

Materials and Manipulatives to Ignite children's fascination.

Alice Sharp

Alice employs her love of people and what makes them tick to approach the world of the child and the journey they take in a truly unique way.



I've been a teacher for 30 years. I am fascinated by how children develop and learn.

What makes each of them tick, what challenges them and what delights and inspires them. This shapes my thinking every day! This curiosity and intrigue gives me a unique and quirky perspective on children and their journey into learning through play.

Always begin with the Child

When considering and planning our play offer we should always begin with the child, not an outcome, benchmark or curriculum statement.

In one setting we work with the staff had noticed , like many other settings, that many of their children's fine motor skills seemed to be delayed. If not delayed then not yet as strong as would be expected.

This lack of dexterity in their hands and fingers is a concern. If we accept that children are using touch screen tech more than crayons, clay, scissors or blocks in their daily lives, this may become the norm.

We decided in order to respond we would look inwards, outwards and forwards.



Looking Inwards



Asking ourselves what do we know about development and how our children learn seemed a good place to start but specifically thinking about what we know and think about fine motor development.

We are very aware that some researchers and educationalists suggest there are three main learning styles.

The first **Visual** seeing and reading, thinking is led by things that can be looked at relying on the eyes of the learner.

The second **Auditory** hearing and speaking – music and rhythm can help memory. Auditory learners learn better if they hear and listen.

Kinaesthetic is the third main style when the thinking is mainly stimulated by doing, handling objects, being physical and 'tactile'.

We also know that some experts believe these 'styles' of learning are more likely to be just habits and are not of great importance. However the three mentioned above are the three main senses for play so are useful to reflect on and consider.

We already offer multi-sensory experiences through the manipulatives we give our children access to. We know that the five 'external' senses are the 'doors' to learning and allow each child, thoughts to journey along more pathways, especially when more than one of these 'doors' are open.





Looking Outwards



So rather than plan to promote and support learners with a specific style of taking on board information we instead support and enable this by offering opportunity to explore and discover using their kinaesthetic, visual and auditory senses.

When planning experiences we ensure a wide range of stimulus to allow exploration and experimentation. This involvement using the senses and capturing the curiosity of the children often prompts them to ask questions, in their head or verbally. It may be that they don't verbalise the question but their continuing discovery and exploration even when it's an internal thinking conversation drives learning forward for them.

We try to ensure we notice their engagement and extend, elaborate and scaffold their involvement. We notice too how important the 'invitation', 'provocation' for play is. If it is exciting and open ended then it is more likely that deeper and richer thinking and engagement is captured.

Although we are aware of child development we decided to dip back into reading papers, frameworks and books to refresh our thinking.

From our reading we decided to focus on planning play to support **hand and finger strength**. We looked at the resources we offered that build strength in the hands and fingers that created resistance.

We were also interested in our children's ability to use both hands together to perform tasks (**bilateral integration**). Using the term 'busy hand' and 'helping hand' to highlight that while one hand is doing we can use our other to help hold.

The third skill we decided to focus on was **finger isolation**. To observe if the children were able to use just one or two fingers in pincer and tripod grip with ease.





But we paused to consider why we were needing to revisit our understanding of fine motor skills.

