“Since joining Mathematics Mastery, the maths teaching in our school has transformed. Students used to think ‘ergghh maths’ and the vibe was very negative. Now, it’s the complete opposite. There is a buzz of excitement and enjoyment around mathematics. When I take a step back and look at where we are now, the significant impact of the Mathematics Mastery programme is clear to see.”

KIERAN COYLE, HEAD OF MATHEMATICS, HAZELWOOD INTEGRATED COLLEGE, NEWTOWNABBEY, NORTHERN IRELAND

About us

Our not-for-profit school improvement programme empowers and equips teachers to improve students’ enjoyment, understanding and attainment in maths.

Mathematics Mastery is research-based and specifically designed for UK classrooms by Dr Helen Drury and a team of experts.

The programme includes five integrated components, which work together to build specialist expertise, develop teachers, improve maths lessons and drive change.

If you want to improve maths provision in your secondary school, email us at partnerships@mathematicsmastry.org. We’d love to hear from you.

We’re driven by a mission to transform mathematics education in the UK.
Why join us

TEACH MATHS WITH CONFIDENCE

A structured programme of maths-focused professional development and high-quality curriculum resources will empower and equip you to give your students a world-class maths education.

FEEL SUPPORTED

We’re with you every step of the way. From pre-launch induction training to an open phone line and regular school visits from your assigned Development Lead, it’s a partnership.

INCREASE STUDENT ENJOYMENT AND ATTAINMENT

Research among our network of more than 500 schools shows our approach is working. 92% of secondary school leaders say the programme has deepened students’ understanding of mathematical concepts.

BE PART OF A NATIONAL NETWORK

Meet like-minded professionals. Collaborate at maths-focused workshops, networking events and professional development sessions to learn from others and share your experience.

LONG-TERM, SYSTEMIC CHANGE

Mathematics Mastery is not a bolt-on service. You invest in us and we invest in you. Together, we enable systemic, long-term change to happen from within.

COHERENT CURRICULUM

Mathematics Mastery schools implement an ambitious, coherently planned and carefully sequenced curriculum.

But don’t take our word for it:

Mathematics Mastery is not a set of worksheets and it’s not just a scheme of work – it’s a holistic approach. It’s hard work, but all teaching is hard work. The programme has given us a shared model and a vision to work towards.

NILAISH SHARMA, SENIOR LEADER, BORDESLEY GREEN GIRLS’ SCHOOL

The steady roll out of the programme is key. It does develop over time and two years down the line, there’s a huge difference among our maths department and students.

DAVID BREWSTER, SENIOR LEADER FOR MATHS, PHILIP MORANT SCHOOL

It’s very cool to see how students really get into the material. We’re in a city school with some very difficult students and now they are engaged and having arguments about maths. Based on the strength of pedagogy Mathematics Mastery brings, I’ve certainly seen better structured talk, more resilience to problem solving and many more students getting started on harder problems.

TOM VINTEN, DEPUTY HEAD OF MATHS, ARK ALL SAINTS ACADEMY

Mathematics Mastery supports our team’s professional development and we love planning together. It’s every maths teacher’s dream – doing the maths! The impact of discussing good questions and recognising the misconceptions that might arise provide a solid platform for pupil engagement and progress.

KAREN GRAY, MATHS TEACHER, MALONE COLLEGE
Our principles

While our programme content evolves each year, the ethos behind it remains the same. The principles are interconnected and grounded in world-leading educational research.

SUCCESS FOR ALL
Every child can enjoy and succeed in mathematics as long as they are given the appropriate learning opportunities. A growth mindset enables students to develop resilience and confidence.

DEEPER UNDERSTANDING
Students must be given time and opportunities to fully explore mathematical concepts. The challenge comes from investigating ideas in new and complex ways – rather than accelerating through new topics.

PROBLEM-SOLVING
Enabling learners to solve new problems in unfamiliar contexts is the ultimate aim of mathematics education. Identifying, applying and connecting ideas enables students to tackle new and more complex problems.

MATHEMATICAL THINKING
Successful mathematicians are known to develop mathematical ‘habits of mind’. To encourage this, we must support students to be systematic, generalise and seek out patterns. Questioning is a key element of this.

MATHEMATICAL LANGUAGE
Mathematical language strengthens conceptual understanding by enabling students to explain and reason. This must be carefully introduced and reinforced through frequent discussion to ensure it is meaningfully understood.

MULTIPLE REPRESENTATIONS
Objects, pictures, numbers and symbols enable students to represent ideas and make connections in different ways. This develops understanding and problem-solving skills – whilst making lessons engaging and fun.
What the experts say

Our studies show that teaching people to have a growth mindset, which encourages a focus on effort rather than on intelligence or talent, helps make them into high achievers in school and in life.

CAROL DWECK, PROFESSOR OF PSYCHOLOGY, STANFORD UNIVERSITY

We know that learning mathematics is more powerful, deeper and longer lasting when children make connections between different mathematical ideas.

