



## National

The Maths Hubs programme, backed by £11 million from the Department for Education, for the first time put schools and colleges in the driving seat to tailor improvement initiatives in their locality, concentrating exclusively on one school subject: mathematics.

The essence of this new initiative is collaboration between a core group of schools, colleges, universities and individuals with proven expertise and experience in helping teachers improve the effectiveness of mathematics lessons, in primary and secondary schools.

32 schools and colleges in England have been selected to take the lead role in a new network of school-based centres, or hubs, designed to improve mathematics education for children and teenagers of all ages across the country.

The entire Maths Hubs programme, linking all 32 hubs across England, is being coordinated centrally by the National Centre for Excellence in the Teaching of Mathematics (NCETM).



## Local

### The GLOW Maths Hub Mathematics Charter

Support  
Research  
Innovate

Enjoy  
Participate  
Achieve

#### teachers

- + all leaders, teachers and teaching assistants have access to high quality teaching and learning conferences
- + all leaders and teachers have the opportunity to get involved in evidence based research – as a team and as an individual
- + all leaders, teachers and pupils have the opportunity to innovate
- + all leaders, and teachers, have the opportunity to become, and have the access to, a 'mathematics improvement partner'/critical friend for coaching and/or mentoring

#### leaders

- + all schools have access to a directory of quality assured onsite/cluster support
- + all schools have access to the Maths Compendium – a collection of 'interesting' practice from across the Hub
- + all leaders have access to 'face to face' network meetings and online webinars, teachmeets, discussion forums, etc

#### pupils

- + all pupils of all ages and abilities have access to enrichment activities and competitions
- + all pupils experience high quality provision on a daily basis; appreciating the beauty and enjoyment of mathematics in it's own right and its importance to enhance their life opportunities and the nation's economy.

*Enjoying mathematics • Creating mathematicians • Breaking down barriers*



## How to get involved ...

DIRECTORY OF SUPPORT	
SLES	
Lead Practitioners	
Schools with recognised mathematics expertise	
Other providers	
RESEARCH & INNOVATION WORK GROUPS	
Title	Description
<b>Mastery Pedagogy for Primary Mathematics (P)</b>	Use of high quality textbooks (linked to Singapore) to support teacher professional development and deep conceptual and procedural knowledge for pupils
<b>Post-16 participation (S)</b>	Intensive project with priority schools and colleges working with FMSP and CMSP
<b>Implementing the 2014 National Curriculum for Primary Mathematics (P)</b>	Collaborative planning, trialing and developing classroom pedagogy and classroom resources to address the aims of the 2014 National Curriculum.
<b>Implementing the 2014 National Curriculum for Secondary Mathematics (S)</b>	Developing conceptual understanding of the 'Big Ideas' in the 2014 National Curriculum for Mathematics, in partnership with Cornerstone, IoE
<b>Implementing the new GCSE Mathematics (S)</b>	Developing effective provision to address the aims, content and expectations of the new GCSEs Exam - in partnership with AQA, Edexcel and OCR.
<b>Arithmetical Proficiency (P/S)</b>	Improving arithmetical proficiency in line with the expectations of the 2014 National Curriculum, In particular: i) pupils' ability to recall quickly and accurately basic 'number facts' ii) pupils being fluent in applying quick, efficient written and mental methods of calculation.
<b>Taking Mathematics Further (S)</b>	Improving participation in mathematics post 16 in partnership with FMSP and CMSP.
<b>Mathematics is Outstanding (P/S)</b>	A school improvement intervention project for primary and secondary mathematics leads and senior leaders (line managers for mathematics). It involves co-ordinating a series of Ofsted Better Maths Conferences, in partnership with Jane Jones, Maths HMI across the region for Requires Improvement/Serious Weakness schools with follow-up forums.
<b>Improving the leadership of mathematics (P/S)</b>	A school improvement intervention activity for mathematics subject leaders. 1) To establish a network of lead departments across the GLOW Maths Hub 2) To develop a 'critical friend' model to support robust self evaluation for established subject leaders 3) To facilitate 'subject residentials' for newly appointed/aspirant subject leaders. The residentials are designed to help subject leaders attain a deep understanding of the vision, systems and operational model of lead mathematics departments.
<b>Enriching Mathematics (P/S)</b>	Developing enrichment opportunities for all children and young people and establishing 'Maths Labs' in lead primary and secondary schools
<b>Yes you can! : Improving resilience and reducing maths anxiety (P/S)</b>	Action research based on the work of Carol Dweck and Jo Boaler - in particular, teachers will engage the power of 'Yet' to improve resilience and the effective use of mistakes and misconceptions to provide opportunities for cognitive conflict and fruitful points of discussion
<b>Improving participation and achievement in mathematics (P/S)</b>	'Research Scholarships' to primary and secondary teachers targeted at developing and researching innovative practice to: - improve the participation in mathematics - develop effective strategies that 'close the achievement gap' between disadvantaged pupils and others - deliver excellent lessons

*Teacher researchers will share the outcomes of their research and inspire other colleagues by:*

- publishing a research report to be shared via the GLOW Maths Hub website
- facilitating local events for interested colleagues
- running workshops at the inaugural GLOW Maths Hub Research Conference July 2015

*Work groups have the potential to lead to NCETM PD accreditation*