

Maths Champions Case Study

Champion: Leigh Park

Setting: William Leech Primary 2s

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 a small village school with a school based two year old provision. We have a high intake of funded children from various backgrounds as well as various needs and abilities. We have recently moved from a separate building into the school building so we have been in the progress of developing the whole provision. We felt that some areas of the setting were not as greatly developed as the others, mostly with regards to mathematical resources and activities. We joined the Maths Champions programme as we wanted to carry out professional development which we could share across our team to support each class and teacher to develop upon their children's understanding and abilities 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?</i> <i>Did the changes you considered come from the online training or resources etc?</i>
Carrying out the audits we found that children had a very limited understanding when it came to mathematical learning on entry to the setting and that we needed to find a way to capture this in a fun and exciting way. After carrying out the environment audit we knew we also had to develop our provision as well as the resources and activities that we were providing. Using the different training provided from the programme we were able to develop a more in-depth understanding of how children see different resources and how they can be used in different ways.
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>
We have introduced a free range of loose parts around the setting in most areas, these are safe and risk assessed items such as corks, shells, milk bottle lids, feathers, pipe cleaners, acorns, and large stones. We had to assess different items we could offer as we have a varied class of children with high SEND needs and smaller items would appear as a possible choking hazard. These resources are available to the children to access independently and have made a big impact on their play. They are using these items to shape and continue their play - developing patterns, sorting, counting. We also worked together to develop an area in the outdoor environment to which the children could access and develop their maths skills further. Providing similar items in the outdoor environment along with some blank picture frames, the children started to collect their own natural items from the garden and create their own learning experiences. They used stones to create groups of items, used grass and leaves to sort into different size

and colours. We provided numbers in various ways – on wooden planks, on a number line, on the floor and the children began to recognise these numbers in their play and began to use more mathematical language.

Some of the staff who were not as confident in their ability to use maths in everyday activities and play responded well to the different resources provided by us from the programme. They were able to see the different things they could do each day which could impact on children's mathematical learning. This was also a good way to help support and guide each other and see the different strengths that one another had to which we could use to our advantage.

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?

We have observed an enormous increase in the children's interest in mathematical play, they are not just sitting and counting, now they are using the loose parts to create their own number lines, they are able to group together objects of different properties that they did not have opportunity for previously. They are beginning to develop their mathematical language to a greater depth also, using words and phrases.

The children have also developed upon their play and relationships with one another by sharing what they have made, inviting others into their play and allowing them to engage and extend further. The children have also developed confidence in their play. They are not afraid to try something new and are using the loose parts to develop their own way of learning and counting.

We have been able to use the different ways of learning and ideas provided by the programme to support learning for all of the children in the setting, especially those with high SEND needs, they have been able to engage in activities which benefit their abilities and begin to learn ways to engage.

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 been sharing the ideas and activities we have been carrying out via our online learning journeys, the parents have stated they did not think that maths could be taught in some of the ways. We have encourage them to collect their own loose parts.

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 have developed their understanding and confidence to take part in a range of different mathematical activities. They have progressed from their comfort zones and used the different range of activities provided to support the children in their groups.

Their general view on maths has changed, for the staff less confident in engaging - myself as the maths champion have observed them engaging in open ended discussions about categorisation or sorting. They have developed upon their mathematical language also and are beginning to use simpler language for the children to learn.

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?

I have really enjoyed engaging in the programme as I feel like it has developed my practice which is now more beneficial to the children. I have been able to shape my own learning and progress this into the teaching of my children. I have become much more confident in my practice and feel very comfortable in providing a mathematical rich environment which benefits all children in my setting.

We found the online learning and webinar sessions very beneficial as we were able to relay this information to our other colleagues to support not only our own understandings but theirs also.

For the setting

What has been the impact on your environment?

Maths is much more prominent in our nursery since being involved in the Maths Champions programme and the children are benefitting from this, this can be observed throughout their engagements as well as the data we collect.

Loose parts has had a huge impact on the children's play in my setting and has been a great addition, it is that thing that was missing we just did not know it! Having this in the setting has allowed the children to engage in open ended play and learn in their own unique ways.

Next steps

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

We plan to implement some parent sessions where the parents can come into the setting and engage in some activities which we have developed through the maths champion programme. Once parents have a understanding and view on the different approaches we are hoping to provide some home bags which all contain a simple mathematical activity to which we can use to support not only the children's understanding of maths but the parents understanding on how their children learn. This will also support our home school link support system which we already have in place.