

Bespoke

NEWS from the Maths Hubs Programme

May 2021 | Issue No. 21

Welcome to Bespoke, bringing news of a rich mix of professional development opportunities for 2021/22, as participants in this year's work show enthusiasm for the quality of their experience when collaboration moved online.

“Engaging with Maths Hubs – the best thing I’ve ever done”

When schools closed and the country went into lockdown in March 2020 last year, Maths Hubs stepped up to assist schools adapt to the rapidly changing realities. A year on, as these quotes show, it's evident that hubs are still providing a high-quality professional development experience, and are well-placed to build on this in the next school year.

“Engaging with the Maths Hubs has been the best thing I have done. It has enabled me to develop my own practice, and that of others in my school in maths but has also developed my leadership skills and ability to provide PD.”

Primary head, Chesterfield

“Maths Hub support has seen our staff transform into confident teachers who deliver the highest quality maths teaching and learning I have ever seen. Truly transformative.”

Primary head, working with Great North Maths Hub

“I've learnt more about the teaching of maths in the last year, compared to all the years previously combined. If you've not already done so, consider joining your local Maths Hub.”

Secondary HoD, Birmingham

“The specialists have provided high-quality support on how to support ALL pupils on returning to school. Excellent guidance and advice given around prioritisation. This has provided my staff with confidence to carry on and assurance that they are doing the right thing.”

Primary head, at a North West Three Maths Hub meeting

“Another fantastic year 5 to 8 transition meeting with @WYorksMathsHub. Really enjoyed these sessions, learning so much about the ks2 curriculum and how we can build on this in ks3 and beyond.”

Secondary 2iD, working with West Yorkshire Maths Hub

“Great #TRG session today! Even online it was great to explore representation and structure! #maths #mastery #mathscpd”



Primary head, working with Central Maths Hub

“Joined a mastery maths group tonight to ensure the work continues while our brilliant maths lead is on maternity leave. One session in and it's like the clouds have lifted. Thanks @MinsterMathsHub for welcoming me on board.”

KS2 teacher, Nottinghamshire



Maths Hubs projects 2021/22

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 and national programmes. These span the phases from Early Years to post-16, and address a range of themes.

Projects run via Work Groups are broadly similar, with schools and teachers in a hub area engaging in activities around an agreed targeted outcome. Many teachers and schools participate in professional development with their Maths Hub every year, taking advantage of the range of projects on offer, and the chance to collaborate at a local level. Contact your local hub to find out which projects they are running.



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: www.ncetm.org.uk/mathshubs

Early Years and Primary

Teaching for Mastery – Maths Hubs support schools at every stage of introducing and embedding a teaching for mastery approach. In 2021/22 all projects will reflect the importance of prioritising those areas of the curriculum where understanding is essential for pupils to be able to move on.

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.

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
- **NEW** Primary early career teachers
- **NEW** Secondary early career teachers
- **NEW** 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
- 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: Formerly known as Challenging Topics at GCSE, 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.

NEW 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.

NEW 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 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 with a particular focus on Covid recovery.

Covid-19 Recovery

Many positive lessons were learnt from online collaboration during Maths Hubs activity in 2020/21. These will be built upon in 2021/22.

As the impact of the pandemic hopefully recedes, the result for Maths Hubs' work will be a blend of face-to-face activities and frequent online collaboration.



$$+ 4 = 15$$

Local Leaders of Maths Education



The education world has always been awash with acronyms and abbreviations.

So we'll forgive you if you can't instantly decode the four letters above. Is it a railway company? Does it signify an academic qualification? Or is it something handed out in the Queen's Birthday Honours?

No, it's the abbreviation used in Maths Hubs work for those individuals operating in a maths-specific leadership capacity in a local area, usually the same area covered by one of the 40 hubs in England.

Typically, a local leader of maths education – an LLME – is a teacher based at one school, who also operates outside, leading professional development work with teachers and departments in schools in the locality and beyond. At any one time, each hub has 30 or more 'active' LLME leading projects spread over a large part of an academic year.

Most LLME already have, or are working towards, NCETM accreditation as a Professional Development Lead – PD Lead for short. In many cases, these local leaders will be better known by another title describing their role, for example Mastery Specialist, or Work Group Lead with expertise in a particular school or college phase.

As the Maths Hubs Programme is maturing, there is growing recognition

that LLME develop and apply expertise in one or more of three distinct dimensions:

- leading mathematics pedagogy: supporting the work and learning of pupils
- leading mathematics professional development: supporting the work and learning of teachers
- leading school development in maths: supporting the work and learning of school leaders

Across the country there are approaching 2,000 LLME. In every Maths Hub there are strong systems and mechanisms in place that hold the group together, in what's called an LLME Community.

The aim is to enable the LLME to work together, as part of their local

community provides opportunities for its members to engage in constructive practice exchange and challenging professional dialogue, always relevant to the context of the Maths Hub's own region.

The working lives of these LLME oscillate between the classroom and various locations outside. Collectively, these maturing groups of local leaders are beginning to exert an increasing influence on the way maths is taught, on the professional development of those who teach it, and on the institutions where the teaching takes place.



Read more about how LLME Communities are designed and operate