MIKE ASKEW, PROFESSOR OF MATHEMATICS EDUCATION, WITS UNIVERSITY

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. Pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

NATIONAL CURRICULUM 2014

To learn mathematics effectively, pupils need to talk about their mathematical ideas, negotiate meanings, discuss ideas and strategies and make mathematical language their own.

CLARE LEE, LANGUAGE FOR LEARNING MATHEMATICS

Pupils who use concrete materials develop more precise and more comprehensive mental representations, they often show more motivation and on task behaviours, understand mathematical ideas and better apply these to life situations.

TERRY ANSTROM, SUPPORTING STUDENTS IN MATHEMATICS THROUGH THE USE OF MANIPULATIVES
Our impact

We want all pupils to achieve. But when looking at the impact of our programme, we believe it’s important to look beyond test scores.

We look at levels of student enjoyment, understanding and attainment in mathematics, as well as how the programme is developing teacher practice.

As a result of consistently high-quality teaching materials and comprehensive professional development for teachers in primary and secondary schools, more than 200,000 students are better equipped to solve problems and achieve more.

Our results

An Education Endowment Foundation trial found that pupils using the Mathematics Mastery programme for one year made an additional one month of progress compared to other pupils.

This impact can be seen in GCSE results. Students who studied Mathematics Mastery at key stage 3 had an average progress score of +0.2 in 2018, equivalent to three months additional progress compared to the national average.

School leaders tell us:

• 92% say the programme has deepened students’ understanding of mathematical concepts.
• 88% say students enjoy maths lessons.
• 96% say the programme has improved maths teaching in their school.
• 96% say the programme is easy to use, and over two thirds say it is helping reduce teacher workload.
Professional development

Our offer of continuing professional development integrated with expertly designed, adaptable schemes of work and resources is unique.

LEADERSHIP OF MATHEMATICS COURSE FOR YOUR MATHS LEAD

The Mathematics Mastery programme expands your in-house expertise by enrolling one member of staff onto a one-year long ‘Leadership of Mathematics’ course.

The course focuses on developing subject leadership skills, pedagogical understanding and classroom practice.

Your nominated maths lead is then supported to cascade professional development across your maths department through delivery of workshops on Mathematics Mastery’s key principles.

The course includes three face-to-face sessions and is supported by guidance and resources throughout the year.

INDUCTION TRAINING FOR TEACHERS

Designed to support everyone who is teaching Mathematics Mastery for the first time.

This comprehensive and collaborative training ensures teachers are equipped with the knowledge, understanding, resources and skills to hit the ground running.

We will develop teachers’ knowledge and leave them confident, inspired and ready to launch the programme.

As you renew the programme over the years, we will make Induction Training available for new members of staff to ensure that each team member can deliver the programme.

MEMBERSHIP OF A NATIONAL PARTNERSHIP

When you join the Mathematics Mastery programme, you are joining a national partnership of schools – all of whom share our mission to transform mathematics education in the UK.

Every year, hundreds of teachers attend the Mathematics Mastery Annual Conference – one of the largest maths education events in the country.

Membership of our national partnership gives you access to a network of like-minded schools.

You can collaborate with other schools, share case studies and best practice, and access the latest thinking on maths teaching.

ONGOING SPECIALIST SUPPORT

Each Mathematics Mastery school is assigned a designated Development Lead who supports you with professional development, additional training and action planning throughout the year; all bespoke and driven by your needs.

Our Development Leads are experienced classroom teachers or senior leaders. They have all been carefully selected and trained as Mathematics Mastery specialists.

Your Development Lead will follow up on launch with a school visit and development sessions to observe, reflect and support you.

They will provide ongoing support and guidance via email and phone to ensure the programme meets the needs of your teachers and pupils.
Our professional development directly supports use of our classroom resources and planning support for ease of use and greatest impact.

Mathematics Mastery lessons are interactive, fast-paced and fun. You'll receive a curriculum designed by experts and a wide range of materials to support your teaching.

All materials are accessed through the Toolkit, our online programme hub.

You’ll get:

- **The Mathematics Mastery curriculum**: schools receive a detailed mathematics curriculum.
- **Fully resourced lessons**: clearly structured lesson resources, including warm-up tasks, talk tasks, teacher-led activities, written exercises, plenaries and exit tickets.
- **Teacher planning support**: teacher guides for each lesson.
- **Short PD videos**: available for each lesson to support teachers to implement mastery approaches.
- **Questions for Depth**: each written practice exercise will have questions for depth embedded within.
- **Programme of ‘step-by-step’ intervention lesson materials**: designed to support students who are struggling to access the curriculum or have gaps in their learning, carefully matched to classroom resources.
- **Planning resources for your department**: Ongoing programme of in-school maths department workshop resources to support the planning and delivery of each unit’s work, including ideas for multiple representations, language and communication and mathematical thinking.
- **Suite of optional assessment tools**: A complete set of Mathematics Mastery formative assessment quizzes on the Eedi platform, as well as formal end-of-year assessments.
How it works

Mathematics Mastery is a long-term investment and most schools aim to roll the programme up one year group after another each year after launching in the first year with their Year 7s.

