

Maths Champions Case Study

INTENT
Introduction <i>A little bit about your setting, why you joined the programme and what you wanted to achieve from it.</i>
I joined the school 3 years ago and was asked to be the school's mathematical lead. Our setting is a mainstream nursery school which caters for children aged 2-4 years and also has 2 additional resource bases. One for children who are dual based with SEMH and the other for SEND children with EHCPs. I am based in the SEND base and so do not directly teach in the main nursery. After taking over the maths curriculum area I felt there were a few areas for improvement and there needed to be more consistency across the setting. I was in the process of developing a maths curriculum document that showed the sequence of learning from age 2 to reception when I found out about the Maths Champions programme and thought it would be useful to our setting and to myself as a maths lead. The programme generated opportunities for me to be more involved in the whole school maths approach.
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 started with the online training which was really useful to help me to develop the curriculum document and sequence of learning. It also gave me great tools to be able to disseminate training to staff about mathematical concepts specifically for the early years. Particularly the breaking down of key concepts like comparison, cardinality, composition, subitising etc. The glossary of the term was a useful handout for staff. The staff confidence surveys were very encouraging to see that many staff did already feel confident in lots of areas and this allowed me to focus on specific areas that we felt needed work such as the outdoors. Our outdoor environment has been impacted by ongoing building work around the school for the last 18 months and the garden has been neglected. The webinar on outdoor learning gave me resources to be able to lead a staff meeting on this which was great to spark ideas and enthusiasm among the staff. Doing the environmental audits gave me as a maths lead a good overview of where we were at with the environment and what improvements I could make. I was happy to see that so much of the environment was already very good due to our high scope approach. In the main room there were lots of open ended exploration opportunities. Just a few simple additions need to be made to add a stronger focus on maths.
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>
We started with the simple additions I wanted to add to the environment. These included • Adding meaningful numerals such as calculators, phones, clocks etc in the role play areas • Providing number lines in each group area that have the numeral alongside the numicon piece so the display is tactile • Adding scales to the sand and water areas to provide opportunities for exploring weight • Creating and introducing mud kitchen recipe books • Trying out some new malleable play recipes from the resource section • Creating maths song books to share with staff for new songs • Adding developmental stages of block play to the construction area as a visual reminder to staff

- Adding images of buildings to the construction area to provide inspiration for children.

I then delivered training to the staff on a regular basis through our staff meetings from what I had learned from the online training and the webinars. This was very useful to staff and after the sessions I observed staff being really enthusiastic and implements lots of the new ideas he had discussed.

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 children have undoubtedly benefited from staff's greater enthusiasm for math as this has passed onto the children. The new additions to the environment have provided them with more opportunities for mathematical development and they have responded as we had hoped to them.

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?

We have been able to share more of our maths learning with parents though the children's learning journeys on Tapestry. I shared with families through email some resources about maths at home and maths out and about from the webinars. We do however still have more work to do in involving families and raising the profile of early math with them.

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 have been really enthusiastic and have enjoyed joining in with discussions during staff training about what we already do, how we can change and improve. This collaborative approach has been great to see from staff across all areas of the setting. It also provided an opportunity to upskill new and yonder members of staff.

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?

Doing the programme has provided me with more opportunities to spend time in the other classes observing maths and getting a greater understanding of where we were at and what we needed to do moving forward. It also gave me a lot more confidence during our recent Ofsted inspection where we had a deep dive into maths. I was confident that staff knew what they were doing in this subject and so during learning walks it was evident that our curriculum was being delivered as intended. It also gave me confidence when speaking about the math curriculum and the action plan I had been carrying out.

For the setting

What has been the impact on your environment?

Our environment looks fantastic. There are many meaningful, play based mathematical opportunities for children to learn through incidental learning, and staff are confident in teaching direct maths though small group work.



Next steps

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

We will continue keep on top of regular maths training for staff to keep the profile of this subject high.