

BBO MATHS HUB NEWSLETTER

Term: Summer | Issue 5 | Date: 26 May 2023

NEWS FROM JENNIE FORDE, MATHS HUB LEAD AND PRIMARY LEAD

Welcome to the latest edition of the BBO Maths Hub Newsletter!

As we find ourselves reaching the final half term of another academic year, it's time to reflect on some of the fantastic work that has been completed this year with schools and look forward to the exciting developments that lie ahead. The exam season is well and truly underway, and so many of you will have been working tirelessly to prepare your students to navigate the pressures of SATs, GCSE and A level exams. We commend the efforts of all involved and wish everyone success as they navigate through these significant milestones.



Looking ahead to the 2023/24 academic year, it is time to set the stage for success. Careful planning and collaboration between teachers, schools, and the wider education community are essential in creating the best opportunities for students in our schools. The BBO Maths Hub continues to serve as a valuable partner for maths professionals and school leaders, fostering partnerships and sharing best practices among teachers and school leaders. Through events, work groups, and collaborative projects, we aim to work together to develop the tools and strategies needed to unlock the mathematical potential of all students in our region.

The Maths Hub programme is a dynamic and ever-evolving initiative that strives to meet the diverse needs of all schools. As we gear up for the academic year 2023/24, we are delighted

to share that there are exciting developments underway. We recognise that every school is at a different stage in their mathematics journey, and we have something valuable to offer to all. Whether you are just beginning to explore the teaching for mastery approach or seeking to enhance your existing practices, we have a range of collaborative opportunities to support your school's unique goals. We invite all schools, regardless of their current position, to get in touch with us, as we are here to support you on your mathematics education journey.

In addition to our commitment to innovation and collaboration, the BBO Maths Hub has been actively working to evaluate the impact of our initiatives in schools. We understand the importance of evidence-based practice and the need to continually assess and refine our approaches. We encourage schools to share their success stories and case studies with us, highlighting the impactful work happening in their classrooms and schools. By showcasing these examples of effective teaching and learning, we hope to inspire and motivate others while fostering a culture of sharing and continuous improvement. We believe that by working together and learning from each other's experiences, we can make a collective and lasting impact on mathematics education in our region. Please get in touch if you have a story that you would like to share about the impact that collaboration with the BBO Maths Hub has had in your school.

Thank you for your continued support, and together, let's embrace the exciting possibilities and shape the future of mathematical learning in our region.

CONTENTS

[Page 3: OPEN EVENTS AND RECRUITMENT OPPORTUNITIES](#)

[Page 7: PRIMARY ARTICLE - What is the Problem with Problems?](#)

[Page 12: SECONDARY ARTICLE - Enhancing the teaching and learning of A-level Mathematics](#)

[Page 13: PRIMARY WORK GROUPS NOW ACCEPTING APPLICATIONS](#)

[Page 16: SECONDARY WORK GROUPS NOW ACCEPTING APPLICATIONS](#)

[Page 18: ALL OTHER WORK GROUPS FOR 2023/24](#)

[Page 19: NCETM NEWS AND FEATURES](#)

[Page 20: OTHER EVENTS AND OPPORTUNITIES](#)



If you are having trouble opening the links in this newsletter in the online viewer please click on the book icon on the bottom right to disable page turn transitions



Developing Mathematical Oracy to support Reasoning

PRIMARY

BBO Maths Hub is offering an opportunity to find out about Primary Mathematical Oracy and how it can have a positive impact in your school.

We are holding an open event with Brenda Robertson on the 20th of June, 3:45-5:15pm.

This session will give further information on the Primary Oracy programme and how it can support teachers in developing oracy skills in mathematics to support pupils in deepening understanding and developing and extending reasoning skills. This taster session would be suitable for school leaders and subject leads who might be looking to develop a whole school strategic approach, or class teachers wishing to further develop their skills and strategies for effective teaching.

This session will be led by Brenda Robertson,

When: **20 June 2023, online**

Time : **3:45pm – 5:15pm**

[BOOK NOW](#)



Preparing for an OFSTED Deep Dive

PRIMARY

The BBO Maths Hub is delighted to offer you an opportunity to join us for a professional development session designed specifically for subject leads in primary schools who are preparing for an OFSTED. The session will discuss strategies to help to navigate the deep dive process with confidence and ease. It will explore what an OFSTED deep dive entails and how to prepare for it.

This session will be led by Kelly DeSantis, Assistant Executive Headteacher at Longford Park Primary School.

When: **15 June 2023, online**

Time : **3:45pm – 5:00pm**

[BOOK NOW](#)



Flexibility in Mental Calculation – Using the Number Talks Approach Taster Session

PRIMARY

Mental fluency supports number facts, tables facts and making connections. In a Number Talk, these areas form the basis for discussion and underpinning this, variation, mathematical discussion and representation (the Big Ideas of Mastery Mathematics).

The importance of mental fluency supports easily recalled number facts from long term memory to support quick recall and longer, written algorithms. Without this both speed, written calculations are impaired and often, with this, number confidence.



