

Specialist Knowledge for Teaching Mathematics for Early Career Teachers in Secondary



This project is designed to support secondary early career teachers (teachers in their first two years of teaching) in developing specialist knowledge for teaching mathematics, thus enabling them to understand, teach and support pupils in maths in the classroom.

What is involved?

At a local level, Work Groups will explore one of the following themes of designing effective learning and teaching in maths:

- Structure of the number system
- Operating on number
- Multiplicative reasoning
- Sequences and graphs
- Statistics and probability
- Geometry

Participants will work deeply on one area of maths, drawing in the associated pedagogy, and activities will include lesson analysis and lesson design. This programme will take place across the equivalent of four days.

We are delighted to offer two cohorts for this programme. Both cohorts will be led by experienced secondary teachers with expertise as Professional Development Leads and as members of our Local Leaders of Maths Education (LLME) community.

As a Work Group, this programme encourages participants to work collaboratively to deepen their subject knowledge and develop practice through the supportive learning community. Participants will be expected to use what they learn by carrying out action research in their own school and reflecting on its impact.

"It has impacted the way I model and teach maths. Beforehand, I used to differentiate a lot. Now I provide everybody with the same work and provide some children with more support and other children with challenges to encourage their reasoning and problem solving on the skills."

"I have a greater understanding of maths and I can help children make links through scaffolding my teaching. My own pedagogy has changed as I now see the importance of revisiting concepts all of the time and have added this into my teaching."

What are the benefits?

Participants will:

- ✓ Plan and teach a carefully sequenced and coherent area of maths
- ✓ Appreciate the key ideas underpinning the area of maths being taught
- ✓ Understand key principles and approaches associated with teaching for mastery
- ✓ Understand approaches to assess students' prior learning, so that learning sequences take this into account
- ✓ Make appropriate use of representations to expose the structure of the maths being taught.

Who can take part?

This programme is designed for secondary early career teachers (those in their first or second year of teaching).

Information for Head Teachers

Participants are required to commit to 4 days (or equivalent) of training across the academic year. Training will be a blended model with some face-to-face and some online learning sessions. There is no charge to schools as this programme is fully funded.

More questions?

Our Deputy hub lead Lindsey Hassan will be more than happy to discuss this with you, or answer any questions that you may have. Please get in touch to arrange a meeting: greatnorthmathshub@gmail.com

How do I register?



[Please express your interest](#)



www.greatnorthmathshub.co.uk



[Mail List](#)



[@GNMH_MathsHub](#)

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 our work will be a blend of face-to-face activities and frequent online collaboration.

"This maths course has been very informative and has helped to develop my mathematical knowledge and improve my teaching. Thank you!"