

Cornwall and West Devon Maths Hub (CODE)

Developing
Teaching for Mastery work
group 2022-23

INTRODUCTIONS

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Mastery Specialists:

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Aims of this meeting:

- Meet each other
- Explain roles and expectations
- Clarify what the essence of Teaching For Mastery (TfM) is
- Outline what a typical TfM “Teacher Research Group” (TRG) meeting will include
- Outline what a typical TfM “Specialist Visit” will include
- Re-cap on what funding is available for your involvement
- Opportunity to meet your TfM Specialist and set some dates

What is a TfM Work Group?

- Research
- Access to national thinking and resources
- Up to seven schools working together with a Mastery Specialist
- 3 year + commitment of collaboration:
 - 2022-23: Developing Mastery
 - 2023-24: Embedding Mastery
 - 2024 & beyond: Sustaining Mastery

The essence of mastery:

- 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-class 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.

The essence of mastery:

- 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.

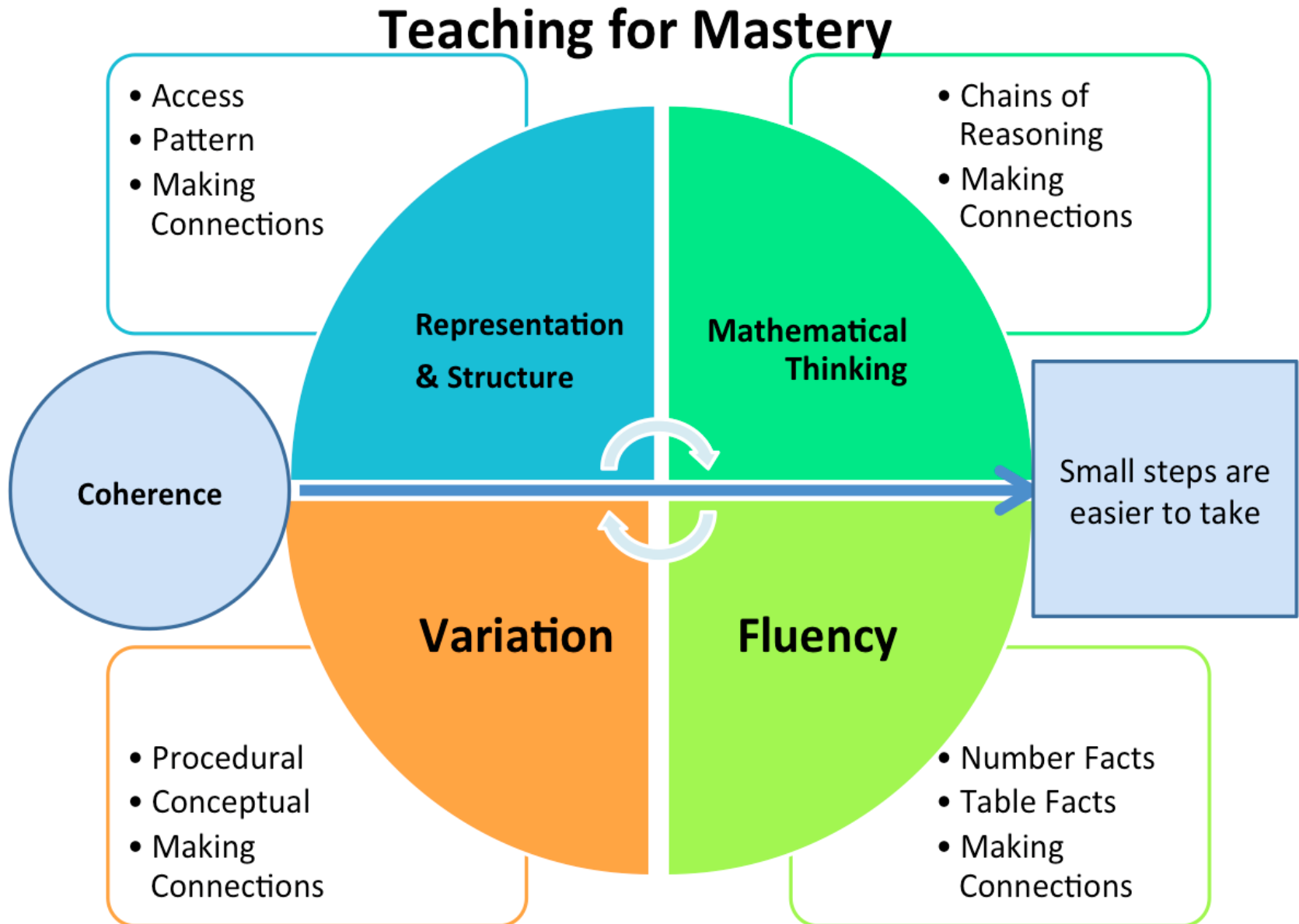
The essence of mastery:

