

Maths Champions Case Study

Champion: Lydia Riley

Setting: Westmorland Primary School

INTENT
Introduction <i>A little bit about your setting, why you joined the programme and what you wanted to achieve from it.</i> I completed my degree in Teaching and Education with a specialism of Early Years studies in 2005 and am now in my 20th year of teaching. I have worked in my current setting for 6 years and have been the teacher responsible for the nursery class since September 2021. The Nursery has a maximum capacity of 90 places-a mixture of half days (15 hours) and full days (30 hours) for children aged 3-4 years old. We currently have 54 children on roll. Both myself and another class teacher lead the Nursery staff which includes 2 full time teaching assistants, 2 part time teaching assistants and 2 part time 1:1 support assistants. Our school is a large school based in an area of high social-economic deprivation. A large percentage of the children entering Nursery are below age related expectations in all areas of the curriculum including Mathematical development, with many having had input from SALT, CDU and ongoing health visitor involvement. I asked the Math Subject lead (KS2 based) if he could find some CPD specific to Maths in Early Years as I felt we needed a burst of fresh ideas in order to boost staff confidence and also improve children's attainment and progress. He found the Maths Champion course and asked me to have a look, I immediately felt that it would be a good fit for our setting and enrolled. I asked one of the Nursery teaching assistants if she was happy to take on the role of Deputy Maths Champion, she agreed to do this.
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 staff audit highlighted areas where members of staff didn't feel as confident as I had previously thought. This was the first area we decided to work on. I completed the online courses as part of the Maths Champion programme and relayed key information and ideas to the staff. Together we used these ideas to improve our confidence and skills. The environment audit identified a weakness in our mathematical outdoor provision and also enabled us to think about how we could include a maths focus in other areas of the classroom too.
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>

After completing the staff audits myself and deputy decided that weekly planning meetings including all staff would be beneficial. This is something we will continue to do for the foreseeable future. All staff have the opportunity to share ideas they have found and would like to try. We share feedback on activities we have led/set up and provide assessments and observations of the children's progress.

We used some of the activities provided in the resources section of the programme as a starting point for our outdoor provision and noted down their impact and effectiveness on children progress and enthusiasm for maths. From there we went on to create ideas and activities of our own finding to continue to develop our outdoor provision.

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?

Including more maths experiences in the outdoor provision has increased enthusiasm and interest for all children. They are keen to take part in both child and adult led tasks and have been observed regularly using more mathematical language in their play.

The loose parts area, inspired by the programme has also proved very popular. More children are choosing to access the maths area than previously, now that loose parts is included.

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 worked hard to involve families in this programme, on a whole they have been quite resistant which is a common theme throughout our setting but our recent Maths Workshop held in class had a successful turnout of 22 parents and carers. The feedback was very positive. Parents enjoyed engaging in the activities with their child/children and would attend another workshop in the future. We have since planned a second workshop for the Summer Term.

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 confidence has improved regarding planning, delivering and assessing maths.
Some staff are now more confident speaking to parents about their child's progress.
Staff have begun using mathematical language more readily as part of the children's cross curricular learning.
All staff are comfortable and confident sharing their ideas and thoughts regarding maths during weekly planning meetings.

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 the coaching course was particularly helpful for me. It allowed me to think about how other staff may feel and how I can help. I have definitely become more decisive and have a clearer knowledge of what steps each child needs to take in order to develop their mathematical skills.

Both myself and my deputy have reassessed how we teach shape and space tasks to the children and the opportunities we provide. Many of the children had very little experience of spatial awareness when they started in Nursery therefore we made a decision to start with shape sorters, wooden puzzles, obstacle courses amongst other spatial awareness activities before even starting on shape names etc.

For the setting

What has been the impact on your environment?

The classroom and outdoor environment look more inviting than ever. The children have learned how to use new resources appropriately and have begun to use their own thoughts, ideas and imaginations too.

Next steps

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

Our weekly planning meetings will be continuing throughout the year.

We will continue to add to and rotate the resources in our loose parts area to maintain enthusiasm and high engagement for all children.

We have printed and collated all the resources available through the programme and will continue to use them as part of our maths curriculum.