Specialist Knowledge for Teaching Mathematics – Secondary Non-specialist Teachers

Maths Hubs Network Collaborative Projects 2021/22

NCP21-30



Outline

This project is designed to support non-specialist teachers teaching maths in a secondary school in developing specialist knowledge for teaching mathematics, thus enabling them to understand, teach and support students in maths in the classroom.

Details

What is involved?

The programme is aligned to the NCETM teaching for mastery pedagogy and is based on six key themes:

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

Participants will explore these themes, supported by an experienced secondary practitioner.

Who can take part?

This programme is for non-specialist teachers of maths in state-funded schools who fit the following definition:

A non-specialist teacher of mathematics is 'a teacher that is currently teaching some mathematics who has not undertaken initial teacher training (ITT) in mathematics'.

If there is sufficient space in the cohort, other teachers of maths who do not fit this definition but would benefit from this support may also participate.

This project will involve the equivalent of 6 full days release time over the year to participate fully.

All sessions will be held online.

What are the benefits?

Participants will:

- explore and increase their use of a range of pedagogic approaches consistent with teaching for mastery
- ✓ increase their confidence in planning for progression in maths
- ✓ improve their subject and curriculum knowledge of secondary maths with a particular emphasis on mathematical structures in key areas.

What is the cost?

The SKTM – Secondary Non-specialists 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

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

- (National Curriculum)

Maths Hubs are well placed to provide training for non-specialist teachers of maths so that these teachers have the opportunity to increase their knowledge and understanding of the intentions of the maths national curriculum and develop their pedagogical skills. This programme is aligned with an overall Teaching for Mastery Programme designed to develop maths teaching in secondary schools.

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

This Maths Hub Work Group will be led by one of Noth West 3's experienced PD Lead holders.

Full dates and venues are yet to be confirmed, further details will be shared with participants in due course.

To express an interest in participating in this Work Group, please email our Secondary Lead - Lindsay Porter at lindsay.porter@three-saints.org.uk

The deadline for expressions of interest is Friday 2nd July 2021.



