Teaching for Mastery Lesson Design at

Abbey Road Primary 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, 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 than 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

Charlotte is a Maths Leader at Abbey Road Primary School, who took part in the East Midlands West Maths Hub 'Lesson Design work group' in 2017/2018. As Abbey Road were beginning to develop their mastery approach towards teaching mathematics; specifically aiming to increase 'understanding based' learning and develop the use of problem solving and reasoning for all learners (regardless of ability), the work group provided an invaluable opportunity for Charlotte to work alongside specialists and other professionals to discover coherent routes through lessons that enable 'teaching for mastery' to take place. Charlotte has gained an overview of the design of mastery lessons and explained:

"Discussions and having the chance to plan collaboratively using the suggested route through lessons has hugely helped to develop both my knowledge and confidence when 'teaching for Mastery' in primary school mathematics. Having implemented this route within my own classroom practice, I have already been able to see the children enjoy 'discovering' mathematical concepts for themselves and have watched them rapidly develop their ability to question, reason and justify based on mathematical understanding. I have also seen less confident mathematicians begin to shine within the classroom, the idea that we all explore maths together on the same level – right from the beginning of the lesson through use of the 'anchor task' - has given **all** learners the opportunity to spot links and to feel successful, without being reliant on knowing the 'correct' answer straight away."

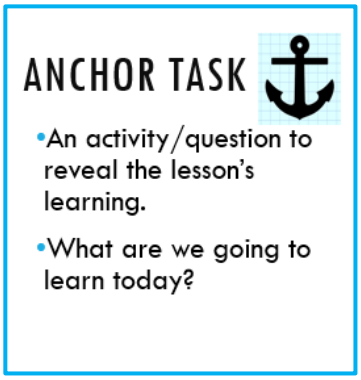
What we did at Abbey Road Primary School

After attending the first 'Lesson Design' work group session, Charlotte began to implement the suggested route through lessons within her own classroom practice. This enabled her to understand more clearly what the most effective starting points for Abbey Road would be and she decided upon the use of pre-loading and the anchor task, in order to develop the children's independent exploration of the 'small steps' within learning. Subsequently, having evaluated these features both independently and at the Lesson Design work group sessions, Charlotte shared these with the Maths Leadership Cluster at Abbey Road, which is formed of three members that represent KS1, LKS2 and UKS2. Cluster members then began to implement these within their own classroom and discussed the impact of both of these elements before they were introduced to the whole staff within a staff meeting, in which teachers were given opportunity to plan both of these elements for their following week's lessons.

PRE-LOADING

- A quick, couple of minutes, starter activity that allows the children to rehearse a skill (something that they already know how to do / have already been taught) that will support the day's learning.
- Aimed at waking up the brain, bringing everybody on task and involved in the learning straight away.
- Also helps children to spot links within mathematics.

The children in Charlotte's class have now been pre-loading and completing anchor tasks for over a half term and already Charlotte has noticed significant improvement in their ability to make links and articulately explain their mathematical understanding. In particular, pre-loading activities have really helped the children to form links between what they already know and what they are currently learning. This has led to even the least confident mathematicians in the class feeling successful when they spot how they can use something that they already understand to help them learn something new. Anchor tasks have also raised the profile of excitement and exploration within maths lessons as the children eagerly discuss and reason with one another when completing the task and assessing what they think the 'learning objective' for the day will be. Various children within the classroom have expressed enjoyment for anchor tasks, explaining that it's fun to find out what they are going to be learning about for themselves!



In the fortnight following the staff meeting where pre-loading and anchor tasks were shared with staff across the school, several members of staff at Abbey Road have already commented on the success of these tasks, stating how they 'really engage children from the moment they enter the classroom', making them 'want to do the maths'. Staff have also commented on how children within their class are developing and strengthening their ability to make links within different areas of mathematics and how effective pre-loading activities can be at aiding this 'link spotting'.

Summary and next steps

As the staff meeting to launch the use of 'pre-loading' and the 'anchor task' has been fairly recent at Abbey Road, Charlotte's most immediate next step will be to evaluate the success of these lesson features with staff; discussing how these are positively impacting on children's understanding and learning within lessons.

Following that, Charlotte will continue to lead Abbey Road's developing approach to teaching for mastery within mathematics by introducing and embedding more of the '9 Big Ideas' for mastery teaching within everyday classroom practice, initially focussing on 'stem sentences' (which Charlotte has used and found effective within her own classroom) as well as procedural and conceptual variation; including 'positive and negative conceptual variation' (focussing on 'what it *is* and what is *isn't*').

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
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