Pressure Control

What is it? In order for writing implements to make marks on the page, a certain amount of force has to be applied. The muscles in the hand and fingers have to learn the right amount of pressure to use in order for mark making to occur but without using too much effort.

Why is it important? If children struggle with pressure control, it will be difficult for them to develop fluidity of movement. Without an understanding of pressure control, children are likely to have difficulties with legibility and are likely to have a slower handwriting speed, in part because they will have to carry out frequent corrections. Too heavy pressure can also lead to fatigue, hand pain and ripping of the paper.

Stages of Motor Learning

Handwriting is a motor skill, therefore it is important to think about the stages of motor learning that children experience. Initially, children need to go through these stages with the pencil control concepts, they then need to start at stage one again to apply it to letter formation and then again into handwriting.

Stage 1: Thinking about it (cognitive stage)
- Children gain understanding and knowledge about different aspects of the skills.
- Activities that can help at this stage are ones that include thinking (asking questions and reflecting), looking (attending to different aspects) and doing (experiencing the movement).
- Feedback is very important. This can be either internal or external, from another child or an adult.

Stage 2: Practising it (associative stage)
- Children rely on their knowledge and previous experiences to refine their skills.
- Repetition is not the same thing as practice. Repetition can lead to mistakes that can become embedded and difficult to correct. Practice involves thinking and making changes.
- This stage of learning may take a long time. For handwriting, it is expected that this will take several years.

Stage 3: Doing it automatically (autonomous stage)
- Once children have reached this stage, they are able to focus on what they are writing, rather than on how they are writing.

Children first have the opportunity to learn and experience their pencil control skills through Thinking-Looking-Doing activities.
Children then have the opportunity to practice and consolidate these skills with a pencil.
How you can support this?

**Bubble Wrap Pop:**
- Children to use their pincer grip (thumb and forefinger) of their “doing hand” to pop as many bubbles in the time given as the “helping hand” holds the bubble wrap.
- Get children to reflect on how hard they are pushing.
- Encourage them to try popping with more force and less force. What happens?

**Bulldog Line:**
- With a number of bulldog clips and a piece of washing line, children to clip as many bulldogs as they can using their pincer grip (thumb and forefinger) and tripod grasp (thumb, forefinger and middle finger) as they can in a given amount of time.
- Try with different clips and/or pegs.
- Ask children to think about what the difference between them are, e.g. do some need squeezing harder than others?

**Bumpy Surfaces:**
- Using different bumpy surfaces, e.g. chalk on the pavement or crayon on top of sandpaper, children to have the opportunity to make marks to experience the different resistance and pressure needed when using the implement on the surface.
- Encourage children to think about the different pressure they are using, “what are you doing differently?”

**Clicky Pen Orchestra:**
**Children will need a retractable pen.**
- Holding the “clicky pen” in their “helping hand”, the adult should use the fingers of their “doing hand” to click to a piece of music. The children should copy the adult’s movements using ‘Tommy Thumb’ (thumb), ‘Peter Pointer’ (forefinger), ‘Toby Tall’ (middle finger), ‘Ruby Ring’ (ring finger) and ‘Baby Small’ (little finger). This should give the opportunity for children to use all of their fingers at different times and different speeds.
- Ask the children “Did it feel different for different fingers?”, “How?”, “Why?”

**Coin and Leaf Rubbings:**
- Using a piece of paper on top of gathered coins/leafs, children to use the side of a crayon to rub the paper on top of the coin or leaf.
- Adult to guide children to look at the difference when they rub lightly and when they apply more pressure.
Go to the Dough Disco:
For a video demonstration: CLICK HERE Dough Disco
- The adult demonstrates different pressure movements with a ball of play-doh, passing between both hands e.g.
  - Squeezing the play-doh as hard as you can with each hand
  - Patting the play-doh as hard as you can with each hand
  - Light tapping on top of the play-doh with each finger
  - Stamping on top of the play-doh with each finger.

In the Kitchen:
Children should have access to different utensils for pushing, rolling and squeezing, e.g. garlic press, masher, rolling pin, shape cutters etc.
- With play-doh and various utensils, adult to guide children to apply different pressures when pushing, rolling and squeezing.
- Encourage children to think about how much pressure they are applying.

Jar – Bits and Pieces:
Adult to lay out a number of small bits and pieces: e.g. bricks, buttons, pipe cleaners, pom-poms etc. Children to also be given different objects which will act as “pick-ups”: e.g. bulldog clip, clothes peg, tweezers etc.
- For each small piece, children should select one of the “pick-ups” to pick up the small piece and place it into the jar.
- Children should repeat the process for each small piece, until all of their small pieces are in the jar.
- Once all of their small pieces are in the jar, children should screw the lid onto the jar.
  **This can also be done as a timed task where a number of children are completing the task simultaneously.**

Mouse Mat:
With a piece of paper on top of a mouse mat, children to be given the opportunity to mark make with a ballpoint pen, exploring how the pencil goes through the paper into the mouse mat when too much pressure is applied.

Peg Boards and Pin Boards:
Children to push pegs into a peg board or pins into a pin board.
### Punching Holes:
- Holding a hole punch (single or double) in their “doing hand” and a piece of paper in their “helping hand”, children should make a series of holes by pressing on the hole punch with their “doing hand”. **This could be a timed activity.**
- Try with multiple pieces of paper, thicker paper or card. Encourage children to think about how this changes how much pressure they have to apply.

### Printing Shapes:
- Cut out shapes in vegetables (e.g. potatoes) and dip in paint, or use stampers, to print different shapes on paper. Children to explore the different marks made when different amounts of pressure are applied.

### Squeezy Bottles:
**Children to have the opportunity to use different squeezy bottles, e.g. empty paint bottles filled with water, water sprays.**
- Use the different squeezy bottles to create patterns on the ground or on the wall, using both hands individually and together.
- Use ones that have small ‘triggers’ so that children can use a pincer or tripod grasp to squeeze.
- Get the children to think about what happens if they squeeze harder/softer and faster/slower.