

Maths Champions Case Study

Champion: Isla Muldrew

Setting: Big Discoveries

INTENT
Introduction <i>A little bit about your setting, why you joined the programme and what you wanted to achieve from it.</i>
When I was told about the Maths Champions programme, I thought it was a great opportunity to widen my knowledge on all aspects on early years maths. The complexity isn't really something that is used much in nurseries as early years maths has been narrowed down to simple counting and awareness of shapes; however since doing Maths Champions, it has enlightened me that there are multiple parts to early years maths that can be easily incorporated into our practice. Our nursery has a high number of 3 and 4-year-olds, each child is very willing to try new things and are interested in any new resource that will be brought out. Some of them may sit for a whole afternoon and will still be interested if brought out again. As Maths Champions, we were excited to start learning about the different ways in which children learn and how we can expand by using items of interest. Our goal was to create a section in our nursery (much like the craft area) that includes different maths resources that the children can access whenever they please.
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>
As we were doing the courses, we discussed together the type of practice that we were already incorporating and the different behaviours that a few children possess. As we went along, we made lists of different things that we can do, as a team, to come up with ways to improve what we were doing. When doing the audits, the staff confidence highlighted that the staff could do with more advice on how to incorporate more maths into their play. It gave us a chance to really see how the staff understand the different complexities and if they know how introduce it to the children. We were quite confident that our learning environment had maths items already and that we wouldn't need to change too much but when doing the courses and seeing the range of other resources we could have, it really changed our perspective.
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 Maths Champions programme has given us so many more new ideas on what to order when ordering items for the nursery. Our first step was to order a range of different items such as measuring tapes, dice, new games that had maths incorporated into them. When introducing these to the children, they were so excited. Each child wanted to have a go and see how they all worked. This made us happy as it has made us want to order more and come up with new, fun ways to use the resources. Even though our setting already has lots of numbers around (such as on toilet doors), we used this programme to come up with other ways that numbers can be placed around. We purchased number blocks to put into the loose parts area, that the children have started to use to order things and create colour wheels with different amounts.

We purchased numbers that we could put on the snack table to let them know that they can have a certain amount of snack and to constantly remind them. They have started to recognise the number 3 more regularly now as a result of this.

As we have been going along the programme, we have informed staff on different ways in which they can include maths; such as giving tuff tray ideas and how they can use different language to support further problem solving.

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 in the nursery have always been interested in games but by introducing more maths language to them, they have become accustomed to using that language in their own play and will do these things without an adults support. We have noticed that they children will understand if something is heavier and they need to use something lighter, they are becoming more used to turning around and understanding the different shapes of puzzle pieces to get the result that they need.

We have seen an increase in their learning by their number counting and most of all, their number recognition. We are still working on their composition and sequencing but having all these different items have made them much more interested in furthering their learning.

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?

Sometimes parents will come up to us asking for help on certain things such as counting or colouring inside lines, asking if we will help them by practicing this at nursery too. The parents have said to us that they have noticed minor changes in their child's development and are impressed with how far they can count or how their problem solving skills have changed.

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?

The staff have shown a greater confidence in asking us how they can use resources to incorporate different maths ideas and will come to us if they would like some advice. We have noticed a big change in their language and their involvement with the child's mathematical development.

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 together has really made us think and develop our ways in which we can help to support children and families in developing maths confidence. By expanding our own knowledge, we have been introduced to the multiple different concepts of maths and it has reflected in our confidence on informing staff and developing different areas inside the setting.

Coming up with new ways to include maths in their free-flow play has really made a big impact on us knowing that the child's mathematical development is always developing, even without an adult there.

For the setting

What has been the impact on your environment?

We have included a multitude of different things around the nursery that have made the children more confident to explore and understand. By introducing items such as big dice and measuring tapes that can be accessed easily, we have really seen a big difference in how the children play and how they explore with confidence.

We have a plan to create a maths section in our nursery, which is slowly building as we gather resources and plan as the maths champions.

Next steps

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

As said before, we plan to create a maths section that include resources such as big dice, measuring items, weight scales and many other things to ensure that the children can assess these whenever they please. We aim to make it inviting each day.

We are continuing to monitor the staff's confidence and will plan regular meeting so all of us can share our ideas together on how we can support their development. We will also continue to monitor the children's increase in maths knowledge and compare to see if we could be doing more to help them.