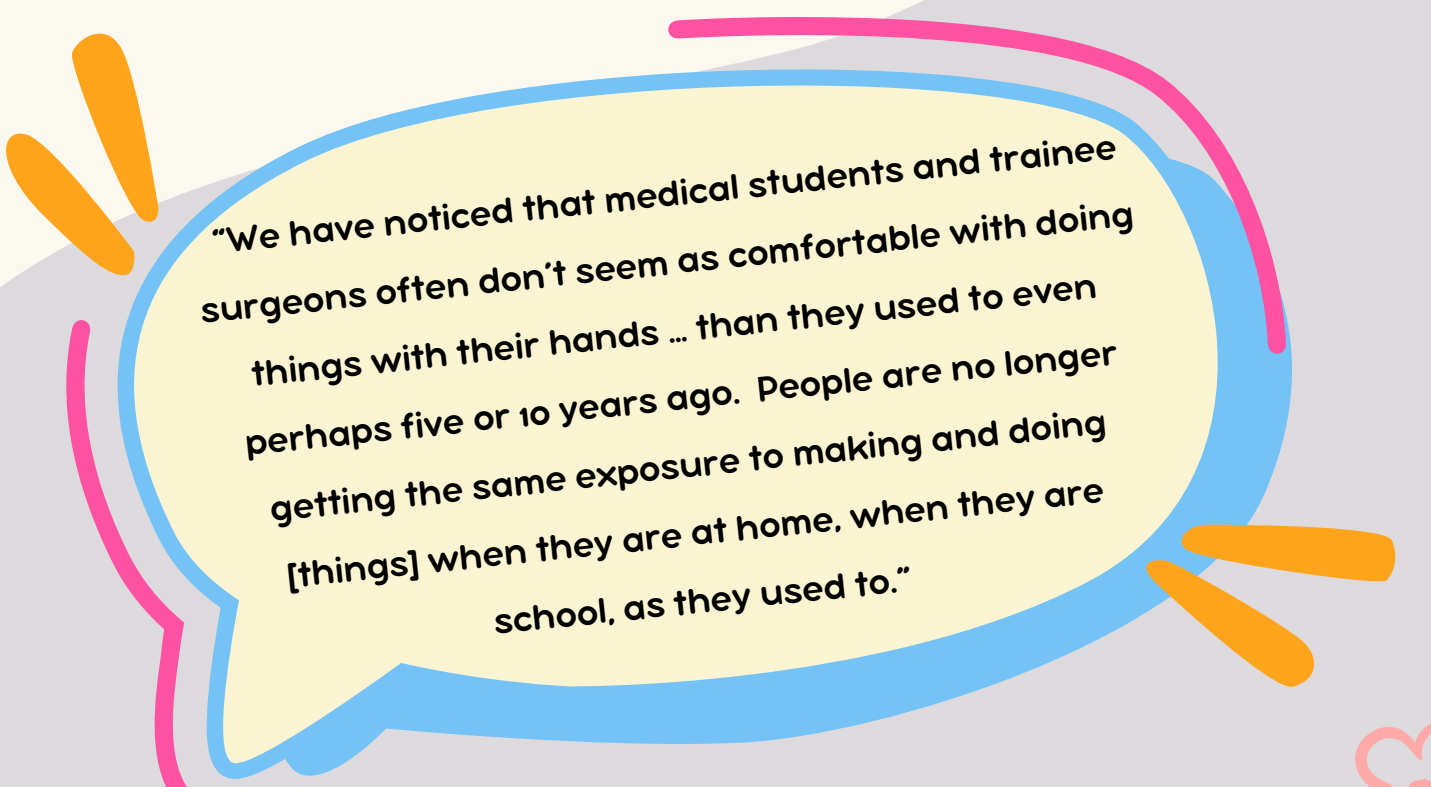
Why do we think they are important skills to learn?

It is not that through the play we offer, we are getting our children ready for their future, their work life, but that we know play, rich fabulous play, allows them to develop a broad range of skills. These skills include fine motor skills.


We had a conversation about

- A chef, they need expert knife skills.
- A fashion designer, they need cutting, sewing and sketching skills.
- A joiner needs good tool skills.
- Nail technician, spends hours painting, placing tiny pieces.
- Surgeons, need complex, precise finger and hand movements.

Professor Roger Kneebone, Imperial College London shares;



"We have noticed that medical students and trainee surgeons often don't seem as comfortable with doing things with their hands ... than they used to even perhaps five or 10 years ago. People are no longer getting the same exposure to making and doing [things] when they are at home, when they are school, as they used to."



In one study we read, health researchers at Dublin City University's School of Health and Human Performance have found that the ability of children to master tasks such as drawing shapes, fixing laces and putting pegs into a pegboard is not meeting fine motor skills developmental milestones.

Their research goes on to share;

13% of children in year one did not match their respective milestone.

14% of year 2 children also exhibited difficulties.

36% of the surveyed children aged between 11-12 years of age didn't meet the expected level of proficiency in fine motor skills for their age.

Looking Forwards



Introducing new materials and manipulatives allows us to notice the actions, emotions and words of our children in new ways.

These little pavers immediately fascinated the children. Every child was excited and eager to use the materials.

We noticed that after exploring and experimenting, getting used to the new materials the children began using them in very different ways.

While they played, we noticed Marco using his pincer and tripod grip with ease. He positioned, turned and twisted each paver brick to modify his "wall", "tower" and "doorway".

As Marco selected, made decisions and explained what he was doing he used his paler, tripod and pincer grasps, he refined and adapted his grasps as he manipulated the little pavers.

As we offered an extension set as an invitation to engage we chatted to the children about the difference and similarities of the blocks. They discussed using mathematical and scientific terms.



They were fascinated, not just interested. This seemed to encourage them to stay on task, focus and concentrate more using these materials.



Jess and Marco were definitely eager to play, for us their use of fine motor skills as well as luscious language was a bonus.



As they played they also developed gross motor skills, spatial awareness, balance and hand eye co-ordination. Their language as they were immersed in the build saw them internalise their thoughts then become playful in their interactions as they shared their ideas and suggestions. Using a plethora of vocabulary as they built.

"Lift, move, over, basket, another, next one, reach, stretch, prop, stable, steady, position, compare, balance, place, set, lay, one, two...add more, build, join, attach, top, roof, next, another, tricky"



View Alice's webinar;

The Child, the Adult and the Play

on our website

<https://www.pengreen.org/stronger-practice-hub/sph-webinars/>



Produced by Alice Sharp



East Midlands Early Years Stronger Practice Hub

The Department for Education Help for Early Years Providers website offers resources, activity ideas and advice for practitioners when planning the curriculum through play-based learning.



Department
for Education

The Education Endowment Foundation (EEF) Evidence Store provides evidence informed approaches and practices to support play-based learning in the early years.



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