



Developing Mastery Across the Curriculum

**What does it mean for your
child?**

Workshop Schedule

- 1. Mastery across the Curriculum (Richard Degg)**
- 2. Mastery in Mathematics (Lucy Jackson and Alison Steer)**
- 3. Examples of mastery (all)**
- 4. Questions from the floor**

What is mastery across the curriculum?

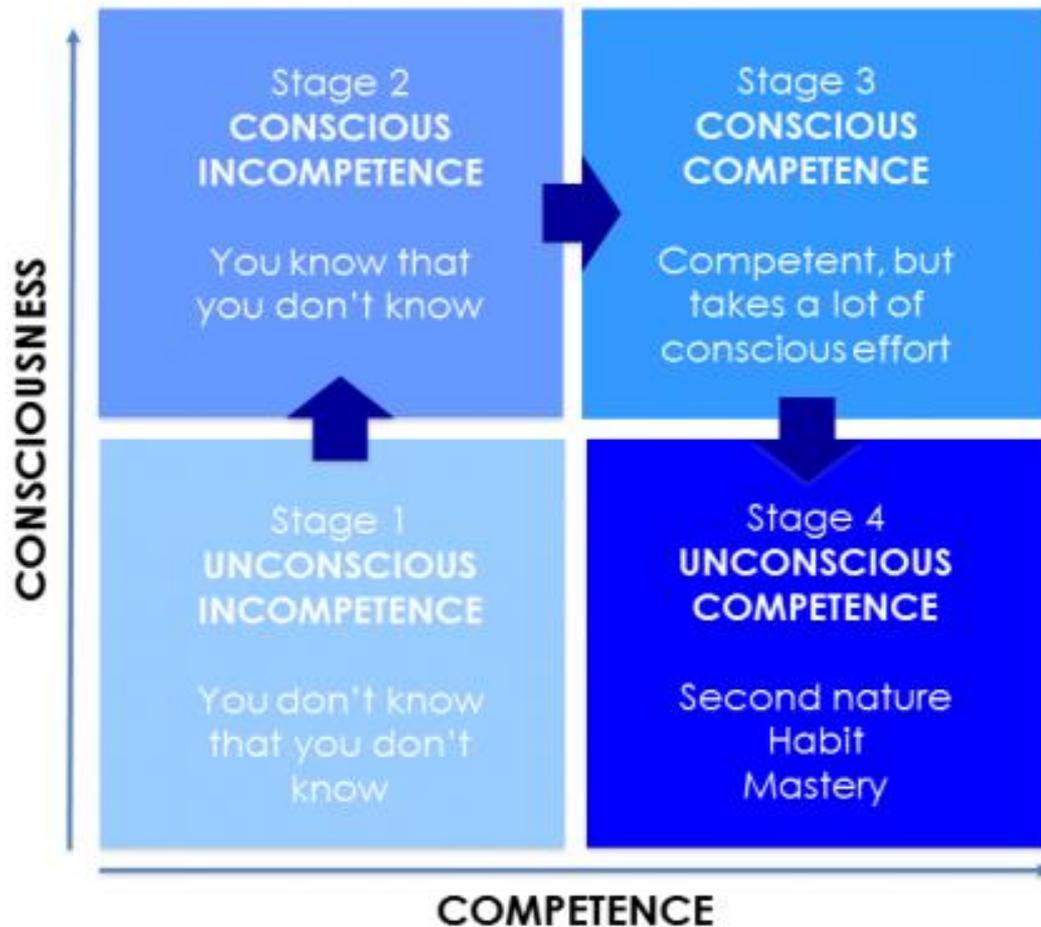
- A mastery model of learning makes the basic assumption that given time and quality instruction, most pupils can and will eventually attain the core intended learning, or standard.
- A mastery approach provides opportunities for all students to develop a deep, long-term, secure and adaptable understanding of a subject.
- It recognises that the time required for some learners to do so will be greater than that required by others, and the learning must be planned carefully to take account of this.

How can we plan for mastery?

- First all pupils are introduced to new learning and given opportunities to develop their understanding.
- We will use marking and assessment to identify those learners who have successfully mastered the new learning, and can clearly demonstrate it, from those who need more time in order to do so.
- The former will then be provided with opportunities to deepen and enrich their understanding.
- The latter will receive further instruction personalised to their needs, so that they too can achieve the intended learning.