Number Talks were created by Kathy Richardson and Ruth Parker in the early 1990s * to engage students in meaningful mathematical discourse and sense-making as well as transform the culture of the classroom to one of inquiry and curiosity.

What is a Number Talk?

Number Talks are an approach to developing facility with computation that engages children in thinking about numbers and allows them to add, subtract, multiply and divide using the mathematics that is meaningful to them.

The typical steps for a number talk are:

- Teacher presents an expression or problem for pupils to solve mentally.
- Allow adequate “wait time” for most students to come up with an answer. pupils can signal with a thumbs up when they have solved the expression.
- Initially, invite pupils to share their answers only, not their solutions.
- Then ask for pupil volunteers to share how they solved the problem.
- For each pupil who shares their solution strategy, chart their thinking on the board. Make sure to accurately record their thinking; do not shape or correct their response.
- Have several pupils who used different strategies share their thinking with the class.
- Invite pupils to question each other about their strategies, compare and contrast the strategies, and ask for clarification about strategies that are confusing.
- Parrish, S (2011) in the Article ‘Number Talks Build Numerical Reasoning’ also highlights the connections to the Mastery Model ‘Build Mathematical Thinking’,
- ‘The benefits of sharing and discussing computation strategies are highlighted below. Students have the opportunity to do the following:
 - Clarify thinking.
 - Investigate and apply mathematical relationships.
 - Build a repertoire of efficient strategies.
 - Make decisions about choosing efficient strategies for specific problems.
 - Consider and test other strategies to see if they are mathematically logical.

This taster session will be held online by Jean Knapp on **Tuesday 27 June 2023 – 3:45- 4:25pm.**

BOOK NOW

The BBO Hub is Recruiting for a Developing Core Maths Work Group Lead

POST 16

As you may be aware, Core Maths is relatively new qualification first examined in 2016. Currently there are about 800 state-funded schools and colleges offering the course and this number is slowly growing. The BBO Hub needs to recruit a Core Maths Lead to run our Core Maths Pedagogy Work Group for the next academic year and potentially beyond. The new Lead would also join the Local Leaders of Maths Education Community enabling them to access the wealth of experience and knowledge within the group.

The lead will be expected to :

- Attend NCETM training, where they will develop their skills to run the group alongside other more experienced leads.
- Plan, deliver and evaluate sessions to support good teaching and learning practice with mastery pedagogy approach with other schools and colleges.
- Attend Maths Hub events alongside the other Local Leaders of Maths Education to further develop their leadership skills and understanding of mathematics pedagogy across the phases or education.
- Complete the PD Lead Accreditation either this year or next year.

For more information on the role, please click the button and submit your application to us at info@bbomathshub.org.uk by **16 June**.

MORE INFO

ECT Opportunities with BBO Maths Hub

PRIMARY

SECONDARY

In preparation for the end of term, please can we trouble you to share the following form and information with your Early Career Teachers that will be working in Oxfordshire, Buckinghamshire, Slough, Maidenhead or Windsor areas, to receive support from the BBO Maths Hub in 2023-2024. It's fully funded and will help new teachers feel more confident and in control at the beginning of their careers, supporting greater staff retention and better educational outcomes. For teachers that will be based outside of this area they can contact their **local Maths Hub** to access the same programmes with them.



This will cover the mathematics subject specific teaching pedagogies and subject knowledge enhancement for your trainees. Thank you.

GO TO FORM

PD LEADERSHIP OPPORTUNITY FOR 2023/24

SECONDARY

The NCETM and Maths Hubs are still accepting applications for the **Secondary Mastery Specialist** programme, designed to develop teachers as experts in teaching for mastery and the leadership of professional development.

What does the programme involve?

All the programmes are designed to develop teachers as local leaders of mathematics education (LLME), who lead various strands of activity of their Maths Hub at a local level.

The Secondary Mastery Specialist Programme is in its eighth year. All Mastery Specialists are classroom-based practitioners who develop teaching for mastery in their own classrooms, and go on to lead Work Groups to support other schools or colleges and their teachers locally.

How can you apply?

When you have secured the support of your headteacher/senior leader, complete the online application via the button below:

APPLY NOW



TEACHING FOR MASTERY OPEN LESSONS

SECONDARY

The BBO Hub has been offering several opportunities to find out about Teaching for Mastery and how it can have a positive impact in your school by observing Maths lessons based on the Mastery Approach.

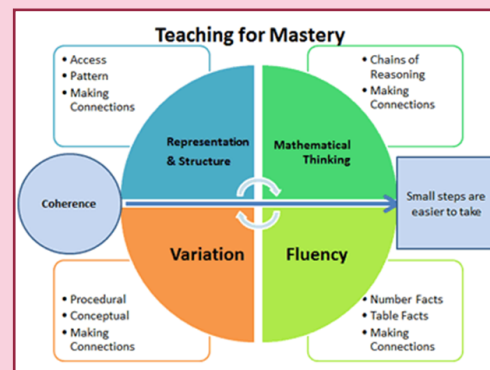
Mastering maths means acquiring a deep, long-term, secure and adaptable understanding of the subject. At any one point in a pupil's journey through school, achieving mastery is taken to mean acquiring a solid enough understanding of the maths that's been taught to enable him/her move on to more advanced material.

