

# MASTERFUL TEACHING, MASTERY LEARNING

## Our curriculum and assessment arrangements:

- are in place to complement the curriculum and so mirror our principles
- offer a structure for assessing pupils' progress in developing mastery of the content laid out for each year.

Schools, however, are only *'required to teach the relevant programme of study by the end of the key stage (in our case by the end of Y6)*.

*Within each key stage, schools therefore have the flexibility to introduce content earlier or later than set out in the programme of study'*  
(National curriculum page 4).

## Problems with levels

- Children labelling themselves which is inappropriate and dysfunctional in terms of learning and self esteem
- Undue pace – focus on moving through levels rather than promoting deep and secure understanding of key skills and content (studies of high performing and/or fast improving jurisdictions don't use a model of levels like we do)
- Snapshot judgement – an average of good and poor answers
- 'Just in/ best fit' - the previous assessment system measures children against levels and sub levels

(**Google** Tim Oates - Chair of the expert panel reviewing the National Curriculum  
<https://www.youtube.com/watch?v=-q5vrBXFpm0> )

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## Key principles

- taking a step back to reflect on the ‘big picture’ of where a child is in their learning journey
- Levels have outlived their usefulness and convey the wrong model of ability
- Focus upon teaching fewer things in greater depth.
- Children moving through the curriculum at broadly the same pace.
- A focus on deep understanding of **key concepts** NOT progressing at a fast pace Assessment focussed on key skills and concepts.
- Age related assessment focus – have children understood the key ideas for their age?
- More assessment, not less, but of the right kind – assessment for learning and of learning at the point of learning (teacher assessment in class)
- A system of rich questioning, probing of ideas to understand what children actually know and how well they know and apply it in context

## The challenge for Teaching

- To always be asking probing questions
- How to know exactly who understands what
- Continual formative assessment
- How to stimulate discussion that can be assessed
- Teachers need to become ‘assessment kleptomaniacs’

## What do we mean by mastery?

The essential idea behind mastery is that ***all children*** need a ***deep*** understanding of the what they are learning so that:

- future learning is built on solid foundations which do not need to be re-taught;
- there is no need for separate catch-up programmes due to some children falling behind;
- children are better able to keep up with their peers, so that gaps in attainment are narrowed whilst the attainment of all is raised.

There are generally four ways in which the term mastery is being used in the current debate about raising standards:

## **1. A mastery approach: a set of principles and beliefs.**

This includes a belief that all pupils are capable of understanding and doing given sufficient time. Pupils are neither ‘born with a subject gene’ nor are ‘just no good at a particular’.

With good teaching, appropriate resources, effort and a ‘can do’ attitude all children can achieve in and enjoy in learning and achieving.

## **2. A mastery curriculum: one set of concepts and big ideas for all.**

All pupils need access to concepts and ideas and to the rich connections between them. There is no such thing as ‘special needs mathematics’ or ‘gifted and talented mathematics’. A subject and its progression is a subject and its progression and the key ideas and building blocks are important for everyone.

**3. Teaching for mastery:** a set of teaching practices that keep the class working together on the same topic, whilst at the same time addressing the need for all pupils to master the curriculum and for some to gain greater depth of proficiency and understanding.

Challenge is provided by going deeper rather than accelerating into new content. Teaching is focused, rigorous and thorough, to ensure that learning is sufficiently embedded and sustainable over time. Long term gaps in learning are prevented through speedy teacher intervention. More time is spent on teaching topics to allow for the development of depth and sufficient practice to embed learning. Carefully crafted lesson design provides a scaffolded, conceptual journey through the a subject, engaging pupils in reasoning and the development of thinking.

**4. Achieving mastery of particular topics** Mastery is not just being able to memorise key facts and procedures and answer test questions accurately and quickly.

It involves knowing ‘why’ as well as knowing ‘that’ and knowing ‘how’. It means being able to use one’s knowledge appropriately, flexibly and creatively and to apply it in new and unfamiliar situations.

The materials we have adapted seek to exemplify the types of skills, knowledge and understanding necessary for pupils to make good and sustainable progress in mastering the primary curriculum.

## Mastery and the learning journey

Mastery is not a fixed state but a continuum. At each stage of learning, pupils should acquire and demonstrate sufficient grasp of the subject relevant to their year group, so that their learning is sustainable over time and can be built upon in subsequent years.

This requires development of depth through looking at concepts in detail using a variety of representations and contexts and committing key facts, such as number bonds and times tables, to memory.

Mastery of facts, procedures and concepts needs time:

Time to explore the concept in detail and time to allow for sufficient practice to develop fluency (to avoid mechanical repetition where learning is not progressed but to create an appropriate path for practising the thinking process with increasing creativity)

## Mastery and mastery with greater depth

Integral to mastery of the curriculum is the development of deep rather than superficial conceptual understanding.

*'The research for the review of the National Curriculum showed that it should focus on "fewer things in greater depth", in secure learning which persists, rather than relentless, over-rapid progression.'*

It is inevitable that some pupils will grasp concepts more rapidly than others and will need to be stimulated and challenged to ensure continued progression. However, research indicates that these pupils benefit more from enrichment and deepening of content, rather than acceleration into new content. Acceleration is likely to promote superficial understanding, rather than the true depth and rigour of knowledge that is a foundation for higher learning.

*Mastery* and *mastery with greater depth* are used to acknowledge that all pupils require depth in their learning, but some pupils will go deeper still in their learning and understanding

Mastery of the curriculum requires that all pupils:

- use concepts, facts and procedures appropriately, flexibly and fluently;
- recall facts with speed and accuracy and use them to work out unknown facts;
- have sufficient depth of knowledge and understanding to reason and explain concepts and procedures and use them to solve a variety of problems.

Checklist for what we might look out for when assessing a pupil's understanding might be:

A pupil really understands a concept, idea or technique if he or she can:

- describe it in his or her own words;
- represent it in a variety of ways (e.g. using concrete materials, pictures and symbols )
- explain it to someone else;
- make up his or her own examples
- see connections between it and other facts or ideas;
- recognise it in new situations and contexts;
- make use of it in various ways, including in new situations.

## Developing mastery with greater depth is characterised by pupils' ability to:

- solve problems of greater complexity (i.e. where the approach is not immediately obvious), demonstrating creativity and imagination;
- independently explore and investigate, communicate results clearly and systematically explain and generalise the learning.

Teaching for mastery requires that all pupils are taught together and all access the same content. Keeping the class working together, spend more time on teaching topics and provide opportunities for all pupils to develop the depth and rigour they need to make secure and sustained progress over time.

**National curriculum assessments** at the end of Key Stages 1 and 2 aims to assess pupils' mastery of both the content of the curriculum and the depth of their understanding and application of mathematics, reading, GaPS and writing.