

Specialist Knowledge for Teaching Mathematics – Early Years Teachers

Maths Hub Network
Collaborative Projects 2021/22

NCP21-25



Outline

This project is designed to support Early Years teachers in developing specialist knowledge for teaching mathematics, thus enabling them to understand, teach and support pupils in maths in the classroom.

This Work Group will be a blended mix of online and face to face workshops, beginning in the Autumn term of 2021.

Details

Who can take part?

These programmes are designed for individuals who would like to develop their specialist knowledge for teaching maths to three to five years olds. This may be particularly relevant for NQTs, teachers that have moved phases, or teachers that have not received maths-specific training.

What is involved?

There are two types of SKTM Early Years pathways:

- Pathway One: Number Patterns and Structures
- Pathway Two: Pattern, Shape, Space and Measures.

Each pathway has three core elements, three associated pedagogy sessions, and a task to support the transition from theory to practice. There is also a final core unit that aims to review quality provision.

This Work Group will follow Pathway Two: Pattern, Shape, Space and Measure (following Pathway One which was offered in 2020/21).

The programme will take place across the equivalent of four days (of blended online /face-to-face workshops) in the academic year, as well as classroom and school-based activities.

What are the benefits?

Participants will:

- ✓ develop enhanced maths subject knowledge with a particular emphasis on developmental progression in the Early Years to ensure sequences of learning are cohesive
- ✓ consider the learning opportunities and pedagogical approaches across the wider provision – reviewing and enhancing the opportunities to promote mathematical learning across the provision.

Participants who successfully complete the Work Group will be awarded an SKTM Certificate.

All materials, lessons observed and case studies will form a comprehensive professional development package for schools to download and use to enhance other practitioners' subject knowledge.

What is the cost?

The SKTM – Early Years Teachers project is **fully funded** by the Maths Hubs Programme so is **free to participating schools**. *See Terms and Conditions of Booking

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

'Early Years settings and schools should invest in developing practitioners' own understanding of mathematics, their understanding of how children typically learn, and how this relates to effective pedagogy.' – *EEF KS1 Guidance Report*.

It has long been recognised that maths teaching is enhanced when the teachers are confident about the subject matter. Seabourne's work over the period of 2004-06 found that Subject Knowledge Enhancement (SKE) courses led to 'improvements in subject knowledge, attitude, understanding and confidence'. Gibson, O'Toole, Dennison & Oliver's (2013) report on SKE courses across all subjects in which SKE is offered finds that levels of subject knowledge and confidence in the subject are dramatically enhanced on completion of SKE courses.

Maths Hubs work with a range of partners to ensure there is effective professional development of new teachers of maths in primary and secondary schools (and other maths classroom practitioners), so that they have the specialist knowledge required to support the learning of maths. This project is offered to impact on developing the subject knowledge and pedagogical knowledge for all practitioners teaching and supporting the learning of maths.

Expectations of participants and their schools

Schools must be able to commit to the full academic year's programme, with senior leadership releasing the same nominated teacher(s) for a blended mix of the equivalent of four days of online/face-to-face workshops and to support them in completing the gap tasks and wider staff engagement, between each workshop. The department will also support participating teachers to summarise the impact of Work Group participation as part of the professional development and Work Group evaluation.

About the Hub

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[Boolean Maths Hub](#) works with schools & colleges to support the continuous improvement of mathematics education for all students in the following local authority districts: Bath & North East Somerset, Bristol, South Gloucestershire, North Somerset and Somerset. The Maths Hubs Programme is funded by the DfE and coordinated by the National Centre for Excellence in the Teaching of Mathematics.

Information for the Headteacher/Principal – *Terms and Conditions of Booking

Schools must be able to commit to the full academic year's programme. This includes attendance and active participation in the blended mix of the equivalent of four days of face-to-face/online workshops across the academic year, as well as classroom and school-based activities. School leadership must support participants to attend all workshops and, unless there are exceptional circumstances, non-attendance and/or Work Group tasks not being completed may result in a charge to the school/college of £100.

What is a Work Group? [Click here to find out](#)

Work Group locations/dates

This Work Group will start in the autumn term. (Dates to be confirmed)

To book your place on this Work Group follow the link [HERE](#)

If you would like any further information please email booleanmathshub@clf.cabot.ac.uk