

Maths Champions Case Study

Champion: Elin Higton

Setting: Wild Monkeys Nursery

INTENT	
Introduction	<i>A little bit about your setting, why you joined the programme and what you wanted to achieve from it.</i>
	We are one of a group of three nurseries. The other two nurseries are term time only, but our nursery is open all year around. We take children from babies all the way through until they leave for school. Our nursery is open from 7.30am until 6pm every weekday. The children here come from a range of backgrounds, and although most of the children cannot be classed as coming from a deprived background, many of them have parents that work long hours, so the children spend a lot of time at the nursery. We want to give all our children the best possible start on their learning journey. When the opportunity to participate in the Maths Champions programme came up, my deputy and I were put forward as we are both very enthusiastic about increasing our knowledge of how to support preschool children with understanding maths. More importantly, our managers had identified a need for more maths implementation in our setting, and this programme would give us the tools to identify short comings and give us more confidence and knowledge to support the children's development in 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>
	Myself and the Deputy Maths Champion both completed the three online courses. We thought it was most useful if we both completed these courses, so that we were able to discuss things that we learnt. The courses were very interesting, and we would chat about them, not only between us two, but also with other members of staff. At a staff meeting, I gave a little talk about what Maths Champions was and what it entailed. I realised that some members of staff felt a little bit intimidated simply by the word 'maths', so I found this (as far as some members of staff goes) one of our biggest challenges. I stressed from the outset that this would be something we could have fun with and not scary at all. We then carried out the staff confidence and learning environment audit. One of the things that stood out quickly from the learning environment audit was the lack of things such as number lines etc. We also carried out an initial observation of six children, so that we could measure impact later on in the year.
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>

Right from the start myself and my deputy began thinking about what we could do both in the nursery environment and as far as the staff was concerned to improve maths in the setting. We started with things like number lines, numbers up the stairs, prompt cards for the staff, number staircases. We made visuals like pinecones on strings to show what a number looks like. We also collected different size pinecones for the mud kitchen (found some really big pinecones in the local park). We could compare the big, medium and little pinecones. We made some games for outside such as, spinning discs with numbers on them, and hopscotch. Inside we made a box with maths resources which could be used during adult led small group times. We made use of a lot of the resource section in the Maths Champion programme. Printing out number cards, subitising cards, domino cards and lots more. We managed to get hold of tape measures, plastic containers that we wrote measurements on the side of, a jar of buttons, put a height chart on the wall, and much more.

We also completed all the core activities for the three different rooms. These were undertaken by the deputy champion and me. We found that the staff in each room prefers us to take the lead, and they joined in. Working through the activities it became clear that as the children were enjoying themselves, they were happily absorbing Maths language and a little more number sense. We have kept the core activities sheets in the rooms so that it can be revisited by other members of staff.

Song bags were made for each of the rooms, we really felt that this was something lacking in our setting. By printing out (and laminated) songs from the resources section of the programme, we have managed to increase singing in all the rooms. In the song bags we put some props, like frogs and monkeys on lollipop sticks, and pennies for "Five currant buns". The children being involved with more than just the singing seems to work sometimes. We also done an action plan to increase staff confidence. We choose to go to each member of staff and sit down with them using the glossary from the programme. We went through it, explaining what each term meant. This was also an opportunity for each of them to flag up anything they felt unsure about. We found this useful doing this on a one-to-one bases, as some staff did not feel like speaking up in a group situation.

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?

With more resources like number lines, and other maths resources dotted around the nursery, the children naturally start engaging more with maths. The children's knowledge of maths has come on leaps and bounds, we have also been able to spot gaps in knowledge by engaging in maths language on a daily basis.

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?

Ideas for maths at home has been sent out to families, and we have noticed that some families are talking about maths at home.

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?

There is an increase in staff confidence. At the beginning of the programme, we did not get much feedback when we went around the rooms. The staff seemed to be a bit reserved. However, over the course of the programme, as they have seen the differences in the children, and my deputy and myself have managed to spread our enthusiasm for what we are learning, we are now noticing a difference in everyone approach. Staff in different rooms are confidently engaging with their children using maths language and are more aware of how they can use maths in everyday tasks and play.

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 and deputy maths champion, we have loved this programme. We are both very interested in child development and how children learn. We talk about the programme a lot, and I have been able to bounce ideas off the deputy and vice versa. We watched the webinars together so that we could discuss what we had learnt. We also got a lot out of the resource section of the programme, printing out and making lots of things that we then put in a box of maths learning resources.

For the setting

What has been the impact on your environment?

Maths is a lot more prominent at our setting now at the end of this programme. There are maths resources in all the rooms and lots in the garden.
The children have benefited from this programme, and our future children will continue to benefit.

Next steps

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

We intend to keep adding to our learning environment both outside and inside. On our patio we want to make a height measuring board, for the children to have fun measuring themselves. We were inspired by one of the webinars, and we want to make an "estimation station", just working on where that is going.
Our intention is to continue to support staff as we work in all the three rooms.