

## Maths Champions Case Study

**Champion: Rebecca Wilmott**

**Setting: St.Mary's Roseheath Childcare**

| INTENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| <p><b>Introduction</b><br/><i>A little bit about your setting, why you joined the programme and what you wanted to achieve from it.</i></p> <p>I have been in childcare since leaving school, many years ago now! I gained my qualification by completing my NVQ L3 childcare and L5 Leadership and management. Throughout the years I've worked my way up from baby room leader, to preschool, senior management to Manager. I have gained a lot of knowledge learning new skills, and the role I most enjoy is Deputy Manager/ 2yr old Room Leader, as I get to be part of a team, and do what I enjoy and do best, ensuring the children have good experiences, through play and learning.</p> <p>Our team is such a small team, and everyone has different strengths. We have children from 6months to 5years, open all year round, 8.30-3.30pm. We are opened planned setting, working in a mixed age group. This can at times present challenges but also works well. We have 2yr and 3yr old funded children, offer morning, afternoon and full time places. We have a high number of children with SEN.</p> <p>I have been at St. Mary's Roseheath for 3years now, and time and time again mathematics is not entirely our strong area, i.e. staff confidence levels, understanding and knowledge. We have gained training through Local Authority, Online and Noodle Now. This has supported staff learning.</p> <p>I was approached by my Manager, about the Maths Champion programme, at first I was a little sceptical and a little unsure how we would fit it all in, but I am grateful to have had the opportunity to take part, to benefit the support and learning, to be able to share with staff and parents, to enhance the learning for children, our environment and to be able to be confident when exploring Maths. I am the Maths Champion and my manager – Deputy Champion.</p> |
| <p><b>How did you decide what to do?</b><br/><i>What did the audits highlight, what changes did you consider and how did you identify the change/s to be made?<br/>Did the changes you considered come from the online training or resources etc?</i></p> <p>At first I took some time to get my head around the portal, completing the online training, looking back over things that we already had in place from previous training programmes etc. I wanted to be confident that when questions arose I was able to answer them; the programme had lots of information. What was great about the programme was that you can recap things as many times as you wanted. We had some difficulties at the beginning of the programme as we were moving premises, short term, and the space was much smaller. We had to think outside the box and take resources that were necessary.</p> <p>We then completed staff confidence audits and this gave us a great starting point and conversations with the team. We completed the environment audit, and again when we went back to our own premises. We shared ideas, made a wish list of resources that we may need to enhance children's learning. Staff were very enthusiastic and encouraged key children parent's involvement. We looked at opportunities in how we were going to gain resources, asked people to donate, use natural materials, use of recycle materials and used the great outdoors!</p> <p>I paired up with the baby room lead and 3year old lead; we looked at the children observations and completed them together, it was very much a team work than individual. This gave us an insight of what was needed to</p>                                                                                                                                                                                                             |

support children's learning and offer more challenge; children and staff were less confident in Comparison, Counting, Shape awareness, Patterns and Measures.

## 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?*

Reviewing audits and observations, we created an action plan of what we felt was important to our cohort of children, environment and resources. We made a to do list and each member of staff committed to own organising activities.

We gained parents' interest in supporting children's learning with maths at home sharing learning, activities sheets, information of the importance of maths. So over a period of time information was given regarding the 8 areas of learning e.g. comparison, cardinality, counting, etc, anything from nursery rhymes, loose parts, games, to support children's learning and understanding, and age appropriate activities. This opened up conversations, supporting parents and children.

We placed nursery rhymes, posters, number lines throughout the setting, looked at resources that are readily available, creating areas to be more appealing, and interesting. But the main thing was language. Use of language through play. Not necessarily having one area for maths but enabling maths in all areas. Use of prompts for staff to use and explore, lots of modelling and discussions on what worked well and what we can do better.

Parents bought in recycled materials, so that we could look at 2D and 3d shapes, models were made, lots of problem solving. We also asked parents to contribute bringing in loose parts, where a member of staff created activity boards. Lots of curiosity in how things work.

Throughout the process we continued to observe, joint observations and relooking back at what worked well and how to further develop. Core activities step 7, are a great resource, developing ideas in different areas; some staff members were confident, whilst some were less, so it was great to look at the core activities and broaden knowledge and understanding.

When going out into the community, children were becoming more familiar with numbers, searching and looking, noticing numbers everywhere, car licence plates, door numbers, wheelie bins, bus stops, signage and poster, shapes and patterns; children openly brought into their discussions daily, making comparisons of size and shapes of vehicles. It was very interesting to watch their confidence grow.

## 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?*

Children are more aware and confident with numbers, shapes and size; enjoy problem solving and just exploration of own interests.

### **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 are more confident and knowledgeable, willing to support children's development in setting; continue to bring in recycled materials, as you can never have enough.

### **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 are more confident, with the terms and continue to use maths' language throughout the sessions, supporting children's interests. When challenges occur we often talk and share ideas and thoughts. Staff are willing to challenge children, ask open ended questions, allowing children to problem solve before jumping in.

### **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?*

It has been a huge support and maths is more prominent in our nursery, you can hear conversations, discussions, activities going on throughout the session. Children are becoming more confident with their approach, including staff. It has been hard work at the beginning with different challenges occurring, but perseverance and dedication of the staff team has made it an enjoyable process. We also supported by the local authorities that came and done some Maths in-house training to support staff that were less confident. The programme supported us in developing our knowledge, and the resources and tools given throughout the programmes have been very valuable.

### **For the setting**

*What has been the impact on your environment?*

The setting is enriched with maths opportunities, indoors and outdoors, e.g. with the use of natural and recycled materials. We continue to further develop. We further develop outdoors and garden area.

### **Next steps**

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

Continue to use good practices, and support one another. Continue to use maths in everyday opportunities, and revisit audits.