These sessions are a valuable opportunity to observe a maths lesson based on the Mastery Approach and ask the team at the hosting school about their own Mastery journey.

Click on the links below to register your place:

WYCOMBE HIGH SCHOOL – 8 JUN 8.20am

SLOUGH AND ETON COLLEGE – 6 JULY 12.25pm



What is the problem with problems?

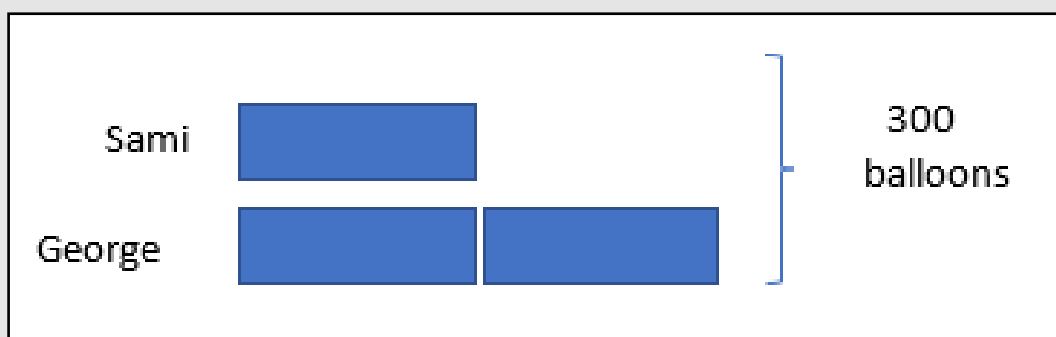
Natalie Ivey, Assistant Maths Hub Lead - Secondary, BBO Maths Hub

I find that whenever I talk to primary or secondary teachers often Problem solving comes up as an area for development- so why is this and what can we do about it? Why do children of all ages find this so difficult? Reasons that teachers often give suggest pupils do not know where to start and they can do the 'Maths' (referring to the working with number or calculation side) but cannot find a way in. This is echoed through much research from George Polya, a Hungarian Mathematician who famously wrote the book "How to Solve it" in the 1950s but also Kirstin Mulholland in a recent EEF blog.



One of the difficulties many pupils have, and it is certainly what I experience in the classroom is the initial sense making or what George Polya describes as stage 1 in the problem-solving process as "understanding the problem". Within this article we are going to concentrate on contextual 'word' problems.

One strategy seen in the classroom is underline the key information however there are flaws in this approach. If we take a basic example and look at the language itself pupils may make a common error tacking this problem. "George had twice as many balloons as Sami. Altogether they had 300 balloons between them." Simply looking for key information pupils may see the word twice and associate it with multiplying and dividing by 2 and halve 300 without 'seeing' the 3 parts, obviously including Sami's too in the total. This is when drawing a picture to represent the problem might be beneficial in helping pupils to access the 'story'.



What is the problem with problems?

Natalie Ivey, Assistant Maths Hub Lead - Secondary, BBO Maths Hub

Sometimes pupils are drawn into computations too quickly and try to calculate battling with the context and quantities presented. In Robert Kaplinsky's (Teacher and Education, UCLA, California) famous trial with pupils in 8th Grade (Y9) the results were astounding. He asked, "There are 125 sheep in the flock and 5 dogs in a flock. How old is the shepherd?" Almost $\frac{3}{4}$ of the pupils tried to compute this question with answers ranging from 5 years to 130 years old.

See it here: <https://robertkaplinsky.com/how-old-is-the-shepherd/>

Other techniques you can try with pupils, to slow them down include slow reveal of information to help them concentrate on a part of the information, drawing out facts. Blanking out numbers means that pupils do not overly focus on calculating before they have read and understood what the question is asking them.

Take the following:

16 A book has [] pages.
Amina has read [] of the book.

This box is hiding a whole number as that is how pages would be expressed in a book.

This must be a proportion or part of the book. It could be a fraction or %

Show your method

pages

2 marks

What could the question be? It could be how much has been read/not read.

What is the problem with problems?

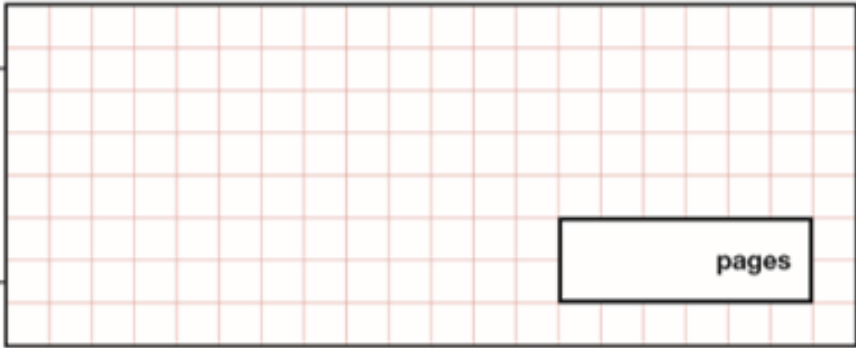
Natalie Ivey, Assistant Maths Hub Lead - Secondary, BBO Maths Hub

