Teaching for Mastery Lesson Design at Ashbrook Junior School

A Primary Case Study

Teaching for Mastery Lesson Design Work Group

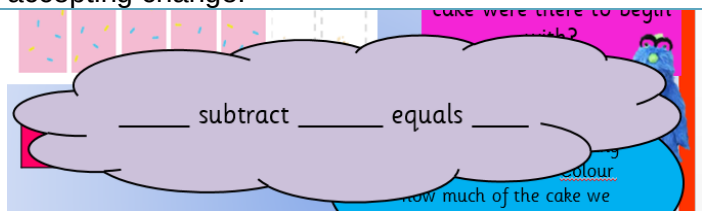
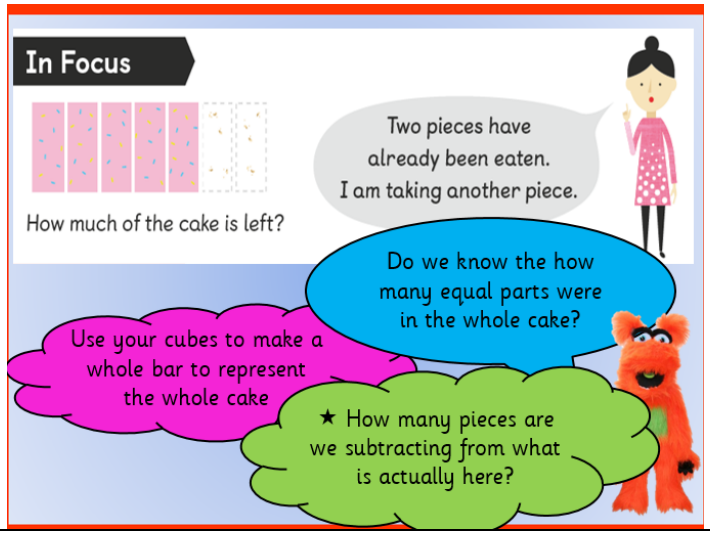
One of the biggest challenges facing schools as they adopt a teaching for mastery approach is how to design lessons. Working collaboratively with practitioners from across the East Midlands the project, we began by identifying the key features of mastery, before exploring a route through a lesson, that allowed teachers to link these together in a coherent manner. Essentially we were looking at how to turn theory into outstanding classroom practice. Though our research often went much wider what is captured here in these case studies, each participant school was asked to focus in on one aspect of lesson design, how it has been incorporated into classroom practice, and the impact it has had on learners.

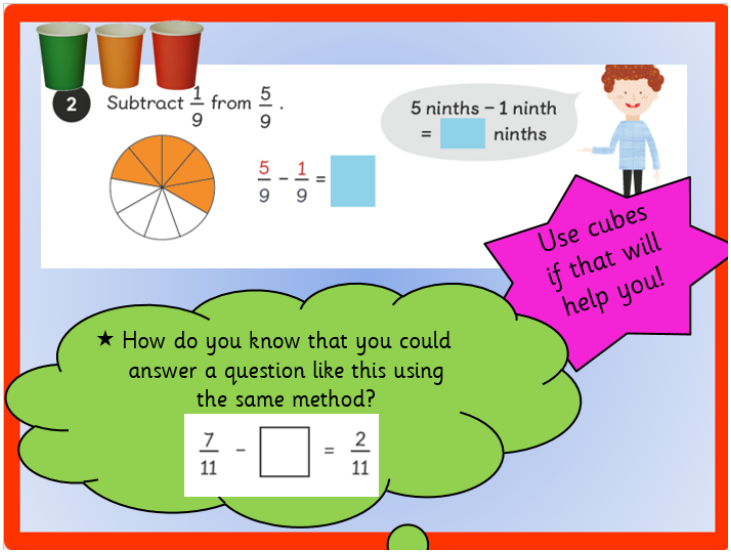
Overview

I am the maths lead for Ashbrook Junior School and we are a small Junior School with around 150 children on roll. We have a higher than average percentage of SSEN and our children are from a mixed catchment. Hearing about the Mastery workgroup was a great opportunity for me as a leader as we are only in our second year of mastery teaching. I was keen to share good practice with other professionals and wanted to gain an insight into how other schools were approaching their mastery teaching. Our school has worked closely with other mastery specialists and we are always looking for innovative ideas to inspire our children.