Getting ready for launch

Day 1 of the Leadership of Maths course for your nominated Mathematics Master School Lead (MMSL) and Headteacher.

Induction training. An essential one-day training course for all teachers who are new to the programme.

An introductory video call from your Mathematics Mastery Development Lead to help you build a bespoke action plan for your school.

Launch

Day 2 of the Leadership of Maths course for your MMSL, with focus on:

• the ‘plan > teach > evaluate’ approach
• embedding the Mathematics Mastery principles
• establishing a culture of professional development at your school

Don’t forget: Your development lead is available throughout the year, whenever needed.

Support throughout your launch year

The Mathematics Mastery Conference – an annual collaborative event for all MMSLs to share best practice and hear about new research insights.

Two school visits and a development session to give your team support through mentoring, coaching, observation of lessons and action plans.

Day 3 of the Leadership of Maths course for your MMSL, with focus on:

• embedding the feedback framework
• practical tools for driving change in your team

Headteacher Celebration Event – An opportunity for senior leadership teams to share their experience of the programme.

Induction Training for new teachers – either for those in year groups that the programme is rolling up to or for those who are new to your school.

What happens after your launch year?

Each year you can roll the programme up into the next year group.

• As you roll the programme up through the years, you will continue to receive one visit and two remote development sessions from your Development Lead across each year.

• Your MMSL can attend the Mathematics Mastery Professional Development Day to look at latest developments and techniques for use as part of the programme.

• Your MMSL will be invited to the annual Mathematics Mastery Conference to hear from leading maths education researchers and fellow MMSLs on best practice.
Join Mathematics Mastery and you’ll become part of a national network

We became a Mathematics Mastery partner in 2016, after I took over as Head of Maths. Our Department is now completely different, and our GCSE results have massively improved. Mathematics Mastery has been a big part of our transformation.

ANGELA JOHNSON, HEAD OF MATHEMATICS, PARKLANDS ACADEMY, CHORLEY

As a senior leader, my role has been to support our Mathematics Mastery School Lead to drive the programme forward while giving them the freedom to lead in the maths department and in the classroom. Working this way is having a real impact on student progress and we’re excited for the future.

STEVE BACON, SENIOR LEADER FOR MATHEMATICS, MEADOWHEAD SCHOOL, SHEFFIELD

My advice for success on the Mathematics Mastery programme is to really engage with the resources provided and do not be afraid to adapt them to suit your classroom. The quality of our lessons has definitely improved as we’ve become more confident in our own teaching.

DEB JOHNSON, ASSISTANT VICE PRINCIPAL, MERCHANTS’ ACADEMY, BRISTOL

Our Year 10 students (who started the programme in Year 7) are confident in their mathematical understanding and skill. They demonstrate their ability to problem-solve and their ability to explain the mathematics. They don’t give up and they’ve learned to push themselves. There is a real buzz in maths lessons now.

BECKY STEER, MATHS HEAD OF DEPARTMENT, CHARTER ACADEMY, PORTSMOUTH
The joining process

Step 1
GET IN TOUCH
Hopefully after reading this you’ll feel informed, inspired and ready to join.

Email partnerships@mathematicsmastry.org or call us on 020 3096 7987 if you still have questions.

Step 2
APPLY ONLINE
Complete a short application to confirm your commitment and nominate your Mathematics Mastery School Lead (MMSL).

Step 3
APPLICATION ACCEPTANCE
We aim to notify you within five days.

Step 4
GETTING READY TO LAUNCH
You’ll receive login details for the Toolkit, dates for Induction Training and an introductory call from your Development Lead.

Step 5
LAUNCH
All stations go. Launch the programme in your school, with support on tap from your specialist Development Lead.

Go now to mathematicsmastry.org and click on Join Us to get started.

Toolkit

When you join the programme, you will be given access to the Mathematics Mastery Toolkit where you will find:

• Complete classroom resources and planning support.
• Comprehensive assessment materials.
• Explanatory and instructional video content.
• Educational research articles.
• Blog posts on latest policy developments.
• The Mathematics Mastery event booking portal.
A note from Mathematics Mastery’s Founder and Executive Director

Teaching maths – and doing it brilliantly – can be tough.

While many curriculum subjects are about sharing knowledge, teaching maths is about building an interconnected understanding. Not only that – the concepts which students need to understand and become skilled in are often highly abstract.

The UK has trailed behind countries like Singapore, Japan and Finland who have identified and systematically adopted ways to help students do this. The attitude and attainment of UK students – many of whom find maths too hard, too boring or too irrelevant to everyday life – reflects how we have failed to do this.

Mathematics Mastery exists to raise expectations for teachers and students and to break this cycle.

The road to mastery is not a short one, but teachers working with us for several years tell us a transformation has taken place within their school – paving the way for a future of increased achievement in mathematics.

Join our programme to transform the provision of mathematics in your school.

DR HELEN DRURY