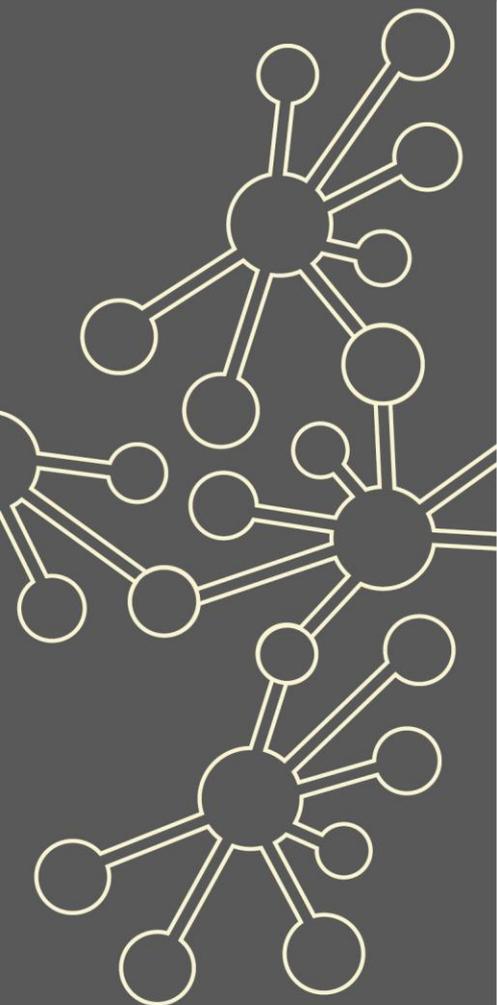


Specialist Knowledge for Teaching Mathematics – Primary Early Career Teachers

Maths Hubs Network Collaborative Projects 2021/22

NCP21-28



Outline

This project is designed to support primary 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.

The focus for this Work Group will be on **Multiplicative Reasoning**.

Details

What is involved?

This Work Group will explore the following theme:

• designing and trialling effective learning and teaching in maths with specific emphasis on developing multiplicative and proportional reasoning. This includes:

- Multiplication and Division
- Ratio
- Proportion
- Rates
- Scaling
- Conversion of units
- Fractions
- Percentages

Participants will work deeply in developing their subject knowledge of this area of maths and will explore the evolution of this topic through Primary and beyond. Participants will also explore different teaching strategies and methods. Using a lesson-study model of professional learning, participants will work collaboratively to design, teach and critically reflect on shared lessons. This programme will take place across the equivalent of four days and may include open-classroom visits.

Who can take part?

This programme is designed for primary early career teachers (those in their first or second year of 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 pupils' prior learning, so that learning sequences take this into account
- ✓ make appropriate use of representations to expose the structure of the maths being taught
- ✓ use a lesson study approach to collaboratively plan and teach carefully sequenced and coherent lessons involving multiplicative reasoning.

What is the cost?

The SKTM – Primary Early Career Teachers project is fully funded by the Maths Hubs Programme so is free to participating schools.

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.



The wider context

'Teachers deserve high quality support throughout their careers, particularly in those first years of teaching when the learning curve is steepest... However, too often, new teachers have not enjoyed the support they need to thrive, nor have they had adequate time to devote to their professional development. The Early Career Framework (ECF) underpins an entitlement to a fully-funded, two-year package of structured training and support for early career teachers linked to the best available research evidence.'

– ECF (Jan 2019)

This project aims to offer high quality maths support for early career teachers, recognising the requirements of the ECF and the impact of Covid on their ITT experience. The ECF underpins what all early career teachers should be entitled to learn about and learn how to do based on expert guidance and the best available research evidence. As is the case for other professions, areas covered in initial training will be covered in greater depth as part of induction as teachers continue their journey to becoming experts. The work in this project will be in line with this, with an emphasis on standards 2, 3 and 4.

Expectations of participants and their schools

Participants and their schools must be able to commit to the **full academic year's programme**. This is likely to involve some face-to-face activity alongside online collaboration.

About the Hub

What is a Work Group?

Work Groups comprise of a group of schools who work on something together over the course of an academic year. Participating teachers will be guided by an experienced Work Group Lead, and will engage in intersessional tasks, trying things out in their classrooms, and feeding back to the group.

More information about the hub

At East Midlands East we are committed to supporting colleagues to become outstanding practitioners – learning from the best of local, national and international practice. We will work with colleagues to provide opportunities to engage with research, develop new practices and to share that development to make a positive impact on learners.

Work Group locations/dates

Dates and venue to be confirmed

Work Group Lead information

Marc North, Senior Research Fellow at the University of Nottingham

Any other relevant information

To register an interest in the programme please follow the link [Expression of interest Form](#)

If you have any queries contact enquiries@ememathshub.org

