

Maths Champions Case Study

Champion: Elizabeth Payne

Setting: Billesley 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>
	We are a 39 place Nursery offering full time and part time hours at Billesley Primary School, located in the South of Birmingham. There are currently over 40 different ethnic groups represented in the school and about half of the pupils are learning English as an additional language. We chose to join the Maths Champions programme to support the development of Mathematics within the Early Years. We already have a unique approach to our teaching at Billesley - offering children endless open-ended resources to explore as they wish - while also striving to provide high quality teaching at all times. We are always looking for ways to improve the teaching and learning and we felt that Maths Champions would be extremely beneficial for our Nursery to support not only the children's development but the members of the team too.
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 audits made us reflect upon our choices of displays and resources provided for the children and how we need to ensure that Maths is in the whole environment and not just the Maths Area. We reflected upon whether we took advantage of mathematical learning opportunities in other areas or if we had missed key learning moments by reflecting upon our observations of the children. We discussed how we would ensure Maths was everywhere within the environment so spent our reflective practice time walking around each area and identifying where Maths was available and how we could utilise the resources available. We created a specific Mathematical display that centred around key words and images and ensured the display remained simple and in line with our philosophy. We spoke about how effective displaying the key vocabulary was and ensured that staff and volunteers were also able to use the language when supporting the children in their play.
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 core activities will become a regular feature of our Maths planning as we found we learnt so much from the children in these sessions and found that they are easily adaptable to suit children at different stages of learning. Our outdoor environment is still a work in progress, but we have ensured that we have plenty of resources available for the children to set up and create their own physical games leading to mathematical exploration such as targets and buckets with numbers on, bowling resources with tally charts, large scale snakes and ladders games etc. We will continue to add to this over the summer term and into the next academic year to ensure plenty of outdoor maths opportunities.

IMPACT
The success and benefit of what you did:
For children <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> The majority of children are achieving at least the expected level in Mathematics, and most are achieving well beyond the expected level and are working with the reception age bracket. Children are succeeding in all of the main areas of number - counting, cardinality, composition and comparison. We feel that they are now well prepared to continue their maths journey in Reception. Not only this but we can sense a buzz around all areas of Maths including number, shape and measure. The children are curious and always interested in exploring concepts in greater detail for example - use of measuring tapes have led to children developing their number recognition well beyond 20. They are able to confidently talk about number and if we make an outrageous statement, they are able to articulate an appropriate response.
For families <i>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?</i> Parents are keen and eager to support their children's learning and we have been able to provide parents with more detailed knowledge of their child's sense of number and provide them with next steps to explore at home.
For staff <i>How has being involved in the programme made a difference to your staff team/individual practitioners? What has been the impact on their practice?</i> Staff members confidence has grown, and they are much more aware of the progression of numbers and the skills that need to be developed in the early stages. Staff are more aware of mathematical opportunities within the classroom and are able to pounce upon these opportunities that may have been missed prior to this course.
For the Maths Champion and Deputy Maths Champion <i>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> My confidence has grown, and I am much more aware of the progression of early number skills, and I feel that I can embed this next year with a new set of children.
For the setting <i>What has been the impact on your environment?</i> We have been able to follow our philosophy while also enabling that we are providing as much as we can for our children through authentic and open-ended resources. Displays are more succinct and relevant to the children's learning rather than being filled up and meaningless. The programme has enabled us to plan and reflect more as a team and ensure that our environment is meeting the children's needs.

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 utilise the environment audits as that was extremely relevant in our setting and we have found this has been the best way to support our children by ensuring our environment is ready to meet the children's needs and next steps. The core activities will be further embedded in our practice, and we will ensure reflection time is taken to explore children's individual achievements and next steps using the assessment document.

Thank you for taking part in the Maths Champions programme.