TUESDAY
2ND JULY 2019

NEWARK
SHOWGROUND

MathsHUBS
East Midlands East | East Midlands South | East Midlands West

SECONDARY MATHS CONFERENCE

SUPPORTING SECONDARY SCHOOLS

INVITATION

We are delighted to invite you to our joint East Midlands East, South and West Secondary Maths Conference on **Tuesday 2nd July 2019**.

The day will include a keynote address by Rob Eastaway, with a focus on What's the difference between a puzzle and maths question?

The conference is for Maths Curriculum Team Leaders or seconds in department.

DETAILS

Venue: Newark Showground, Lincoln Road, Winthorpe, Newark NG24 2NY
Cost: £30 for the Maths CTL or £50 for the Maths CTL and one other.
What's included: Lunch and refreshments for all delegates

How to book: **Bookwhen**

AIM

To support development in Secondary School Maths departments.

Opportunities and resources will be provided for discussion between Heads of Department and Senior Leadership line managers focused around the following areas:

- Secondary Teaching for Mastery
- Maths and creative Problem Solving
- Advanced Maths Support Programme (AMSP)
- Primary Mastery – what can you expect from students
- What's it like to be part of a Network Collaborative Project (NCP)?
- Variation Theory
- Representation and Structure
- Secondary Opportunities working with Maths Hubs

There will also be a Market place this year throughout the day with stalls showing Maths Hubs/Exam boards and textbooks.

AGENDA

09:30-10:00	Registration	
10:00-11:00	Introduction and aims of the day	Ryan Metters/Jayne Ireland/Chris Shore
	Keynote: What's the difference between a puzzle and a maths question?	Rob Eastaway
11:00-11:45	How does research support Teaching for Mastery?	Margaret Young NCETM Regional Lead
11:45-12:00	*Break*	
12:00-12:45	Morning workshops	
	1. Maths and creative problem-solving	Rob Eastaway
	2. What the AMSP can offer us	Natalie Vernon
	3. Teaching for Mastery at primary schools	Tom Isherwood
	4. What's it like to be part of an NCP?	
	5. Variation theory	Dr Tom Bennison
	6. Using Representations to make sense of maths concepts	Peter Mattock
12:45-13:00	Reflections and writing of questions	
13:00-13:45	*Lunch and networking*	
13:45-14:30	Afternoon workshops	
	1. Maths and creative problem-solving	Rob Eastaway
	2. What the AMSP can offer us	Natalie Vernon
	3. Teaching for Mastery at primary schools	Tom Isherwood
	4. What's it like to be part of an NCP?	
	5. Variation theory	Dr Tom Bennison
	6. Using Representations to make sense of maths concepts	Peter Mattock
14:30-15:15	Secondary Teaching for Mastery	Jai Sharma/Dave Berry/Peter Mattock
15:15-15:30	Closing remarks/evaluation	Ryan Metters/Jayne Ireland/Chris Shore

SPEAKERS

Rob Eastaway, Director and founder of Maths Inspiration

Rob is closely involved in the world of maths from books he's written and radio shows to theatre-based lecture shows and numerous talks to varied audiences. In 2016, he received the Zeeman medal for excellence in the promotion of maths and is close to several of the UK's leading maths bodies.

Margaret Young – NCETM Regional Lead

Margaret joined NCETM in June 2018 as Regional Lead for Humber and East Midlands. She is passionate about ensuring all children enjoy, engage and progress in mathematics learning and has over 30 years' experience working both in the classroom and as a mathematics advisor independently.

Dr. Tom Bennison

Following completion of a PhD in Applied Mathematics, Tom Bennison is pursuing a career in teaching and is now the Level 3 Lead for the East Midlands West Maths Hub. With experience of teaching undergraduates, postgraduates and school students he is keen to support other teachers deliver A-Level Mathematics. He views the introduction of the new syllabus as an opportunity to expose students to mathematics; not just past exam questions. He is a proponent of technology in the classroom and advocates the use of interactive activities alongside the more traditional exercises to develop understanding and intuition amongst students. He is one of the editors for the Tarquin Group A-Level series.

Natalie Vernon, Advanced Maths Support Programme National Coordinator

Natalie is an AMSP National Coordinator who works in conjunction with area Coordinators to support all areas of Level 3 Mathematics including A-Level Maths, Core Maths and Further Maths.

