

Early Years and Primary

Teaching for Mastery – Maths Hubs support schools at every stage of introducing and embedding a teaching for mastery approach.

Schools joining the programme for the first time have two possible entry points:

- Mastery Readiness
- Teaching for Mastery Development

Schools carrying on with, or re-joining, the programme, take part in one of two stages:

- Embedding teaching for mastery
- Sustaining teaching for mastery

All projects follow the Work Group model, with expert leadership, which supports schools in developing strong curriculum, teaching, and professional development practices that reflect a teaching for mastery approach.

Mastering Number: A large-scale national project to support the development of good number sense in pupils in Reception and KS1. Over 5,000 schools have already taken part.

Years 5 to 8 Continuity: Primary and secondary teachers collaborate on this project, to ensure continuity of mathematical learning from Year 5 to Year 8. Work Groups will take an aspect of the maths curriculum or a pedagogical approach as the focus for their work, and develop a consistent approach to it.

Specialist Knowledge for Teaching Mathematics (SKTM)

There's more to subject knowledge than knowing how to do the maths yourself. Teachers and teaching assistants need to have a clear understanding of how children grasp and retain mathematical concepts. Again this year, Maths Hubs are running Work Groups designed to enhance subject knowledge, available specifically for:

- Early Years practitioners
- Primary teachers
- Primary teaching assistants
- Primary Early Career Teachers
- Secondary Early Career Teachers
- Secondary non-specialist teachers

ITT Providers

A network of local ITT providers will continue work started in 2019/20 to develop working partnerships, spread good practice, and share work on mastery with trainee teachers.

Leadership in Maths Education

Every Work Group is led, at local level, by a teacher experienced in leading maths-specific CPD. Across the Maths Hubs Network, projects exist to enhance this leadership capacity and to support those seeking to become local leaders of maths education (LLME).

- Developing Mastery Specialists in primary and secondary schools
- Running national workshops for Work Group Leads to learn from each other
- Supporting teachers who have attained, or who are seeking to achieve, NCETM Accredited PD Lead status and School Development Lead status
- Maintaining local networks so Local Leaders of Maths Education (LLME) can stay in touch

Secondary

Teaching for Mastery – Maths Hubs projects help secondary departments to consider what effective mastery of maths look like for their students. Schools nominate two teachers to become 'Mastery Advocates' for their department, participating in one of three phases of development:

- Teaching for Mastery Development Work Groups, for departments joining for the first time
- Embedding Work Groups, for the second participation year
- Sustaining Work Groups, for the third participation year

Mathematical Thinking for GCSE: Work Groups offer teachers and their departments support to address the reasoning and problem-solving challenges of associated with assessment at GCSE.

Years 7–11 Coherence: This offers participants the chance to analyse, deconstruct and trace a particular key topic area through the curriculum, developing insight into effective teaching approaches, and considering implications for curriculum design.

Secondary Subject Leadership: Work Groups will offer support to secondary heads of department/subject leaders, to enable them to better understand and implement teaching for mastery approaches across their department, and to develop in their role as leaders of both student learning and teacher professional development.

Secondary Maths MAT Leads: This centrally-led programme is for those who lead maths across multiple schools, and will enable them to better understand and develop effective maths pedagogy approaches across those schools.

Post-16

This range of projects aims to support teachers of all students in Year 12 and above, including those needing to resit GCSE.

Supporting Post-16 GCSE Resit: These Work Groups get to grips with a variety of methods designed to support teachers of students resitting their Maths GCSE.

The three Level 3 projects below are all run by Maths Hubs in partnership with the Advanced Mathematics Support Programme (AMSP).

New to teaching Core Maths: Teachers new to Core Maths will develop specialist knowledge for teaching the qualification, and increase their confidence in delivering it.

Developing Core Maths Pedagogy: Teachers looking to expand existing provision can join Work Groups exploring the philosophy and practicalities of this qualification.

Developing A Level Pedagogy: The demands of A level Maths are explored, as participants develop knowledge of the content and requirements of the specification.

Maths Hubs projects 2022/23

There are 40 Maths Hubs across England, serving all state-funded schools. Again this year, Maths Hubs are offering fully-funded professional development in the form of Work Groups, programmes and communities. These span the phases from Early Years to post-16, and address a range of themes.

How to take part:

If you'd like to participate in any of this work, contact your local Maths Hub to find out how to get involved at ncetm.org.uk/mathshubs

 **MATHSHUBS**

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IN THE TEACHING OF MATHEMATICS

Coordinators of the Maths Hubs Programme