

Maths Champions Case Study

Champion: Louise Ormesher

Setting: Eatock Primary School

INTENT
Introduction <i>A little bit about your setting, why you joined the programme and what you wanted to achieve from it.</i>
From September, we had changes to the practitioners in our EYFS unit, including an ECT who joined our team and a new teaching assistant. As part of my role as EYFS Lead, I support and develop the curriculum across all areas of learning, including nursery and reception. In supporting all practitioner's performance management, I identify and support staff to develop their skills and knowledge to improve outcomes for all children and families. Our EYFS unit admits children from three to five years. We have many of our children enter our setting below age-related expectations and as a result, we are always striving to develop our knowledge and skills to support those children and families who require additional support to achieve their potential. I believe it is important to keep up with changes in education and always ensure that I am up to date with new research. The Maths Champions programme was an excellent opportunity for us to develop all practitioners' knowledge in understanding and teaching mathematical development. All practitioners were enthusiastic to develop their own knowledge and practice; identifying new and interesting ways to support maths in order to further enhance children's development.
How did you decide what to do? <i>What did the audits highlight, what changes did you consider and how did you identify the change/s to be made? Did the changes you considered come from the online training or resources etc?</i>
I completed the three on-line training courses as the Maths Champion. The courses were extremely informative and introduced us to the maths concepts through the 'big ideas of number sense'. We wrote down some key things we wanted to move forward with from the training; one was to provide staff with an overview of the main points from the training to help increase their knowledge and confidence, and the other was to work towards a moderation system for assessing children's knowledge and progress in maths. We then carried out the staff confidence and learning environment audits. One of the biggest things this highlighted for us was that we needed to review the resources we had available across the setting. We had a good range of adult directed maths activities planned into our curriculum but we felt there were limited opportunities for natural exploration of everyday maths. It also highlighted that we had some long-standing staff members who had a good knowledge of how to support children's maths learning and some newer members of staff who weren't as confident, and could benefit from some coaching support.
IMPLEMENTATION
What did you change or implement? <i>Outline a positive change, or changes, that have taken place as a result of being part of the Maths Champions programme. How did you plan for it and what did you do? How did you plan to assess the benefit of the change on staff practice and children's experiences?</i>

After I completed the training and shared the aims of taking part with the EYFS team, we reviewed our current learning environment, indoors and outdoors, looking at opportunities for everyday maths exploration. We were inspired to create a loose parts area. We carried out some research and looked at all the information provided by the programme, and decided to introduce a loose parts area into our continuous provision. We worked closely as a team to research and choose what resources we wanted to use. Discussion ensured that everyone in our team knew how to confidently support children to use these resources and what possible maths learning could come from exploring them.

We started with a small range of open-ended loose parts organised into baskets on a moveable set of drawers that we newly purchased. The children can freely access these to explore and move the trolley to a different area if they wanted to, for example- a carpeted area/ table top... Staff spend time in this area modelling and scaffolding children's learning as they explore and use the resources, developing their mathematical language and knowledge.

We also introduced a new games and jigsaw area that is updated frequently to match the needs of different groups of children across nursery and reception. We purchased a new set of shelves that we could use to differentiate the levels of the games and jigsaws. We purchased new games and jigsaws that can support a range of mathematical development across a wide range of ability needs. Staff have taken time to model how to use this area and spend time playing mathematical games and completing jigsaws with the children.

This is now used by the children independently. It has been wonderful to see the children using the taught skills, using mathematical language to play the games independently.

IMPACT

The success and benefit of what you did:

For children

What has been the impact of the changes on children's learning and development? How has being involved in the programme made a difference for children in your nursery?

The Maths Champions programme has helped us to identify changes that we needed to make to our indoor and outdoor environment and how to adapt our continuous provision. As a result, we have seen an increase in children's engagement in open ended play and use of math's language and language. We have seen that the children are selecting and using the new mathematical resources across provision. The children are embedding the taught skills independently as they access and use equipment such as the large ten frames.

For families

What has been the impact of the changes on families? How has being involved in the programme made a difference for families whose children attend your nursery?

Parents and carers are now better informed about their child's learning in mathematical development and how they can support learning at home in a playful manner using a range of resources. We have kept them updated about their child's learning in school through pictures sent via Tapestry (online learning journal) of their children engaged in mathematical learning.

For staff

How has being involved in the programme made a difference to your staff team/individual practitioners? What has been the impact on their practice?

Staff, including myself, say that they have learnt lots from the training we delivered. The big ideas of number sense and the trajectories are thorough detailed documents that have allowed all staff develop their personal knowledge of the steps of mathematical development. I have observed this in practice where I have seen the staff identified as being less confident taking an active role in supporting and enhancing children's learning by modelling skills and using key vocabulary as they engage in everyday experiences. Overall, confidence has increased greatly across the whole setting.

For the Maths Champion and Deputy Maths Champion

How has the programme helped you as Maths Champion and Deputy Maths Champion to develop your own practice? What has been the impact on your practice?

As Maths Champion, the programme has given me access to a range of CPD opportunities which has inspired me to make changes to the learning environment and how to support staff. It was extremely helpful having resources available so we could access these when we needed.

We found the videos for each area of mathematical development extremely useful. They provided us with a deeper understanding of the mathematical concepts children need to develop a strong foundation.

Next steps

What further improvements might you make and how will you continue to monitor the quality of maths opportunities within the setting?

- Marvellous Maths parent drop-in sessions (stay and learn with your child sessions) are to be planned in for the Summer Term.
- Continue to use the resources and activity ideas to support practitioners.