

Help Sheet

0 – 25 Specialist Teaching And Support Service

How to support a trajectory schema.



Why?

- The word schema was first introduced by Jean Piaget in 1952. In simple terms, schemas are 'patterns of play' that help children to develop their knowledge and understanding about how things work.
- Schemas are part of child development. For children with SEND schemas are likely to be in line with their developmental stage and may last for a longer period of time.
- Some schemas will fulfil a child's sensory needs as well as being exploratory learning. Children find schemas motivating so they can be a useful way to plan 'next steps' for a child with SEND.
- Trajectory is a schema where children show an interest in lines and movement. When a child explores lines and movement, they are learning about how things work.

Learning gained from exploring the trajectory schema can be:

- Cause and effect
- Gross motor and fine motor skills - co-ordination and control
- Weight and force
- Linking and building on experiences
- Sensory feedback e.g. where their body is in relation to the environment (Proprioception)

Related vocabulary: Throw, drop, push, pull, roll, kick, bounce, catch, chase, swing, fast, slow, up, down, across

How?

Play behaviours associated with the trajectory schema may be:

- Throwing objects and watching them travel and land.
- Dropping objects including food from a height. E.g. off a table or high chair.

- Pushing things off ledges or shelves and watching them drop.
- Running and moving in straight lines.
- Moving toys in straight lines.
- Jumping off furniture or steps.
- Throwing piles of leaves, feathers or other light objects into the air and watching them fall.
- Pouring water from a height.
- Flicking or catapulting materials.
- Drawing straight lines and zig-zags.
- Kicking, rolling, bouncing or catching balls.



Children who are exploring a trajectory schema often like to run and throw objects. Running water and pushing objects into a straight line is also common. To overcome these problems:

- Substitute bathroom tap play with water tray play e.g. include water carriers with taps, a samovar or containers that pour like teapots and watering cans.
- Redirect running and throwing activities to a suitable space with safe equipment.
- Provide a target to direct throwing.
- Create a track to guide running.

Reference / Evidence base – informed by:

Jean Piaget, Psychologist – Piaget's Theory 1952

Chris Athey, Lecturer in Education – The Froebel Early Education Project 1973-78

Tina Bruce, Honorary Professor in Early Childhood Education – The Froebel Block Play Project 1987

Understanding Schemas in Young Children Again! Again! – Sally Featherstone