

#### ***Key points of your Maths Champions improvements***

- ❖ Use of mathematical language is embedded in everyday practice.
- ❖ Practitioners are more aware of the ways maths can be linked with every area of development in the EYFS.
- ❖ Number lines and numbers in the environment.

#### **Background detail**

##### ***A little bit about your setting and why you joined the programme – what did you want to achieve from Maths Champions***

We are a small setting having 36 spaces overall, (8 babies, 12 toddlers and 16 pre-school) with 11 staff including myself. The Nursery is located the London commuter belt and is predominantly white British.

When I took over as owner of TCCL in October 2015 the Nursery was rated as RI at its most recent Ofsted inspection. The outcomes for children leaving our care were lower than average especially in maths. The Maths Champions programme came along at the right time to help us improve outcomes and staff practice in the 30 month period while we wait for our first Ofsted inspection. We will be updating the summer term cohort tracker for our Pre-School room at the end of July 2017 and hope to see a noticeable improvement in outcomes for space, shape and measure and number.

The work we have done on the Maths Champions programme is note within the SEF for TCCL so that we can demonstrate the decisive action was taken to improve an area of weakness.

#### **Section 2 – Champion's section**

##### ***How has the programme developed your own and your team's CPD?***

Making Maths Matter and Maths in the Early Years were useful for the staff as it helped them to focus on children's learning and development in maths.

The Resources section has been a useful prompt for staff to think about different ways to plan activities and use resources. The section on Role Play was popular as this was an area where we did not make the most of opportunities to promote maths.

##### ***What has been the impact of the training?***

*(e.g. training courses / staff meetings / in-house training / mentoring / peer observations / key changes / overall practice)*

We have included a short section on Maths Champions activities in our regular staff meetings. I have provided tailored support for each room to help our practitioners make better use of maths opportunities with each age group. The webinars on boys and maths and loose parts were shared

at Room meetings with the Pre-School and Toddler rooms to help inspire the staff. Baby room staff have been using the resources section to improve the environment for the 0-2's.

The staff confidence audits showed that the practitioners are happy and more confident with the use of maths on a daily basis. However I am aware that some of the staff have not done much work with the BKSB modules to improve their own 'higher' maths knowledge. Part of this is due to staffing issues that we had for 3 months at the beginning of the year and it is also partly due to a 'fear' of maths.

***From your starting point to today, what have been the changes in the following:***

- ❖ ***Children outcomes*** – the children seem to be a lot more confident in speaking to adults about maths. When they had their PIPs+ reassessment done each of them was happy to sit with Lucy, our researcher and complete the exercises despite not having met her previously. Their ability to identify written numbers and shapes in the environment and relative sizes of objects that they see has improved.
- ❖ ***Staff development*** – staff report to me that they feel much more confident in planning activities and selecting next steps for the children in their care. The planning in all rooms that we look at highlights more interesting activities and more focused next steps.
- ❖ ***Parental relationships*** – parents in the Pre-School room are more aware of what we do with the children to support their learning in general. We introduced a short weekly activity guide sent to parents and carers on a Monday via our My Baby's Days app highlighting what the children will be taking part in for the coming week.

❖ ***Environment outdoors***



***Sensory Number Line and large construction blocks***



***Garden Clock & Thermometer***



***Potion station***

❖ **Environment indoors (Pre-school room examples)**



**Interactive number line**



**Cake shop with "Specials board" behind the till**



**Cake Shop role play with scales, clock and counting cakes**

❖ **Attitudes towards maths**

Staff are very aware of maths, maths language and seem confident in their use of it in daily practice. The Pre-school children constantly weave in maths concepts of size, shape, measure, positional language, number etc in their daily conversations with each other and with the adults that they speak to.

**Tell us about any new initiatives or projects relating to maths? E.g. parental partnership development**

❖ **Children outcomes**

The Pre-School room children use maths language in their everyday talk now. When we had the verbal feedback from our observation visit (from Penny Cartwright of A+ Education) it was noted that the children used excellent positional language (they were telling her about our pond 'in the corner'). They are confident to identify sizes and volumes and appear to take pride in being able to tell the adults about objects that are larger, bigger, taller, empty etc.

In the Spring term we ran a themed week around Jack and the Beanstalk and held a competition for children and parents/carers to grow the biggest beanstalk. Parents were encouraged to send in photos of the beans as they grew. We made a display of these and encouraged 'healthy

competition' between parents to keep their beans growing taller. Three of our children brought their bean crop in to share and we measured the different bean sizes before cooking and eating them.

We now try to do more 'hands on' maths related activities that parents can become involved in. We have asked parents to collect sticks on weekend outings and encourage the children to measure them. We have also developed a short activity leaflet that we give to parents of the children moving up to our Pre-school room

### **❖ Staff development**

The staff have been generally enthusiastic about elements of the programme that have benefitted the children (activities, resources, ideas, support from me as the Champion) but less so about their own upskilling for maths outside the work environment

## **Section 3 – staff**

(Comments included below are from different staff across the setting, in our different rooms)

### ***How has the programme developed your CPD in relation to maths?***

- ❖ Making Maths Matter gave us ideas for continuous provision.
- ❖ The short section in the staff meetings helped me understand how to use maths in the role play area.
- ❖ I feel more confident that I am helping my key children to learn maths every day.

### ***What has been the impact of the training on your day to day practice?***

- ❖ Realising how the displays and toys and activities in the room can support maths.
- ❖ Being more confident to tell the children that I don't know and that we can try to solve the problem together.
- ❖ Finding out just how much maths there is in what we do every day already.

### ***What resources did you find most useful and why?***

- ❖ Zero to Three video series for the babies and toddlers.
- ❖ Pirates PLOD for toddlers when we did the themed week.
- ❖ Cars and ramps idea for distance measuring (Pre-School).

### ***Can you tell us the biggest change the Champion has introduced for maths across your setting?***

- ❖ Using maths words when we speak with the children (in some activities like cooking I used a lot of maths without knowing it).
- ❖ Number lines in the garden.
- ❖ Being able to link maths with all the areas of the EYFS.

**How did you find the BKSB element of the programme? If you did not use this, please tell us why?**

- ❖ *There was a lot of areas to be done on the programme and it felt like we didn't have much time to do it.*

**Can you tell us the difference in your confidence and attitudes towards your own maths and teaching children maths since the start of the programme?**

- ❖ *I feel more confident that I can set next steps for children and help them to achieve them.*
- ❖ *I can talk about shape, space and measure ideas with the Toddler children and support them.*
- ❖ *I am more positive that I can make maths fun for the children and use a variety of activities to engage their interest.*

**Next steps**

*How are you going to develop your practice further and why, what will the impact be? Who will be involved? How will your practice support good outcomes for children?*

- 1. I want to continue to improve the bank of resources that are available to parents and find more ways of letting them get involved with what we do. We have good parent partnerships but I would like them to be stronger.*
- 2. We want to make even better use of our outdoor spaces to extend and develop children in all areas including maths. Essex CC run a face to face training course, "Bringing the Natural World to Early Years with Essex Outdoors" which we will be sending one of our newer practitioners on in September to help us achieve a more inspiring outside space.*

**Final thoughts on the programme.....**

*I believe that this has been a very worthwhile project for TCCL and myself. It has focussed our practitioners on an area where our children's outcomes weren't very good and more importantly highlighted how the EYFS actually integrates all its prime and specific areas and that one activity can 'tick many boxes'.*

*We do so many more interesting and challenging activities with the children as a result of taking part in Maths Champions!*

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