical)

- Cooking activities (hold the bowl and stir with the other hand, spread butter on a cracker with a plastic knife).
- Hold a jar while removing the twist cap.

- Use a manual eggbeater to mix up soap bubbles or various textured items (different coloured hole punches, beans, etc.).
- Hold the jacket while unzipping.
- Stabilise paper while colouring.
- Stabilise stencil while drawing around edges.
- Locks and keys.
- Large nuts and bolts.
- Turning pages of a cardboard book.

Using both hands at the same time to perform different parts of the task (asymmetrical)

- Cutting with one hand while adjusting paper with the other hand.
- Unbuttoning and buttoning.
- Lacing activities.
- Tying shoes.
- Fastening zips.
- Attaching assembly toys using both hands to rotate objects for correct orientation to put together.
- Stringing beads.
- Stacking blocks.
- Paper folding.
- Cutting soft foods or dough with a fork and knife.
- Playing cards.

Crossing the Midline

- Colouring on large pieces of paper on the floor or wall to encourage big movements across the midline.
- Race cars around a Figure 8 picture or on the wall with one hand and then the other
- Container play- place the containers about a metre apart the child sits or stands in the middle and moves objects from one container to the other. Left to right and vice versa.

- Simon says- ask the children to copy your body positions e.g. left hand on right knee, left hand on right ear etc.
- Hand-clapping songs which involve crossing midline 'A sailor went to sea, sea, sea '
- Printing either rubber stamps or potato prints. Have a strip of paper running horizontally in front of the child and stamp left to right and vice versa.
- Doing a Brain Gym cross crawl activity helps to develop better coordination of the two body sides. It is said to activate full mind and body function.
- Drawing large shapes on a blackboard or whiteboard where the child crosses the body midline (must be standing directly in front of the board with no movement of the feet). This could also be made into a chasing game with an adult drawing a line and the child having to follow. Or you could fill a large area with lots of swirling shapes and patterns and ask the child to colour them in

Developing a hand preference

The strongest and most efficient hand will emerge as long as midline crossing is in place.

- Wheelbarrow walking.
- Repetitive strengthening and fine motor activities (sanding wood, playing with resistive materials, hammering, nuts and bolts, clothespins, pinching activities, squirt bottles, in-hand manipulation activities).
- Tap on the table in patterns (i.e., right hand, right hand, left hand).
- Large scribbling on the chalkboard or drawing on mural paper that is on an easel or taped to the wall or floor
- Swinging a ball on a string above the head
- Throwing small balls or beanbags with one hand.
- Drawing, writing, or painting with one hand, stabilising paper with the other.
- Cutting with one hand, stabilising and turning paper with the other.
- Using one hand to build towers with blocks, stabilising and helping to keep blocks lined up with the other.
- Tracing or scribbling over templates, holding a writing implement with one hand while stabilising paper with the other.



THERAPY SERVICES

- Opening containers, such as jars or plastic containers with lids require stabilisation with one hand and action with the other.

Praxis Activity Cards



Scissors



Buttons



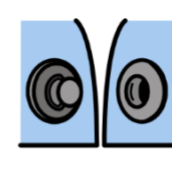
Laces



Zips



Jacket



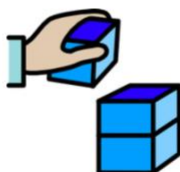
Popper



Cards



Beads



Building



Tear Paper



Rolling



Open Jar



Fold Paper



Cutting
Food



Drawing



Whisking



Catch



Stencil



Cars



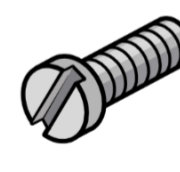
Stamping



Chalk



Lock



Bolt



Story