- 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.

The essence of mastery:

- 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.

The 5 big ideas – a focus for TRG 1



TfM Workgroup



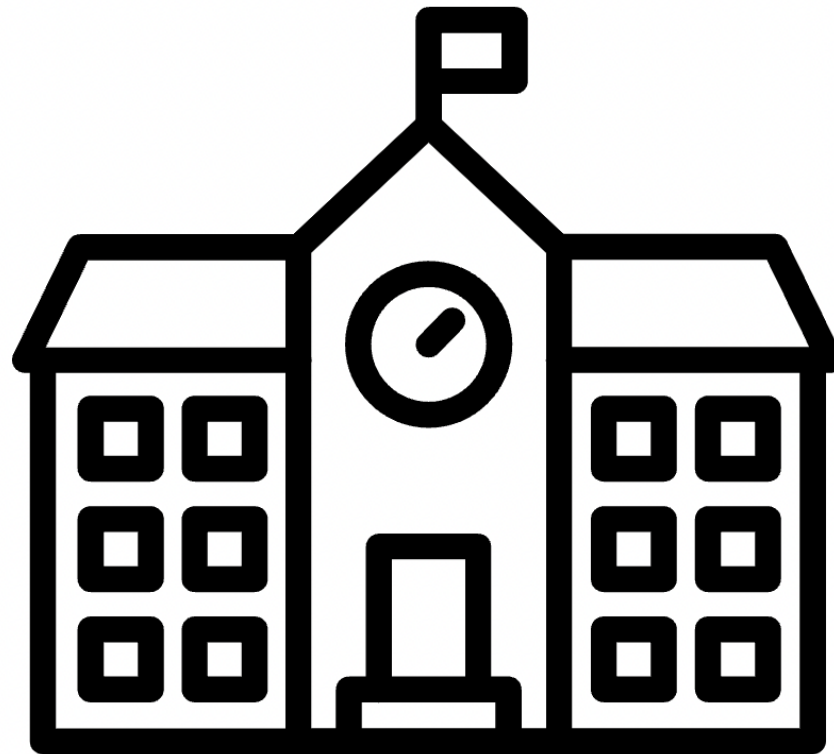
- 1 TRG (1/2 day) per half term – a collaborative research lesson:
 - Watching a maths lesson together
 - Focus on the 5 big ideas of TfM
 - Rich, collaborative professional discussion following lesson

- 1 TfM Specialist school visit (1/2 day) per term:
 - Specialist working alongside lead teachers and senior leaders
 - Opportunity to identify strengths and areas for development across school
 - Set targets for the year ahead

- Core funding of £1000 per school (2 x £500) is claimed through Service Level Agreement for continued participation

A Headteacher's Perspective:

What's in it for our school?





Good beginnings never end.



1: engaged key staff in high-quality, sustained, professional (and safe!) reflection, collaboration and dialogue

"It's not what you look at that matters, it's what you see!"

2: provided access to a wealth of NCETM materials

"Stand on the shoulders of giants!"

3: secured involvement from SLT, and purposeful improvement foci

"To lead people, walk beside them."

4: addressed any possible pre-conceptions

"Don't criticize what you don't yet understand!"

5: provided strong levers for change, movement out of comfort zones and healthy support/challenge

"Fortune favours the brave!"

Breakout rooms

- Meet your Mastery Specialist
- Introduce yourselves
- Clarify dates
- Opportunity to ask questions

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