Then reveal the next part:

16 A book has pages.
Amina has read $\frac{1}{3}$ of the book.



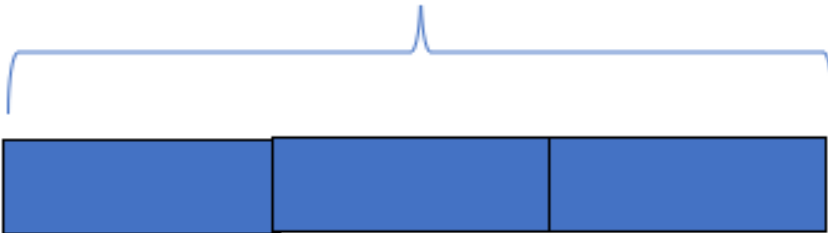
Show your method



2 marks

At this point, you can reveal the next part. You now can start to form representations to show the structure, helping your understanding of the problem and the calculation you may use:

Whole book ? pages



$\frac{1}{3}$ Read

At this point you can deduce that the information, not read is $\frac{2}{3}$

Now you can reveal the actual question:

How many pages are **left** for Amina to read?

What is the problem with problems?

Natalie Ivey, Assistant Maths Hub Lead - Secondary, BBO Maths Hub

Without structuring it in this way and slowing pupils down, many saw $\frac{1}{3}$ of the number and divided the number of pages by 3 and put that as the answer. At this stage you will notice that we have not revealed the number of pages which is in fact 276. However, for pupils unable to access division of a number such as this, you could simplify it to be 30 or 300. It does not matter if we want them to experience the structure and teach how to unpick problems. This can cause additional anxiety and cognitive overload if we expose them to too many difficulties to work with at once.

For many pupils, it is not always the number and calculation that is the issue, it is understanding the problem itself. If we can teach them to read and deconstruct the problem, look carefully at the information and identifying the facts and unknowns, then this will stop them from jumping into 'number plugging' when faced with the challenge of context versus quantities.

Questions to prompt pupils to thinking about UNDERSTANDING problems.

- Can you state the problem in your own words?
- Will a picture, diagram or acting it out help you to understand?
- What are you trying to find or do?
- What are the unknowns? What restrictions or key criteria are there?
- What information do you obtain from the problem? What are the facts? What can you deduce?
- What information, if any, is missing or not needed?

Remember when selecting problems, we need them to get pupil thinking and give some element of challenge, yet the teachers role is to provide the "Goldilocks of problem"- not too easy not too hard. It must be problematic but not so much so that it causes cognitive overload and anxiety with some pupils. These strategies should help to alleviate some of these factors and support the process.

What is the problem with problems?

Natalie Ivey, Assistant Maths Hub Lead - Secondary, BBO Maths Hub

Key strategies

- Remove stages and gradually build up.
- Slowly reveal stages.
- Make examples more difficult.
- Remove numbers.
- Visualise and draw pictures/diagrams.

By Natalie Ivey (AMHL Secondary). I run the Y5-8 Continuity programme where we look at transition between KS2 and 3 and look at developing consistent approaches within the primary and secondary phases, including representations such as bar modelling.

Professional Development Taster Session

We are aware that strengthening the links between the primary and secondary maths curriculum is essential for many pupils. With this in mind, we are holding a taster session for our **Years 5-8 Continuity** programme on Monday 19 June 4 - 4.45pm on Zoom



Come and learn:

- About overcoming some of the difficult barriers to maths
- To develop effective pedagogy to teach pupils with maths anxiety and increasing motivation and independence
- How to improve transition and provide continuity between primary and secondary expectations in the maths curriculum

These are just some of the areas covered in the Work Group so please come along and find out more about this fully funded CPD opportunity.

Please register via the button below:

BOOK NOW

Enhancing the teaching and learning of A-level Mathematics

SECONDARY

Chris Podger, KS5 Lead for Mathematics, UTC Oxon.

The NCETM are fully funding teachers from schools within the BBO Maths Hub to participate in workgroups with the aim of improving pedagogy both for individual teachers and within our maths departments. Workgroups have the emphasis on collaborative working and are a different way of delivering professional development (PD) in maths.

This academic year, I have had the pleasure of being the PD lead in a workgroup with teachers from five other schools within the BBO area. We have met six times across the year in a mixture of face-to-face and online sessions. The workgroup decided to explore the three “overarching themes” that were introduced by the major overhaul of the A-level specification in 2017, namely: problem solving, use of mathematical language & argument for proof and mathematical modelling.

During each workgroup session, there was time to develop a task that would be trialled with one of our A-level classes with the results fed back for discussion at the next session. Particular highlights have been exploring the development of problem-solving skills using goal or context free questions. These “questions without a question” encourage students to analyse a scenario without the pressure to find a solution, thereby developing their confidence and higher-order thinking skills. In the areas of both problem-solving and proof, it became clear that our departmental schemes of work need to incorporate activities for students to develop the mathematical language skills to become more articulate when sharing their understanding. For modelling in mechanics, the tin of beans on kitchen scales that mysteriously change weight caused much head-scratching and discussion in year 13.

