

Maths Hub Work Group

Mathematical Thinking for GCSE

A project focusing on ways to help GCSE students improve their mathematical thinking.

Who can take part?

This work group is for teachers of KS4 who want to further develop their pedagogical and theoretical understanding of developing mathematical thinking, and practical classroom strategies to explore these ideas. Lead participants will be expected to lead developments from the Work Group in their own department and so should have the opportunity and authority to do this effectively.

Key concepts – what’s covered?

Exam boards often note that, when students come to GCSE exams, AO2 and AO3 are frequently poorly addressed. This Work Group is designed to:

- offer teachers support so that they are better equipped to help all students develop their mathematical thinking, ultimately preparing them for the challenges of the GCSE and beyond
- increase participants’ experience and understanding of the role of reasoning and problem-solving in the curriculum and understand how these are tested at GCSE
- support teachers in understanding and using participation in a Work Group as the basis of collaborative continued professional development for themselves and within their department.
- demonstrate improved confidence in planning and leading lessons that support deep mathematical thinking

Funding and Dates

The Mathematical Thinking project is **fully funded** by the Maths Hubs Programme so is **free** to participating schools.

Wednesday 11th January Online – 3:30 – 5:30
Wednesday 8th February - Tanners Brook, SO15 4PF –
3:30 – 5:30

Wednesday 1st March – Online – 3:30 – 5:30
Wednesday 29th March – Online – 3:30 – 5:30
Wednesday 17th May – Online – 3:30 – 5:30
Wednesday 21st June – Online – 3:30 – 5:30

Booking information

Information and application for programme can be found on the Solent Hub website:

www.solentmathshub.org.uk

Alternatively, please contact
info@solentmathshub.org.uk
for further information or booking.

What does the programme provide?

Across the academic year:

- ❖ The Work Group is generally structured around **four workshops** with school-based tasks for participants to complete and reflect upon between each meeting. Days One and Four are full days (or equivalent), with Days Two and Three each taking 0.5 days.
- ❖ Depending on participating schools, the Workgroup may be split into six shorter workshops run as afternoon and twilight sessions.

Expectations of Participating 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. During the programme, participants will be asked to undertake tasks with learners to deepen their thinking about the learning of maths, and to share this with colleagues. It is asked that school leaders support their staff to complete this work.