Teaching for Mastery Lesson Design at

Wadsworth Fields 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 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

In school, the current maths coordinator is in a transition period with a new member of staff. They both took part in the project to gain an insight into mastery for mathematics, networking opportunities and to see how they can implement a consistent and effective approach to mastery in mathematics in school.

What we did at Wadsworth Fields Primary School

Before beginning this project, as a school, we had some training on the concept of mastery for mathematics. The maths coordinator delivered staff meetings, which focused on manipulation, representations and variations. Alongside this, we looked at the frequency of problem solving and challenge within our lessons. We established clarity within our books, enabling everyone to have a clear indicator that showed we had completed mastery lessons. Now members of staff have participated in the Maths Hub project, it is clear that our starting points have been good but we need to ensure we endeavour to embed mastery within every maths lesson and embrace a holistic approach rather than see mastery and problem solving as a separate entity. Mastery in maths lessons needs to be coherent and a whole school approach to ensure we give children the best opportunities to be the best they can be. During the first session of the project, we were given a clear indicator of the key aspects needed to create a mastery lesson and some necessary resources. This allowed everyone to have the chance to implement these ideas into their lessons.

Focus

One idea to help teach for mastery was anchor tasks. This simple and effective starter activity allows children to reason within maths lessons from the very beginning. For the first anchor task, a year 3 maths group were given the photo of a compass. The children discussed what they could see and how the points of North and South spilt the compass in half and then into quarters, when East and West were included. Then the children saw 4 right angles that make a full turn and we looked at 4 x 90 =360. The children continued to discuss turns, angles and fractions, all from this one activity. The discussion around this photo lasted for the majority of the lesson so technically was not quite how the lesson should have worked. However, the children really enjoyed spending the time, discussing their understanding and were very pleased with themselves, when they had made the links.

Anchor activities can be great to generate ideas and children's thoughts. Sometimes there is a focus on ensuring the children write down everything rather than explaining their reason. It is clear, they are a useful tool to start drip feeding aspects of mastery into lessons.

Summary and next steps

Now, in school, we would like to develop confidence in staff to plan and deliver conceptual journeys for children. Eventually, mastery for mathematics will be a whole school approach. Therefore, our next steps will be to ensure staff have time to feel confident with some aspects of mastery. We will begin with

implementing different aspects in small steps. For example, before the end of term it is achievable to ask staff to attempt to use anchor tasks for a whole week within their lessons. The small steps approach will hopefully not have too much of an impact on everyone's work load and will be seen as achievable by staff rather than extra work. After the staff have had the opportunity to include one aspect of mastery they will hopefully be more open to other changes.

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