The workgroup has taken a bit more of my time than anticipated but the improvement in my personal pedagogy has been far more than expected. As a workgroup, we all agreed that making time to work with colleagues in this collaborative fashion has been hugely valuable. We found the face-to-face sessions the most productive, so next academic year the group will run a smaller number of longer sessions that are all in person and look forward to welcoming additional colleagues to the A-level pedagogy workgroup.

To read more about the Developing A Level Pedagogy Work Group and register your interest for 2023/24, please click the button below.

MORE INFO

Primary Work Groups and Opportunities for 2023/24

PRIMARY

The Maths Hub Programme has PD opportunities for all teachers at all stages in their careers and across all phases. We are now beginning recruitment for projects running in 2023/24 and have details below of those currently accepting applications. Follow the 'More Info' links for further details on the opportunities or click 'Apply Now' to register for your place. Alternatively, contact us at info@bbomathshub.org.uk to discuss the best programme for you and your department.

All of our Work Groups are free.

MASTERY READINESS

Lots of schools are ready to start their mastery journey, and some would benefit from initial support before becoming part of the full programme. This diagram shows a school's journey towards mastery. Use it to determine where your school's journey starts (click diagram to show a larger version with more detail of the journey).

Who can take part?

Schools will have an identifiable barrier to being able to successfully implement teaching for mastery at present. Barriers may include an Ofsted grading of RI or Inadequate, poor pupil progress in maths, serving an area of low social mobility, or issues in the school that have meant the implementation of sustained change has been difficult.

What is involved?

Schools with additional challenges need bespoke support to ensure their systems and cultures are conducive to a teaching for mastery approach. Those who are not yet ready to join a Teaching for Mastery Development Work Group will prepare for implementing a teaching for mastery approach which is embedded and sustained across the whole school. This will involve receiving support from Mastery Readiness Leads, and developing classroom culture and attitudes to maths that will support a teaching for mastery approach, both on the part of teachers and their pupils.

After the year-long programme, Mastery Readiness schools will be ready to progress into Development Work Groups and beyond.

What is the cost?

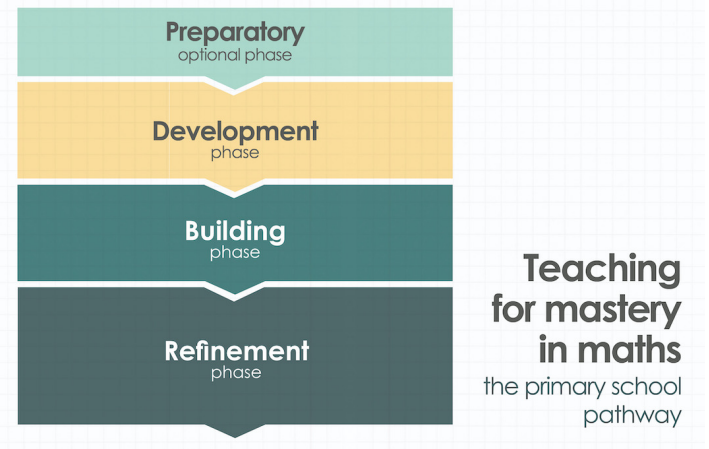
There is no charge for participation in this programme. However, schools must ensure that staff are released to engage in the workshops and school visits, and that the headteacher attends events where appropriate.

How can you find out more?

- Read a [case study](#) of a school that took part in the pilot Mastery Readiness Programme in Northumberland.
- Download or print a [flyer](#) for the project.

What should you do next?

If you are interested in taking part in this programme in 2023-24, applications are now open. Please complete the application form via the button below and we will be in touch in due course.



MORE INFO

APPLY NOW

Primary Work Groups and Opportunities for 2023/24

PRIMARY

PRIMARY TEACHING FOR MASTERY - DEVELOPMENT

If your school is ready to start developing a teaching for mastery approach, you can join a Work Group starting in the new academic year.

The Teaching for Mastery Programme is a professional development opportunity designed to support teachers like you to develop best practice in maths in your school. It is suitable for schools interested in implementing a teaching for mastery approach to maths.

What is involved?

Two teachers from each participating school join a Work Group, consisting of six or seven local primary schools. Each Work Group is led by a trained Primary Mastery Specialist. Work Groups meet regularly to plan, observe and discuss teaching for mastery. In between meetings, teachers explore mastery approaches in their own classrooms and across their school.

Support is provided from a local classroom-based Mastery Specialist who leads the group. This model of professional development involves hands-on learning and peer-to-peer support. It is evidence-based and designed to support substantial long-term change.

Who can take part?

This programme is for state-funded primary schools in England. Two teachers from each participant school will attend six half-day meetings during the school year, and lead teaching for mastery development in their own school.

NB: Schools can only take part in this particular Work Group once. However, there are other Work Groups dealing with teaching for mastery which are available in the year after a school is in a Development Work Group and beyond. Talk to your Maths Hub about your options.

What is the cost?

The Primary Teaching for Mastery Development Work Groups project is **fully funded** by the Maths Hubs Programme so is **free** to participating schools.

