

## Maths Champions Case Study

**Champion: Katie Fossella**

**Setting: Wild Monkeys Beach**

| INTENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <p><b>Introduction</b><br/><i>A little bit about your setting, why you joined the programme and what you wanted to achieve from it.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p>We are a pack away, term time nursery. Looking at the children's next steps, we noticed that a lot of our children were behind in maths. Talking to parents, we realised maths seems to be a struggle to include for a lot of people. The staff were unsure of how they could help with this and only really felt confident with counting things. So, we really wanted to look into some extra training to help develop our knowledge on how to support maths.</p>                                                                                                                                                                                                                                                                                                           |
| <p><b>How did you decide what to do?</b><br/><i>What did the audits highlight, what changes did you consider and how did you identify the change/s to be made?<br/>Did the changes you considered come from the online training or resources etc?</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>When completing the audits, we realised that we didn't have a lot of maths resources and opportunities around the room and staff didn't have the knowledge and confidence to teach maths effectively. So, we decided to add maths opportunities to as many areas as possible. We looked at training for the staff which came from the knowledge the Maths Champion learnt it from the courses in the programme. We provided lots of print outs and activity ideas from the resources provided in the programme. We then started to add resources outside to the fences, such as numbers and shapes. We provided different toys, games and equipment and put these in areas which gave the staff a base to look at maths with the children and start talking about maths.</p> |
| IMPLEMENTATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p><b>What did you change or implement?</b><br/><i>Outline a positive change, or changes, that have taken place as a result of being part of the Maths Champions programme.<br/>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></p>                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>To be honest I didn't plan on how I was going to assess the change. But looking now at the staff and the children and collecting the last observations it is so obvious how far we have come in a year and how well all the staff have taken on board new knowledge and put it into practice. Supporting maths comes more naturally to most staff now and it is included in all areas of play. Looking at the children's next steps, many of them are no longer maths related as we feel like their skills are being fully supported through resources and staff interactions. Children are improving all the time with their maths ability. The nursery now has maths all around with lots of visuals and activities.</p>                                                   |
| IMPACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>The success and benefit of what you did:</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>For children</b><br/><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></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

I feel being involved in the programme has made us all realise how we previously provided few opportunities for maths learning and how important it is to make maths accessible in all areas for all children. The children's learning has improved so much. Most of the children we observed did not know any numbers and were not using maths language. They have now started to notice maths more naturally, using number names and a few have even started counting and comparing, which is amazing. Parents have commented on the change they have seen too and how their child is saying random number names in play. They say their children are counting things when out and about and it's so lovely to hear that our work is really making a difference.

### **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 started to talk more to parents about the importance of maths, and each week set a challenge to see if the parents can help the child to find a certain number of things for example 5 leaves, 3 sticks, 2 circle objects. This has gone down well and the parents are more involved. This has shown them that maths can be something simple that can be done whilst walking to the shop or in the garden. Parents have said the children love the challenge and they have found it useful in helping the children with maths.

### **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?*

All staff can now be heard using maths language on a daily basis, in all areas. Their confidence to talk to parents about maths has grown and they have all said they feel more confident to teach the children maths and to make sure it is used in all activities. Some staff still feel they need reminding from time to time and could do with continuing training on maths and how it can be used. Which as a setting we have agreed we will do either with online training or by staff meetings, sharing ideas and changing bits around more regularly.

### **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 a Maths Champion I feel I am now more aware of the importance of maths and teaching it from a young age. I also feel more confident to do this have as I have realised it isn't just about teaching them to count, it is so much more! I have noticed now when playing or engaging in an activity I find myself singing number songs, counting, comparing, talking about sizes and generally just including maths where possible. My children's next steps are now varied, not just all based on number and counting. In time, I believe maths may end up being a strength in our setting rather than a weakness.

As the deputy, I found it a little harder to get into and the programme was quite in depth which sometimes I struggled with. But with the champion helping and showing me how we could use it in our setting my confidence soon grew and I was able to show and help others with the struggles I had too faced. I now enjoy talking to the children about maths and make it my challenge to try and put maths into the daily routine as many times as I can in one day.

### **For the setting**

*What has been the impact on your environment?*

The environment itself now has resources to support maths in most places you look, the children are pointing out numbers and asking questions. They look at the number line and count up with it.



### **Next steps**

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

We have already spoken about continuing maths training and making sure any new members of staff are also shown how we have added maths into our setting. I would like to continue to evaluate every term where maths is being used, how it is being used and if we can improve anymore or need new resources to keep it fun and engaging.