Welcome to the latest issue of Bespoke, as we approach summer half-term. The programme's nearly four years old now, work is expanding and, across the country, thousands of teachers of maths are visiting each other's classrooms, discussing in detail how maths is best taught and learnt and gradually deepening their own professional leaning.

MATHS HUBS ROLE EXPANDED

With the programme's funding now secure into the next decade, and the network's reach widening year on year, Maths Hubs are gearing up for an expanded role. To support this, initially in the North of England, leadership capacity will be expanded with the appointment of school-based individuals as Assistant Maths Hub Leads. Steps are also underway to create two entirely new Maths Hubs: one serving central Lancashire and one serving Cheshire and the Wirral. Further expansion, in other English regions, is likely to be announced in 2019.

From September 2018, the programme's expanded priorities will be:

- Teaching for mastery in primary and secondary schools.
- GCSE, A level and Core Maths.
- Early Years teaching: building mathematical foundations for Year 1 and above.
- Supporting and influencing mathsspecific initial and ongoing teacher training.
- Increasing the pool of local leaders of mathematics education, who lead professional development, especially in areas of greatest need.



MATHS HUBS COUNCIL

The Maths Hubs Council meets once a term and brings together school-based representatives from hubs in every region. Also round the table are representatives from the NCETM and the DfE. It is here that the priorities of the programme are discussed and policies for the implementation of Maths Hubs work agreed. The Council is chaired, on rotation, by a leadership figure from one of the Maths Hubs. The position is currently held by Kathryn Greenhalgh, from Yorkshire and the Humber Maths Hub.

"The Maths Hubs Council provides a broad and balanced representation from the world of school improvement in mathematics – senior leaders, classroom teachers, NCETM and the DfE. It is a personal privilege for me to chair the council, and I know that all other members feel proud to be able to influence decisions leading to improved futures in the area of maths for all pupils in this country."

National Centre for Excellence in the Teaching of Mathematics

MOVING TO MASTERY

WHY IT MAKES SENSE FOR THESE PRIMARY HEADS

Change can feel risky. Changing the way maths is taught in a primary school can feel very risky.

But our experience with the thousands of schools that have joined the Teaching for Mastery Programme in the last three years has shown that change has overwhelmingly paid off.

So, as Maths Hubs go about recruiting more than two thousand schools to join the programme in September, we thought it worth hearing some of those accounts.



"We've spoken to the children and they tell us now that they enjoy maths and they like it because it's hard and they enjoy being able to challenge themselves. So it's created a buzz around maths in the school, which has been the biggest impact of the programme."



"Initially it improved the quality of teaching of the (two) teachers and gave us a shared vocabulary in terms of improvement in maths. But it's not just the maths. It's about a shared pedagogy, creating a resilient staff who improve their lessons from the bottom up. And our results! We got the best maths results in Hastings last year, and our results will be consistently strong now for the next three or four years".



"We needed to make a change. We all agreed that the teaching for mastery was the whole school priority, and of course its funded so there was nothing to lose". primary schools, and led by a trained Mastery Specialist from a nearby school. Work Groups (sometimes known as Teacher Research Groups, or TRGs) meet regularly to plan, observe and discuss teaching for mastery. In between meetings the teachers will explore mastery approaches both in their own classrooms and across their school, as well as receiving support from their local Mastery Specialist. This model of professional development, involving hands-on learning and peer-to-peer support, is evidence-based and designed to support substantial long-term change. Schools commit to two years' development: the first involves working closely with the Mastery Specialist; the second involves more independent consolidation of changes introduced in the first year

BYOUR SCHOOL Every
Maths Hub in England
Places for primary schools to

There
is no charge
for the professional
levelopment teachers receive

In the first year participant schools receive £1,000 to subside teacher release time, and are eligible to claim £2,000 match-funding to spend on maths textbooks

In the second year, Maths Hub funding is available to support activities that sustain the work

taking place throughout
the summer term. But the
sooner you apply, the higher
your chances of getting a place.
ontact your local Maths Hub for
more details, or visit the NCETM
website (www.ncetm.org.uk/
masteryrecruitment)

The expansion of teaching for mastery into more secondary schools is well underway, driven by a growing team of Mastery Specialists developed within the Maths Hubs programme. A three-year pattern has now been established for each cohort of specialists.

Each teacher focuses principally on their own teaching, adapting some of the principles of teaching for mastery: finding out what works for them in their own contexts.

Each teacher works with the rest of their school's department to try to support school-wide change.

Now fully established as a Mastery Specialist, each teacher works with the maths departments in a pair of local schools, to help them introduce teaching for mastery.

The programme is fully funded from within the Maths Hubs programme with money to release teachers to spend time on in-school professional development and outside school at group residential training events and collaborating with local colleagues.

The second cohort of specialists, recruited in the 2018 spring term have recently attended the first residential event, which leads teachers into deep thought about how they teach their subject, often entering unfamiliar territory. For example, can they really explain why multiplying two negative numbers together gives a positive result? Or give a pictorial explanation of why

'bus stop' division works? Time is also spent thinking about last summer's GCSE papers and what it was that tripped students up, as well as thinking about the sequencing of a topic such as multiplying fractions.

These teachers have been drawn from all over the country, with Maths Hubs carefully selecting to try to reach areas with less historic engagement in the programme. Teachers come with a rich variety of teaching backgrounds and levels of experience and seniority within their school. Some are from schools that have been committed to teaching for mastery for a few years and are ready to contribute the expertise of their staff to schools in the surrounding area. There are others whose school is just beginning to think about what it would mean to begin teaching for mastery and are expecting their participating teacher to guide them through the process.

The sessions at the residential are collaborative and thought provoking, creating rich discussion and building a supportive community that continues contact between residentials through an online NCETM community.

OTHER SECONDARY MATHS HUBS PROJECTS

Alongside, and complementing, mastery work, Maths Hubs are engaged in projects, continuing in 2018-2019, in other areas of importance for secondary maths, including:

- Mathematical thinking for GCSE
- Challenging topics at GCSE
- Year 5 to Year 8 Continuity
- Supporting GCSE re-sit
- Developing A level teaching
- Embedding L level technology
- Supporting Core Maths