Support is provided from a local classroom-based Mastery Specialist who leads the group. This model of professional development involves hands-on learning and peer-to-peer support. It is evidence-based and designed to support substantial long-term change.

If you are interested in taking part in this programme in 2023-24, **applications are now open**. Please complete the application form via the button below and we will be in touch in due course.



[MORE INFO](#)

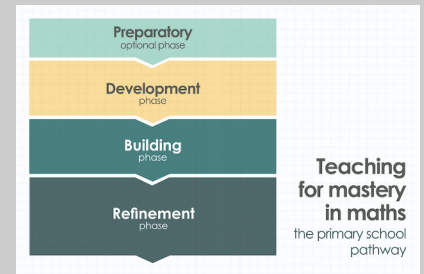
[APPLY NOW](#)

Primary Work Groups and Opportunities for 2023/24

PRIMARY

PRIMARY TEACHING FOR MASTERY - EMBEDDING

The strategic goal of the Teaching for Mastery Programme for primary schools is to establish teaching for mastery approaches so that all pupils develop deep knowledge, understanding and confidence. Those who have worked on establishing teaching for mastery in a Development Work Group become part of an Embedding Work Group in their second year, focusing on systems and culture to support teaching for mastery as well as support for school leadership and subject leadership.



If your school has previously participated in a Development Work Group, you are now eligible to join the Embedding phase. You must show a strong commitment for embedding teaching for mastery approaches, and at least the lead teacher from the Development Work Group must have already started using mastery approaches. The school leadership team including the headteacher must also be involved, to ensure there is a whole school commitment.

Work Groups in this project will support schools to scale up teaching for mastery approaches from individual teachers' classrooms, ensuring whole-school practices are consistently adopted. There are six workshops across the year, plus support from a Mastery Specialist.

To apply for your school, please fill in the application form via the button below:

[MORE INFO](#)

[APPLY NOW](#)

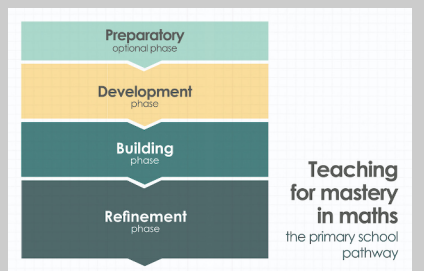
PRIMARY TEACHING FOR MASTERY - SUSTAINING

This is for primary schools who have previously been involved in a Development or Embedding Work Group, or who are Mastery Specialist schools. It brings together schools working to sustain their mastery approach to maths.

Participating schools must show strong commitment from their leadership for sustaining mastery approaches, and for most teachers to have already started using these.

Each school will have a lead participant in the Work Group, normally the maths lead. At different points in the year, other teachers will also participate.

Sustaining Work Groups are a permanent form of support where schools can focus on continued improvement, consistency and refinement of teaching for mastery. Teachers, maths leads and headteachers are all involved, striving to support teachers, and looking at collaborative planning and subject knowledge development. The expectation is that schools remain in a Sustaining Work Group for many years to come.



To apply for your school, please fill in the application form via the button below:

[MORE INFO](#)

[APPLY NOW](#)

Secondary Work Groups and Opportunities for 2023/24

SECONDARY

The Maths Hub Programme has PD opportunities for all teachers at all stages in their careers and across all phases. We are now beginning recruitment for projects running in 2023/24 and have details below of those currently accepting applications. Follow the 'More Info' links for further details on the opportunities or click 'Apply Now' to register for your place. Alternatively, contact us at info@bbomathshub.org.uk to discuss the best programme for you and your department.

All of our Work Groups are free.

SECONDARY TEACHING FOR MASTERY - DEVELOPMENT

Whether you want to take a teaching for mastery approach in your own classroom and department, or introduce mastery in both your own school and beyond, we have a CPD opportunity for you. The NCETM and Maths Hubs are offering funded professional development activities, available in 2023/24.

What is involved?

Secondary maths teachers whose schools want to introduce teaching for mastery can nominate two teachers ('Mastery Advocates') to join a Work Group. Mastery Advocates then form part of a locally-based group of teachers who meet regularly to develop professional knowledge and expertise, and receive bespoke support.

In a Teaching for Mastery Work Group, teachers collaborate with colleagues from local schools, and get support and guidance from a Local Leader of Maths Education (LLME). Participants also take away ideas to help students become more confident mathematicians, ready to tackle GCSEs and A levels, and begin to introduce and embed teaching for mastery.

Mastery Advocates

The fully funded programme enables you and another teacher from your school to become 'Mastery Advocates'. Initially you will be part of a Work Group for a year. You will also get in-school support from a Mastery Specialist. Beyond the first year, you will continue to work with your local Maths Hub and take part in a Work Group as you embed mastery across your department.

This programme is for state-funded secondary schools in England. Mastery Advocates should be teachers with the commitment, experience and authority to lead developmental work across a maths department. The support of the Head of Maths, and the headteacher or a member of SLT, is also essential.

What is the cost?

The Secondary Teaching for Mastery – Development project is **fully funded** by the Maths Hubs Programme so is **free** to participating schools.

