

## **Physiotherapy Service for Children and Young People**

### **Motor Planning and Organisation**

Motor planning is the ability to organise your body's actions. This is a skill that allows us to remember and to complete steps for movement to happen. Motor planning is used for all physical activities including jumping, hopping, skipping and climbing.

If you have motor planning difficulties you will have difficulties or use extra effort to complete tasks, please see some advice below:

### **Strategies and Activities for Supporting a Child with Motor Planning Difficulties:**

1. Help the child identify steps needed to start and complete the task. Have the child repeat directions and if possible/ required write down the steps.
2. Ask the child what they are going to do and how this will be completed.
3. Encourage the child to talk through and explain what they are doing while completing the activities.
4. To provide instant positive feedback, provide the child with a shorter task to complete. Note the length of time a child focuses on the task and plan the task so that it can be completed within this time.
5. Create a tick off list/ timetable as a visual prompt for completing tasks.
6. Give the child one instruction (verbal or written) at a time. After one action is successfully completed provide the child with another instruction.
7. Reduce visual distractions and check for clutter in classroom/ home environment.
8. Complete activities that require the assembly of parts to create a project. This challenges the child's ability to develop strategies for organising parts as they relate to the whole project.

### **When playing a game:**

1. Discuss how to play a game and plan this before playing the game. Demonstrate this verbally as well as visually.
2. Mark out the boundaries of the game. For example, use rope, masking tape or chalks to mark a game circle or start and finish lines.
3. Using signals for control, for example two blows of a whistle to signal freeze.
4. Stop each action between turns to gain everyone's attention in the game and therefore regain order of the game.
5. Demonstrate the sequence of movements for the activity/ game to the child for example- the adult shows a pattern such as jump, clap, jump, clap or jump, jump, clap, jump, jump, clap.

### **Activity Ideas:**

1. Create different obstacle courses to challenge the child's motor planning ability. Including:
  - Under tables, chairs, blankets, duvets, tables covered with sheets
  - Over soft and hard surfaces - different heights to step over or climb over.
  - Through hoops, climbing frames, rubber rings, cardboard boxes etc.
  - Change of direction: clockwise / anti-clockwise, always turning left or right.
  - Different postures: tiptoe, one foot in front of the other, crawling commando-crawling, snaking, lying on a scooter board.
2. Walk around chairs - position two chairs about two to three metres apart. See if you and your child can walk around the chairs while hitting a balloon to keep it up in the air.
3. Running and weaving between objects - place boxes about one to two metres apart and encourage running and weaving in between the boxes without knocking into them.
4. Ladder walk - place a paper/chalk/masking tape ladder on the ground and see if your child can walk between the rungs of the ladder forwards, backwards and sideways. See if they can do it while carrying something, for example a beach ball, box or large toy.
5. Walking along a line - make a straight line on the floor out of approximately six metres of masking tape. The game is played by walking along the line without

stepping off. As with “ladder walk” the aim is also to walk forwards, sideways and backwards. To make the activity more difficulty, see if your child can catch a ball at the same time.

6. Skipping - is often difficult for children with motor planning difficulties because it involves the correct sequence of movements. To teach skipping, as with all skilled motor tasks, teach each stage of the skill separately. i.e. step first, then hop, step with other leg, then hop. If your child is unable to hop, practise hopping first on a mattress or exercise rebounder to develop the “spring”.

## **Ball Skills**

Children struggling with motor planning difficulties, do not often have the age-appropriate ball skills. Balls skills, such as catching, throwing and kicking help to develop balance, coordination and proprioception.

When playing with a ball, it is important to remember:

- A rolled ball is easier to catch than a thrown ball, because it moves slowly.
- A large, soft ball is easier to catch than a smaller, harder ball.
- Objects that don't bounce are easier to throw and catch (e.g. a beanbag).
- A bounced ball is easier to catch than a ball that has been thrown directly.
- Catching a ball that you have thrown against a wall is more difficult, because the ball tends to travel faster.
- A balloon is easier to catch because it moves slowly.

When practising ball skills with a child, make the task easier or harder, by altering:

- The length of the throw; start at 3-4 feet apart and increase the distance.
- The height of the throw.
- Whether the object is to be caught straight on, or whether the child needs to move or reach to one side.
- The force of the throw.
- The speed of the object.
- The size of the object.

Ensure that the child is:

- Ready and anticipating the throw, or kick.
- Concentrating and following the object with their eyes (many children close their eyes as an object moves toward them).