What we did at Ashbrook Junior School

Focus	To improve teaching so that more children are reaching greater depths of understanding in Maths.
Aims	• To improve opportunities for challenge for the more able within a lesson. • To provide opportunities for pupils to reason their answers, explain and justify through the use of stem sentences. • To use 'aim high' tasks to deepen children's understanding.
The journey	To begin my project, I developed a self-confidence audit for staff to answer so that I could direct CPD opportunities towards the correct areas. I also looked at the SIP and data which highlighted the following: 1. Data shows that the more able pupils are making improvements in attainment but are not making enough improvement in their progress. 2. The school improvement plan shows that the percentage of children reaching above national expectations at key stage 1 is not staying at that level in years 3 and 4. From unpicking these areas, I was able to draw up a school action plan which I shared with my school. This allowed people to take ownership over what we needed to improve on and made them feel a sense of responsibility for the way forward. Using the action plan and the self-confidence audit, I was able to organise specific support to individual members of my team and was able to target key areas that staff felt under confident with. Staff meetings took on the form of sharing good practice

	across the school and sometimes included members of team sharing good ideas that they had observed during CPD opportunities. From this, we were able to create an idea of what challenge looked like for our children. We developed the following: • Challenge bubbles to be evident on our lesson powerpoints to show that children are always doing something to improve their learning. • A structure for what an 'aim high task' would look like and what this should include. We used the NCETM documents as good models of these types of questions within each year group. • The view of what a stem sentence would look like and why they were supposed to be used. Beginning the journey in this way, allowed members of staff to move towards the end vision together just as would be the case for children moving through a mastery lesson together. It allowed staff to break down the barrier between each of them and to discuss their concerns and worries about the future of maths in our school. It took the stigma away from people of feeling the need to ask for help on their own which, with my staff team, is an invaluable gift.
<u>Barriers that were overcome</u>	From the beginning of the study, I understood the importance of listening to others, particularly due to the fact that project had a great emphasis on teaching Maths in a completely different way to what the staff were used to. This resulted in there being teething problems of the new initiatives that I was trying to implement and at times, meant that a professional conversation needed to happen with certain members of staff. Many times, barriers were put up not because of people not wanting to follow the journey but due to people not truly understanding how to get the children to where they needed to be. Using a triangulation of lesson studies, small parts of staff meetings and CPD opportunities supported the breakdown of this barrier and allowed people to see something working before trying it themselves. It provided staff with a purpose to what we were doing and why we were doing this which in the grand scheme of things, is the first step to staff members accepting change.
<u>Evidence in practice</u>	 



Fill in the numbers to make the number sentence correct.

Aim High

How many different ways can you complete it?

How do you know you have found them all?

$$\frac{\quad}{10} - \frac{\quad}{10} = \frac{2}{10}$$

Summary and next steps

We are not at the end of our journey for improving mastery teaching for the more able but we have certainly already come along way. We need to embed: stem sentences, purposeful challenge bubbles and deepening aim high tasks in order to improve our outcomes of children reaching the higher outcomes. This comes with time, monitoring and effective strategies to support target areas.

We are now looking into the whole vision of mastery and are in the process of perfecting our coherence within lessons. Staff are thinking more about the key areas of mastery that need to be in their lessons and are more willing to drive change as a team rather than be forced to be led.

More Information

For more information about this project, or other workgroups and opportunities available through the East Midlands West Maths Hub:
Visit our website: http://www.emwest.co.uk
Follow us on Twitter: EM_MathsHub
Email: mathshub@george-spencer.notts.sch.uk