What should you do next?

If you are interested in taking part in this programme in 2023-24, applications are now open. Please complete the application form via the button below and we will be in touch in due course.

Benefits

- Your students will develop a deep, secure and connected understanding of the maths they are learning
- You will begin to develop teaching for mastery approaches within your own classroom
- You and your head of department will begin to develop an understanding of the practices and principles aligned to secondary teaching for mastery
- You will begin to support the teachers in your department to develop teaching for mastery approaches in their practice

[MORE INFO](#)

[APPLY NOW](#)

Secondary Work Groups and Opportunities for 2023/24

SECONDARY

SECONDARY TEACHING FOR MASTERY - EMBEDDING YEAR SUPPORT

Secondary Teaching for Mastery Embedding Year Support is available for those departments who participated in the previous year's Secondary Teaching for Mastery Development Work Group, and who are beginning to embed their work on teaching for mastery.

Mastery Advocates (designated previously in the Development Work Group) will work closely with an assigned Mastery Specialist to help them embed teaching for mastery approaches across the whole department. Specialists will provide three days of bespoke support tailored to each school.

The focus will be on constructing or refining a coherent development plan and supporting and leading the whole department in realising the aims of that development plan. The school will also be part of a Secondary Teaching for Mastery Embedding and Sustaining Work Group with other schools.

If your school took part in a Secondary Teaching for Mastery Development Work Group in 2022/23, submit your application now to take part in an Embedding Year Support Work Group in 2023/24 via the button below:



[MORE INFO](#)

[APPLY NOW](#)

SECONDARY TEACHING FOR MASTERY - SUSTAINING

This project is for departments who participated in a Secondary Teaching for Mastery Development Work Group, or who have a member of their department who is part of the Mastery Specialist Programme. Mastery Advocates will meet regularly throughout the year, and the content of departments' development plans will be the stimulus for how joint work will be devised and undertaken.

Focus will be on the department's planned developments, as well as sharing and critiquing them with a group of schools in a professional learning community.

Each Work Group will have a focus for the year. The four foci for 2023/24 are:

- developing mathematical thinking
- developing coherence
- developing mathematical coherence for learners across maths and science
- a bespoke teaching for mastery focus.

If your school is eligible to join a Sustaining Work Group in 23/24, please apply via the button below:



[MORE INFO](#)

[APPLY NOW](#)

All Other Work Groups and Opportunities for 2023/24

The programme for 2023/24 has now been finalised and our website contains details of all the projects we will be offering in 2023/24. Follow the links below to find more information on our offering and to register your interest.

Alternatively, contact us at info@bbomathshub.org.uk to discuss the best programme for you and your department.

All of our Work Groups are free.

PRIMARY

SECONDARY

POST 16

PRIMARY AND EARLY YEARS

[Specialist Knowledge for Teaching of Mathematics, Early Years Teachers](#)

[Specialist Knowledge for Teaching of Mathematics, Primary Teaching Assistants](#)

[Specialist Knowledge for Teaching of Mathematics, Primary Early Career Teachers, Phase 1](#)

[Specialist Knowledge for Teaching of Mathematics, Primary Early Career Teachers, Phase 2](#)

[Specialist Knowledge for Teaching of Mathematics – Primary Teachers](#)

[Mastering Number - Embedding the Impact](#)

[Mastering Number at KS2](#)

[Primary Subject Leadership](#)

[Primary Oracy](#)

SECONDARY

[Secondary Subject Leadership Network](#)

[Specialist Knowledge for Teaching Mathematics – Secondary Early Career Teachers Phase 1](#)

[Specialist Knowledge for Teaching Mathematics – Secondary Early Career Teachers Phase 2](#)

[Specialist Knowledge for Teaching Mathematics – Secondary Non-Specialist Teachers](#)

POST 16

[Developing Core Maths Pedagogy](#)

[Developing A Level Pedagogy](#)

CROSS PHASE

[Years 5-8 Continuity](#)

[Cross Phase – Supporting low attainers to achieve a L2 qualification in mathematics](#)

[ITT Partnerships](#)

LEADERSHIP

[Professional Development Lead](#)

[School Development Lead](#)

[Primary Mastery Specialists](#)

[Secondary Mastery Specialists](#)

[Secondary Maths MAT Leads Programme](#)

