Teaching for Mastery Lesson Design at

Gilbert Heathcote Infant and Nursery 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

Helen Corbett is the Key Stage 1 Lead, Maths Lead and Year 1 and 2 teacher at Gilbert Heathcote Nursery and Infant School. Helen took part in East Midlands West Maths Hub Teaching for Mastery Lesson Design Project 2018. Through taking part in this project and the implementation of mastery across the whole school, staff and children have come to enjoy maths lessons with one teacher describing that she 'loves them' and children in Year 1 and 2 stating that they find lessons 'jolly' and 'I enjoy learning different ways to work it out.'

What we did at Gilbert Heathcote

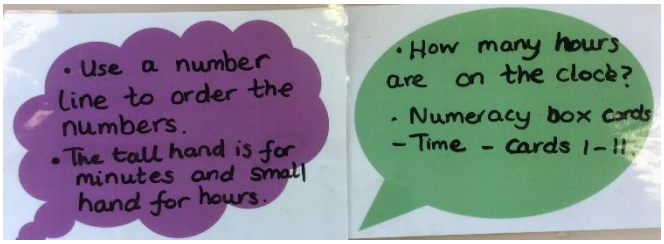
At Gilbert Heathcote, Helen began implementing the mastery curriculum last year in her mixed Year 1 and 2 class, using the White Rose Guidance. This began with incorporating fluency, reasoning and problem solving in lessons, all children working at the expected level and being support through teacher and TA led intervention and resources and then when succeeding being challenged to exceed their learning through mastery style questions. This year the rest of the school followed suit and began teaching using the same mastery approach through the use of the White Rose Guidance.

We had a staff INSET about reinforcing the use of concrete, pictorial and then abstract representations so steps were not missed at the beginning of the children's learning journey. Stem sentences were also introduced across this school, from Reception to Year 2 and these have helped the children to explain their answers in a sentence format and as the children in Year 2 stated they 'Help my brain think about what I am doing' and 'I'm getting better at writing explanations'.

Helen changed from the more 'traditional' lesson layout to begin with an 'Anchor Task' for all children to answer a question/problem and to open up discussion and use of their mathematical voice. This is then followed by 'Guided Practice' where new learning is taught through interactive instruction and children engaging in tasks similar to those they will complete independently later in the lesson. Finally the children will use what they have been taught and apply this to their 'Independent Practice'. Support/scaffolding questions and ideas are included on the plan as well as challenge questions. A notes section was incorporated for staff to write down anything of note, children who struggled or succeeded so this could be used to inform future planning, lessons and interventions.

Focus

The main focus this year was changing the format of the planning. Helen used the lesson design example given at the first lesson design mastery workshop and adapted it to include a 'pink support thought bubble' and a 'green challenge speech bubble' the school had already implemented across all classes.



Lessons begin with an anchor task and through this it enabled staff to quickly assess the children, their ability to tackle the task and how they approached solving it independently. Then when moving on to the second part of the lesson individual children were targeted through staff support, questioning and resources. The guided practice element meant new learning is taught through interactive instruction and all children could access and develop in their own way. Thus insuring that when the children moved to the third part of the lesson they could use what they had been taught independently to solve the problems and find the answers to the questions.

Impact

Across school the teaching of mastery has really developed this year, all classes are using the White Rose to plan, all have the fluency, reasoning and problem solving type questions and stem sentences have been integrated across all year groups including the EYFS. This means across the school the children are being taught with a consistent approach, using the same mathematical language and questions and having access to a range of representations.

In Helen's class the use of the anchor task, to start the lesson, meant children were quickly targeted and miss conceptions were picked up. Guided practice meant key skills could be taught through an interactive approach and children could demonstrate what they had been taught, before moving on to the independent practice. Teaching a mixed year group has been a challenge but through the new lesson plan it meant TA's could follow the anchor, guided and independent format and use the support and challenge questions and ideas to help with one of the year groups. Children have become more aware of maths language, explaining and discussing their answers at a higher level and selecting their own resources to solve problems.

Summary and next steps

Over this year the children have demonstrated an improved mind-set within maths lessons and are eager for their lessons, showing enthusiasm, engagement and resilience. All classes next year will be planning using the same format starting with the anchor task, moving on to guided practice and then finally the independent practice with support and challenge in place. Gilbert Heathcote will be continuing to develop its mastery approach across the school to move the children forward in their learning.

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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