

Maths Champions Case Study

Champion: Kate Swift

Setting: Windsor CP school

INTENT	
Introduction	<i>A little bit about your setting, why you joined the programme and what you wanted to achieve from it.</i>
	We joined the Maths Champions programme as our recent OFSTED raised some concerns regarding our mathematical curriculum in the nursery as we didn't follow any schemes of work and had designed our own curriculum. I went away and researched different research papers on maths in early years to gain a better understanding and came across the EEF paper on early maths which highlighted the Math Champions programme so we applied for it. We wanted to gain confidence and knowledge to be able to adapt our curriculum to support our children in early maths and ensure they have the best possible start to their maths education in our school. I wanted ALL staff to be confident in mathematical thinking and to challenge our children with good maths questioning and interactions in the environment on a daily basis. Our school is a very unique school with high numbers of EAL (97% in Nursery and 93% in Reception) and high levels of SEN (3 children in Nursery out of 15 and 15 in Reception out of 28 children 6 of which have EHCPs) so I wanted to gain more confidence in how to reach these children as well to ensure they have a good start to maths.
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>
	The audits highlighted that maths in our outdoor provision wasn't being considered as highly as in our classrooms and our areas around the classroom didn't have enough mathematical opportunities. The staff audits also highlighted how staff weren't as confident in maths themselves and how that then impacts their interactions with the children (maths questioning). The changes came from both it was a perfect mix.
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>
	The audits made us hyper aware of how not only do our areas/environment need to support maths but our language and questioning as well. Staff are now asking more mathematical questions or small groups activities are lead more confidently by staff. Areas in the classroom are now set up to enhance mathematical thinking and children are seen and heard using more mathematical language around the classroom. I have been able to observe our nursery teacher through learning walks and seen the Maths Champions programme/lessons/ activities in action and it has been fantastic to watch her develop more confidence. We are still working on our outside maths provision as we wait for some key resources but staff are using more questioning, i.e. "Can you get me 5 stick? Let's count how many stones you have. Can you hide behind the tree, etc."

IMPACT
The success and benefit of what you did:
For children <i>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?</i> The children have developed a real love for maths which for me has been the most rewarding part of this program watching children engage and have a positive attitude towards maths. The children have developed more in-depth knowledge around maths and numbers 1-5 in nursery and 1-10 in reception. Children are thinking critically around mathematical problems and problem solving better as well.
For families <i>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?</i> Families seem more confident in what maths looks like in the early years; before lots of parents would just practice writing numbers 1-10 over and over again, whereas now parents have a better understanding that early maths is so much deeper than that and I have had parents say to me 'I asked her to get me 2 apples at home' or 'I asked her if she could make me a pattern using leaves'. I still have some workshops to run for maths at home and some handouts to make which I am hoping will extend the positive impact we are already seeing.
For staff <i>How has being involved in the programme made a difference to your staff team/individual practitioners? What has been the impact on their practice?</i> Staff have become more confident in maths and understanding the importance of early maths. Staff are using better mathematical questioning now inside and outside the classroom. Staff are using the resources in areas in the correct way to extend mathematical thinking.
For the Maths Champion and Deputy Maths Champion <i>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?</i> It has helped our Deputy maths champion as he has never taught in early years before so he now has a great understanding of what maths looks like in the early years which has been so beneficial. It has allowed us to have time out of class together to discuss areas we need to improve on and how we can do that as a team.
For the setting <i>What has been the impact on your environment?</i> The environments are a lot more enriching for the children now and we are more aware as staff what needs to be provided for children to allow mathematical thinking to happen. We use more loose parts in areas now because we are aware of all the different uses that they can be used for.



Next steps

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

We want to continue to improve our maths outside and are still continually working on this; I wanted to continue to support parents with early maths at home and provide workshops for them using the maths champion resources. I will be still completing the staff confidence audits if we get a new member of staff join to help see what part of maths are they struggling in and provided training for that individual.