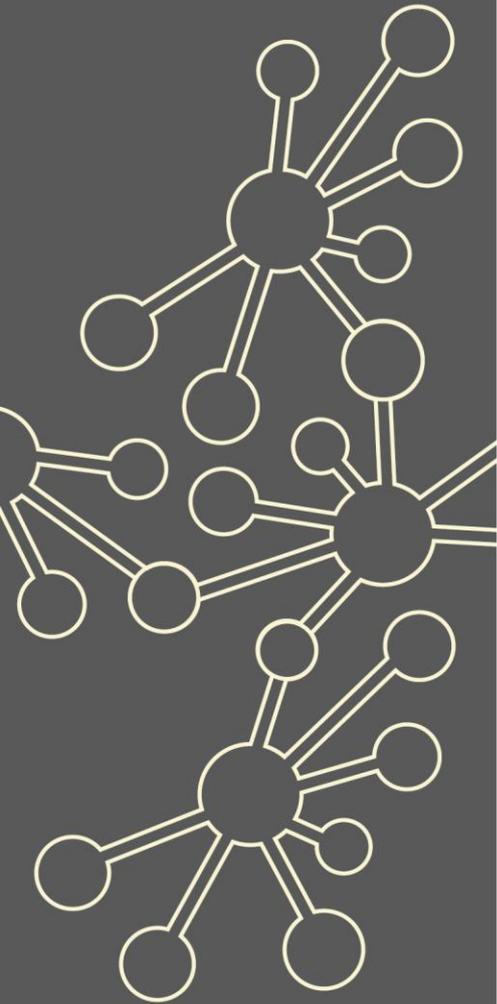


Years 7-11 Coherence

Maths Hubs Network
Collaborative Projects
2021/22

NCP21-18



Outline



This project focuses on participant teachers working together to analyse, deconstruct and trace through the curriculum a selected key topic area, developing insight into effective teaching approaches, and considering the implications for longer term curriculum design.

The project was previously known as Challenging Topics at GCSE, but its name has been amended to more accurately reflect the work undertaken as well as to convey the importance of curriculum coherence.

Details

What is involved?

Local Work Group design will follow a workshop – school-based work cycle, consisting of several workshops followed in each case by specific school-based work. Workshops will provide opportunities for teachers to identify and analyse a key topic area, to work collaboratively to develop pedagogical approaches to it, and to evaluate and discuss after teaching.

There will be three days (or the equivalent) of Work Group meetings across the academic year.

Who can take part?

Participants should be secondary school teachers of GCSE Maths. Individuals or ideally pairs of teachers from a department participate, with an expectation that they will work with other members of their department at appropriate points.

Schools that have participated in previous years may do so again, as developments often take place over time.

What are the benefits?

Participants and their departments will:

- ✓ develop a deeper insight into the maths that underpins learning in a challenging topic, through unpicking and analysing the topic
- ✓ develop a deeper insight into the key issues and misconceptions behind the topic
- ✓ identify misconceptions and plan a series of lessons to support students in the topic area
- ✓ use and evaluate appropriate pedagogies to teach the topic area
- ✓ work with their departments to unpick and analyse topics to inform collaborative planning and development of schemes of work.

What is the cost?

The Years 7-11 Coherence 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

Feedback from teachers, along with GCSE exam analysis, indicates there are key areas of the curriculum that students find challenging. While teachers will need to address students' short term conceptual difficulties with regard to such topics, there is also the recognition that these issues are often rooted in earlier learning, and this forms a key focus for these Work Groups. These Work Groups address strategic goals relevant to secondary schools, specifically: supporting schools to address the challenges of teaching GCSE Mathematics so that all students develop deep knowledge, understanding and confidence, and are well prepared for progression to post-16 education. This project can offer an entry point into developing teaching for mastery approaches, or could support a particular focus for a department already involved in the teaching for mastery programme.

Expectations of participants and their schools

Schools must be able to commit to the full academic year's programme. This involves three days (or the equivalent of) face-to-face or online support (TBC) across the academic year, as well as classroom and school-based activity.

About the Hub

Welcome to NNW Maths Hub, we are one of a network of 40 Maths Hubs in England, working together within the Maths Hub Programme, which began in 2014. The programme is funded by the Department of Education (DfE) and coordinated by the National Centre of Excellence in the Teaching of Mathematics (NCETM).

The Work Group is the model of professional and school development used in most Maths Hubs projects.

A Work Group is:

- **comprised of a group of schools who work on something together, normally over the large part of a school year, typically with one or two teachers from each school acting as lead participants**
- **led by a teacher or former teacher, expert both in the area of maths education in question and in leading teacher professional development**
- **normally part of a national collaborative project, which supports the Work Group Leads and seeks to ensure lessons are learned from around the country.**

Should you wish to apply please complete and return (by email) the registration form or contact NNWCoordinator@queenkatherine.org