Dave Berry – Secondary Teaching for Mastery Lead – East Midlands West Maths Hub

Dave is Secondary Maths Lead for the East Midlands West Maths Hub. Graduating from Leicester Polytechnic with a first class honours degree in mathematics Dave then embarked on a 34-year long career teaching mathematics, serving 24 years as a Senior Leader including 8 years as a Principal. He developed the HSBC sponsored first ever online GCSE Mathematics course whist serving at Thomas Telford School, the hugely successful and influential City Technology College in Shropshire, and contributed, through meeting with Professor Adrian Smith, to the Making Mathematics Count Report during that same period. During the last three years Dave has worked as Senior Director of Mathematics for Delta Academies Trust, and in this role has written their KS3 Mastery Programme including a complete suite of resources for Year 7 and Year 8. Additionally, Dave has served as a Lead Assessment Writer for AQA and resource developer for Pearson, both concerning the new linear AS and A levels, encompassing both Maths and Further Maths.

SPEAKERS

Kate Auld – Secondary Work Group Lead

Kate is a Secondary mathematics teacher with a number of years' experience teaching students from Year 7 to Year 13. Before embarking on a teaching career, Kate was an engineer. Kate has also been involved with the East Midlands East Maths hub both as a participant in an Network Collaborative Project (NCP) and more recently as a workgroup lead.

Jai Sharma – Secondary Teaching for Mastery Lead – East Midlands East Maths Hub

Jai has been involved in the introduction of mastery within a secondary context since 2016, initially as part of a group of schools looking at curriculum development, and then as one of our first cohort of Secondary mastery specialists. Jai has worked with Doreen Connor from Nottingham Trent University on a project entitled 'developing a concrete-pictorial-abstract model for negative number arithmetic' which was presented at the ATM/BSRLM conferences and published in their journals. In Jai's role, he is responsible for the co-ordination of all Secondary Teaching for Mastery activities, including supporting our cohorts of Secondary Mastery Specialists.

Tom Isherwood, Primary Maths Mastery Specialist Lead

Tom is currently a Primary Maths Mastery Specialist Lead at East Midlands West Maths Hub. He has been an integral part of the Primary Teaching for Mastery programme for a number of years.

Peter Mattock – Secondary Teaching for Mastery Lead – East Midlands South Maths Hub

Peter Mattock has been teaching mathematics in secondary schools for over 13 years and leading maths departments for over 8 of those. He is a regular presenter at mathematics conferences across the country. Peter is deeply involved in the work of the East Midlands South Maths hub and has been accredited as an NCETM Secondary Mathematics Professional Development Lead and a Mathematics Specialist Leader in Education. Peter is also one of the first secondary maths teachers to take part in the NCETM Secondary Mastery Specialist programme, which is aimed to explore how approaches for teaching for mastery can be developed for the secondary classroom, and now works as the Secondary Mastery Lead for East Midlands South. Peter tweets from @MrMattock and has run several organised Twitter chats on behalf of the NCETM, particularly around the subjects of the use of concrete and pictorial representations as well as other areas of teaching for mastery development. Peter's book "Visible Maths: Using representations and structure to enhance mathematics teaching in schools" is available on the Crown House Publishing website, through www.amazon.co.uk or from your preferred local book shop.

WORKSHOPS

Teaching for Mastery at Primary School – what can you expect from your students?

This session highlights recent developments in Teaching for Mastery at Primary school and will focus on what we as Secondary practitioners can expect to see from students who have been exposed to the approach.

Secondary Teaching for Mastery – The journey so far...

As Teaching for Mastery becomes more embedded in Primary schools across our region, attention is turning to how these principles can be applied effectively within a secondary context to support students mathematical understanding. This session will outline the Teaching for Mastery journey in secondary schools so far highlighting the role of the mastery leads and specialists and how they are working collaboratively with mastery advocates in work group schools to introduce mastery within their faculties.

Variation Theory

In this session Tom will be investigating how Variation Theory can support student learning.

What's it like to be part of a Network Collaborative Project (NCP)?

In this session Kate will share her experiences of both aspects of her involvement, focussing on the Mathematical Thinking for GCSE effectiveness workgroup.

How does research support Teaching for Mastery?

Is Teaching for Mastery new? Where does it come from? Why do we think it 'will work'?

These are all questions that have been pondered on since the introduction of Teaching for Mastery. In this session we will look at different pieces of research, past and present, exploring where and how this research is reflected in the Teaching for Mastery big ideas.

Using Representations to Make Sense of Maths Concepts

In this session Peter calls on the some of the strategies in his book "Visible Maths" to showcase how manipulatives and images can be used to support pupils in making sense of mathematical concepts. Peter will demonstrate how multiple representations can provide strong foundations for big ideas in maths, so that pupils can build upon a secure understanding at each stage along their journey through the subject.

What the Advanced Maths Support Programme (AMSP) can offer us...

This session will highlight the role of the AMSP and the range of opportunities available for maths departments to engage with. Natalie will also share how the AMSP and Maths Hubs are working collaboratively to deliver Level 3 workgroups.