

Maths Champions Case Study

Champion: Andrea Pryor

Setting: Little Lingfields Ltd

INTENT
Introduction <i>A little bit about your setting, why you joined the programme and what you wanted to achieve from it.</i> I have been working within the nursery for 12+ years but have held the Managers role for 6 and a half years. Part of my job is to work closely with my deputy and practitioners to support and develop quality learning opportunities across the whole nursery. My role is to support the staff with upskilling and using their strengths and interests to improve learning outcomes. Little Lingfields has been running for 17+ years and takes children from 6 weeks up to 5 years. We open 7.30am-6pm, all year round, taking on government funded children; 9+months. We have found a difference in the learning/development of those who attend from a young age to those who started once they were in receipt of the government funding (before the most recent funding changes). Through planning and reflection, mathematics is an area slightly lacking and in previous years noticed by Ofsted. This programme was a great opportunity to upskill our knowledge in an area that we feel lets us down slightly. We were keen to develop our understanding and use different learning styles to ensure we were giving the children better opportunities. I spoke with the Room Leader of the 3-year-old class and asked if she would like to complete the programme alongside me and explained how I thought it would benefit her with her confidence as well as ensuring the room is enhanced and providing the correct things.
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 DMC and I planned in time to sit and look at what the programme was fully about and completed the courses together. This helped us to understand things better as a team, as we felt when reading it alone, we weren't quite understanding what some things meant but when we came together, reading out loud to each other gave a clearer understanding. With the DMC working closely with the children, we were able to bounce off each other using our knowledge from practice and understanding from a planning/managerial role. From reading all the information on the course, we found some of the terminology confusing but once we got our heads round it, it was reassuring to know we do quite a lot of it without realising. We then looked at our environment and what we were providing. This highlighted that we were missing a few resources that the children could benefit from. After completing our environment audit, we made plans to put an order in to purchase a few extra things like; dice, number cubes, stop watches, different measuring tools etc. It also made us realise that maybe we need to keep on top of the learning environment and when things go missing or break, we need to promptly replace these to ensure learning opportunities aren't missed. We then carried out a staff confidence audit, which showed we were missing opportunities due to a lack of confidence in incorporating maths in everyday play. On discussing with staff, it was quite clear that they had gotten comfortable and a little stale in their approach, and they just needed a little support and motivation. Once I had

looked over what we needed to improve on, the DMC and I planned to carry out a staff meeting to help with confidence and understanding of how to cooperate better maths learning.

IMPLEMENTATION

What did you change or implement?

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?

The deputy and I got together and discussed how we wanted to include the other staff and what was the best way to do this.

After several discussions with one another and the deputy having put activities into her teaching, we thought it would be best to complete a PowerPoint to share within a staff meeting about what we were learning and how we could use this within everyday play. This was provided alongside the core activities in the programme so staff could see how this would work in practice, rather than just a sit and talk where people don't get a real understanding of how it works.

Staff really could see how simple it was to incorporate maths within play and it surprised us what many of our children understood when we just spent a little extra time invested in maths. Children were excited and very interested in the activities. We then left activities out or put them out at different times, and children continued to be engaged and support their friends, they especially likes making 'dens' and putting their friends, animals into homes; roleplaying and problem solving.

We really unpicked the language we were using in play and how we could enhance this to support maths learning. Staff initially found it difficult but when we got together and spoke about how we could help one another it was really useful. One staff member came up with the idea of using colour notes in areas with simple open-ended questions to use to support sustained shared thinking. Because this was out of the 'norm' children were very inquisitive which opened up lots of discussion about what they were doing and/or they spoke about things they did previously.

It was noticed that a small number of staff still struggled to adapt from their 'normal' ways of doing things. The deputy noticed this when observing over the days etc, so we planned to complete some one-on-one support to further support this.

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 programme has led us to make some changes to our environment and look at the resources available to children daily. As a result of this we have seen a big increase in children's language skills and how they use maths in their play independently.

The programme also made us recognise that we incorporate a lot of maths already. It showed us children did understand cardinality and subitising, we just had not realised our own teaching.

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 commented on how impressed they were with their children learning when seeing and reading it on our online journal that we share with individuals' parents. A small number of parents have asked about maths concepts and how they can support it at home.

Parents now have a better understanding of how everyday language and tools can help their children's learning, such as setting the table for meals.

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 feel they understand how to incorporate maths into learning using new and exciting ways. Staff feel a little more knowledgeable but there is still room for improvement, and we will continue to work closely with staff until their confidence increases.

Staff continue to use the core activities and resources from the programme and are finding new ideas to extend learning.

We still have a little way to go, but we are positive!

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?

The DMC has shown great improvements with her confidence, and she is eager to try new things. Not only has her confidence grown in this area, but in in general across her whole job role. She is shadowing and working alongside others more confidently to support them (coaching).

For myself, it has given me more confidence in know what we are providing as a staff team and I can see maths happening more in everyday practice. We continue to share ideas and discuss any concerns etc.

I am hoping our efforts are recognised when other professionals/Ofsted visit etc.

For the setting

What has been the impact on your environment?

Better understanding of ways to incorporate maths throughout the whole nursery, not just in our Pre-school room.

The whole staff team are using the tools from this programme which I feel has shown an increase in confidence and enthusiasm.



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 to assess our areas in all room using the environment audit. We want to ensure that children continue to progress and show a keen interest in maths.

We would like to involve parents more and look to share valuable information via leaflets and activity packs which they can carry out at home.