



A statement on Teaching for Mastery in Maths at Eardisley CE Primary School

Since September 2017 we have at Eardisley CE Primary School been embarking on a concerted development of our teaching in maths. As such, we are working with the Salop and Herefordshire Mastery Maths Hub and following an action research model to analyse and probe the development of our own practices and its impact on pupils. This is a two-year programme which enables us to learn alongside other professionals and to adapt the model for our small school. The project is being led in the school by Mrs Katrina Small (maths leader) and Miss Kayleigh Evans (EYFS leader) and is involving all teaching and support staff.

Since mastery is what we want pupils to acquire (or go on acquiring), rather than teachers to exhibit, we use the phrase 'teaching for mastery' to describe the range of elements of classroom practice and school organisation that combine to give pupils the best chances of mastering mathematics.

Mastering maths means acquiring a deep, long-term, secure and adaptable understanding of the subject. At any one point in a pupil's journey through school, achieving mastery is taken to mean acquiring a solid enough understanding of the maths that's been taught to enable him/her move on to more advanced material.

The NCETM paper of June 2016, *The Essence of Maths Teaching for Mastery* outlines the salient points of this approach and is reflected in our school policy for the teaching of mathematics:

- Maths teaching for mastery rejects the idea that a large proportion of people 'just can't do maths'.
- All pupils are encouraged by the belief that by working hard at maths they can succeed.
- Pupils are taught through whole-year group interactive teaching, where the focus is on all pupils working together on the same lesson content at the same time, as happens in Shanghai and several other regions that teach maths successfully. This ensures that all can master concepts before moving to the next part of the curriculum sequence, allowing no pupil to be left behind.
- If a pupil fails to grasp a concept or procedure, this is identified quickly and early intervention ensures the pupil is ready to move forward with the whole class in the next lesson.
- Lesson design identifies the new mathematics that is to be taught, the key points, the difficult points and a carefully sequenced journey through the learning. In a typical lesson pupils sit facing the teacher and the teacher leads back and forth

interaction, including questioning, short tasks, explanation, demonstration, and discussion.

- Procedural fluency and conceptual understanding are developed in tandem because each supports the development of the other.
- It is recognised that practice is a vital part of learning, but the practice used is intelligent practice that both reinforces pupils' procedural fluency and develops their conceptual understanding.
- Significant time is spent developing deep knowledge of the key ideas that are needed to underpin future learning. The structure and connections within the mathematics are emphasised, so that pupils develop deep learning that can be sustained.
- Key facts such as multiplication tables and addition facts within 10 are learnt to automaticity to avoid cognitive overload in the working memory and enable pupils to focus on new concepts.