What does mastery look like?

The Four Stages of Competence



Mastery and Mathematics

- **Mastery in Mathematics has been more developed than other subject areas in the new curriculum.**
- **Maths mastery is happening constantly in an Educational setting as it is taught through practical investigation, reasoning and play.**
- **Early experiences of maths is very important as children have different aptitudes to maths, not abilities.**

Maths Mastery Expectations

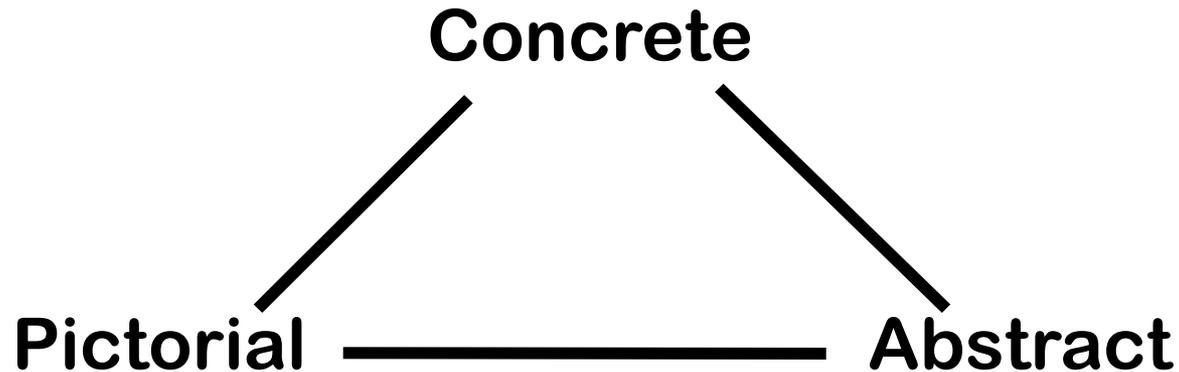
- Teachers continue to enrich all children's learning by enhancing their conceptual understanding with focused problem solving. These Mastery tasks test and ask the children to prove and explain mathematical theories.
- Reasoning is an important aspect Mastery.

Maths Mastery Teaching

- **Good mathematicians are expected to support and help their peers. Working together and supporting each other are powerful skills for Mastery. Two heads are better than one.**
- **The importance of talking Maths and reasoning their ideas, explaining why and how, deepens understanding further.**

Maths Mastery Teaching

- Tools are still needed to help deepen understanding.



Maths Mastery Example 1

Areas of learning covered-

- What is a fraction?
- Fraction notation,
- Equivalent fractions,
- Relative size of fractions,
- Addition of fractions (in a simple form)

Maths Mastery Example 2

You have a some fraction strips which I accidentally have ripped (oops!).

Can you work out which strip was originally the longest?

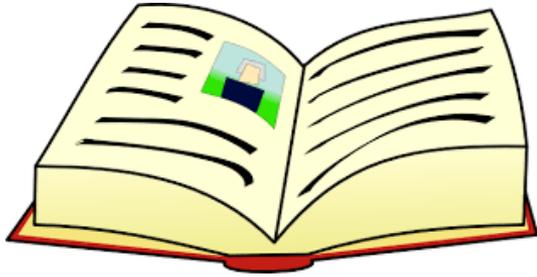
Can you work out the order from shortest to longest for the FULL strips?

Maths Mastery Example 3

- Only a fraction of each whole rod is shown. Using the information given, identify which rod is longer.



- Explain your reasoning.



Reading Mastery

Look at the materials on your table...

Use your reading skills to identify the country described in the travel guide.

How can a child show mastery?

- Complete independence in using a concept, skills or knowledge
- Fluency in the application of a concept, skills or knowledge
- Ability to apply learning across subject boundaries
- Consistency in application over a period of time
- Ability to apply without reminders or pre-teaching
- Ability to explain connections with other learning
- Evidence of resilience in applying their learning
- Ability to teach to another

Final thought...

“If people knew how hard I worked to get my mastery, it wouldn't seem so wonderful at all.”

Michelangelo

**Alison Steer, Lucy Jackson
and
Richard Degg**