Spotlight 2: Girls in Maths - Coates Primary School

Alison Penney

explores different ways to boost girls' maths in Coates Primary School

What was the problem you were trying to solve?

I was trying to solve the problem of the confidence of girls in my class in maths lessons. I did a confidence survey with a group of girls who all scored themselves low in their confidence and in their mathematical abilities, they also all found it tricky to ask for help during lessons. They all said they preferred reading and writing to maths. They all agreed that maths was much harder in Year 3 than it was in Year 2 so I wanted to support them in regaining their confidence when approaching maths activities.

How did you go about solving it?

After conducting a confidence survey, I then did weekly check ins with the girls on how it was going. They liked being able to discuss their worries in maths in our small group.

In order to build up their confidence I started a new maths activity for the whole class – Maths at Work which is produced by the Cambs Maths Team. Our school already uses Maths Eyes so the class were familiar with the approach. We discussed the images each week and then the children would write down their ideas on a post it – what they thought the job was and how maths was used. Some jobs really surprised them at how much maths were involved and the type of maths. The focus group of girls really enjoyed this activity and started to feel more confident in their own abilities, especially as we discussed all the different types of maths skills that they already knew.

We also introduced a female mathematician of the week and would display a poster each week. I chose a range of mathematicians from different time periods, cultures and nationalities. The class were particularly fascinated to learn that Florence Nightingale who they had studied in

Year 2 won awards in maths to do with her work around diseases.

Going forward, the original group of girls are going to be taking part in a Stemette Group where each week we will look at different STEM activities to continue to support them in their confidence.

What impact have you noticed so far?

The confidence of the focus group has definitely increased, especially as they have realised how many jobs need maths and the range of different maths skills. The group have become more confident in asking for support in lessons and during our weekly check ins when we have discussed what we will be learning about in the week, they have asked for extra support on certain topics. This has worked well in class and after going through the first few questions together as a group, they have been much more confident in then attempting the rest of the questions independently. As a class, they have really enjoyed learning about different female mathematicians and the struggles that they faced to have their degrees, work and achievements recognised by the world.

What key advice would you give another school facing a similar problem?

Listening and talking to the children is so important. The first confidence survey I did with the group was eye opening. It really helped me to see why they were feeling worried about maths and they all thought they were doing badly when in actual fact they weren't. This then enabled me to address their confidence issues and support them in realising they could do it and try to give them the same enjoyment when doing maths that they all had for English. The Maths at Work activities have been really successful in allowing the entire class to see how much maths is used in all different kinds of jobs and the children have really enjoyed learning about different female mathematicians. I think it's so important that children learn about key figures in maths, for example they had no idea that Florence Nightingale was a mathematician or the key female figures such as Joan Clarke who helped to break the enigma code in WW2.

Class teacher Alison Penney can be contacted using