

EEF Case study:

Shotley Bridge Nursery School Ltd



Key points of your Maths Champions improvements

- Both indoor and outdoor environments have been enhanced to develop mathematical learning and development through natural materials and loose parts.
- All practitioners within the setting are more confident when engaging in mathematical activities.
- All children in the pre-school room are making good/rapid progress in their mathematical development.

Background detail

Shotley Bridge Nursery School is based within the outskirts of Consett, County Durham, offering full day care and education to children from birth to compulsory school age. Having worked/visited a number of early years settings, I have discovered that there are many practitioners, like me, that bury their head in the sand when it comes to teaching maths to children. Of course we know that we need numbers in the environment, everything can be counted, number songs and rhymes are on repeat on our internal juke box and compare bears are an excellent resource to make a quick assessment on children's mathematical development. I myself have always strived to work towards the mathematical learning outcomes and celebrate at the end of the year if a small amount of our pre-school children creep into the mathematics 40-60 month area of learning.

Within Shotley Bridge Nursery School the children continue to make rapid progress in the prime areas, literacy, understanding the world and expressive arts and design but the progress in maths is slow.

So when reflecting on this I, like many, have to be brutally honest and admit the real reason behind this..... I HATE MATHS!!! It's boring and difficult and why do I need to know what $a + b - (b \times 2a) = ?$ Someone please tell me at what point in my early years career will I need to use trigonometry and algebra and I am sure the children in the nursery will not benefit from me being able to work out the radius of a hula-hoop or the angles on a musical triangle! However there is a nagging voice in the back of my head, these children have a right to learn and make good progress in ALL areas of learning and I needed help to achieve this.

When an opportunity appeared in Nursery World, requesting participation from early years settings, to develop mathematics within the nursery, I talked to the directors about the potential difference it could make to the setting and was overjoyed when they agreed to apply. I was ecstatic when we were accepted.

Section 2 – Champion’s section

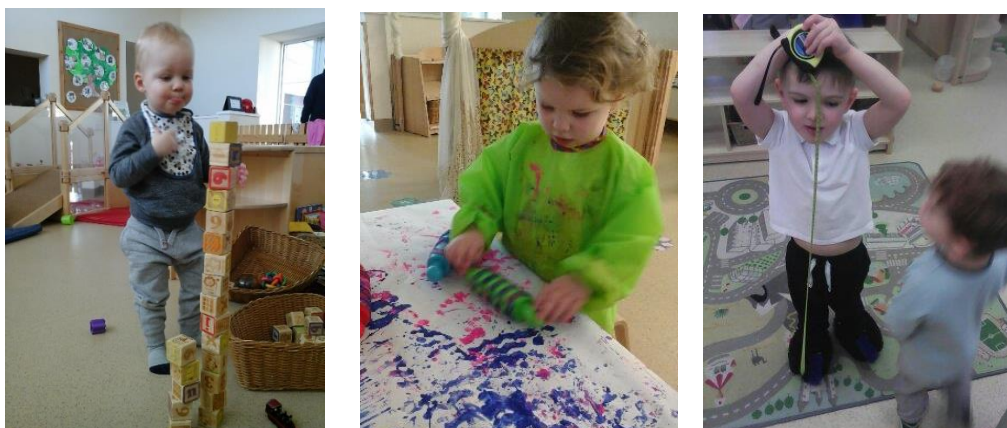
The programme has had a massive positive impact on my own CPD and all other practitioners within the setting have continued to enhance their current practice when planning and implementing mathematical activities and resources. Through online resources and webinars I have been able to share my knowledge with my own team in the preschool room and other practitioners working within different rooms. We have worked together to enhance the outdoor environment for all the children that attend the nursery and implemented new activities based around the children’s interests.

From our starting point the participation in the maths challenge, has:

- All children in the preschool room have made rapid progress in their mathematical development and the other rooms within the setting are instilling a firm foundation of maths with the younger children.
- All practitioners are more confident in talking about/teaching and implementing mathematical activities.
- Parental relationships have increased with a number of parents participating in mathematical activities within the home environment and positively commenting on their children’s mathematical development.
- Attitudes towards mathematics in the early years have changed with all practitioners responding enthusiastically to new mathematical resources and activities.



Parents sent in photographs of their children engaging in mathematical activities within their home environment.



A Sample of the different aged children engaged in mathematical activities within the indoor environment.



A Sample of the different aged children engaged in mathematical activities within the outdoor environment

Next steps

Through evaluation and reflection we, as a team, have realised how maths can support the other areas of learning:

- Within small groups we are developing personal, social and emotional development
- Children's language and communication is improving when children work and play together
- Children's physical development is enhanced through timing self care routines and providing number puppets in the outdoors
- Literacy skills are developing as children are developing their writing skills when recording numbers and shapes
- Children are taking more notice of their environment and developing their technology skills which is having a positive impact on their Understanding of the World
- Through creation, music, dance and imagination the children are more engaged and using maths in everyday activities.

More Maths Please:

We are approaching the final term of our year long study. I am for the first time, working on number bonds to 5 and 10, as well as Piaget's theory of conservation, which the children find fascinating. I have found a new passion for maths and am developing new and exciting ways in which the children can explore number and shape space and measure. No longer is maths considered a thorn in my side but an asset to all other areas of learning within the Early Years Foundation Stage. This year the children in the pre school room are making rapid progress within this area of learning. The other rooms are instilling a firm foundation of maths within the younger children.

Maths has found a way into our hearts and we love it!

National Day Nurseries Association

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