NCETM NEWS AND FEATURES



A Tale of Two Schools



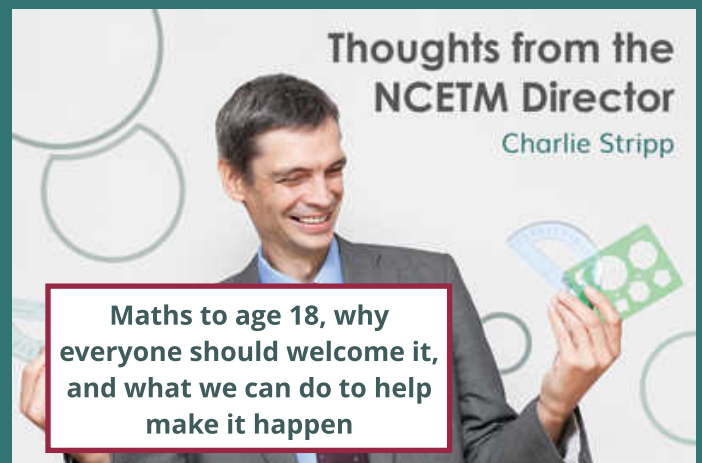
PRIMARY ROUND-UP

Primary Round-Up :
May 2023



NATIONAL NEWSLETTER

NCETM Newsletter -
April 2023



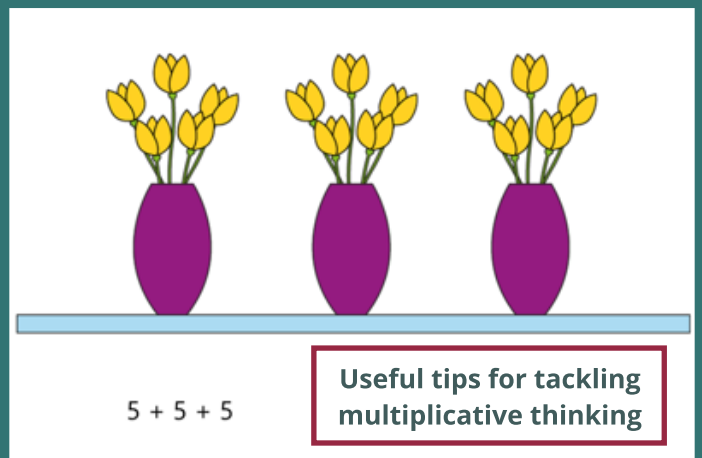
Thoughts from the
NCETM Director

Charlie Stripp

Maths to age 18, why
everyone should welcome it,
and what we can do to help
make it happen



How a mastery approach is
helping EAL pupils



$$5 + 5 + 5$$

Useful tips for tackling
multiplicative thinking

OTHER EVENTS AND OPPORTUNITIES

NATIONAL LITERACY TRUST - WORDS THAT COUNT

The National Literacy Trust has received funding from the Money and Pensions Service (MaPS) to deliver a financial literacy programme to 11-14 year olds either in alternative provision or in mainstream education at risk of exclusion.

Words that Count aims to unpick the financial terms and concepts that have many young people stumped so that they feel empowered to make good financial decisions and can build financial resilience. We thought this may be of interest to some of your schools as the programme is fully funded (all resources (physical and digital), training and events are provided).

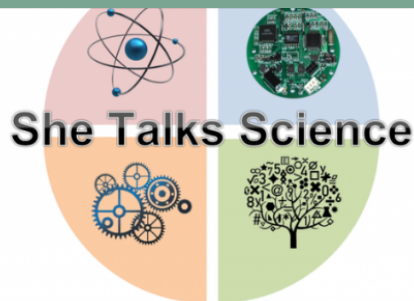
Through its 10 fully resourced sessions, **Words that Count** aims to give students the tools to make more informed choices about their current and future finances. Content will support leaders to differentiate, acknowledging the wide range of abilities often found in these settings. Online training will be provided for all teachers, teaching assistants or librarians taking part in the delivery of the programme. By the end of the programme participating students will:

- Demonstrate good understanding and knowledge of money management including debt and savings
- Demonstrate good understanding of budgeting
- Demonstrate an ability to forecast
- Articulate the importance of financial wellbeing to themselves and their peers

Further information and details about sign-up are available via the button below. There is no charge for the programme. It is fully funded.

[APPLY NOW](#)

STEP SUMMER SCHOOL - FREE TO ATTEND



The STEP Summer School will run this year at Murray Edwards College, Cambridge from 12-14 August. It is free for students to attend. Applications are welcomed from students who identify as women, who have just finished Y12, and will apply to study maths at a university that requires STEP.

There are spaces for 50 students this year, board and food included, travel not included. The application form and further information can be found via the button below:

[APPLY NOW](#)

PRIMARY ENGINEER - DATA CHALLENGE FOR SCHOOLS

STATWARS Climate Change Challenge.

The STATWARS: Climate Change Challenge empowers and educates pupils to tackle climate change by analysing datasets they capture themselves. Pupils use fabulous resources to calculate their own carbon footprint and analyse this data to identify three changes they can personally make in their daily lives to help tackle climate change.

Thanks to the support of Primary Engineer's partners WPP, the STATWARS: Climate Change Challenge and all their supplied curriculum teaching resources are completely free for teachers to enter and is open to all schools in the UK.

To register and for more information, go to the event website.

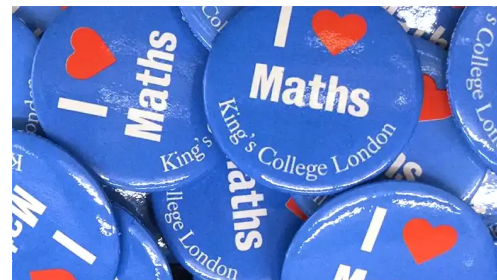


[EVENT WEBSITE](#)

OTHER EVENTS AND OPPORTUNITIES

KING'S COLLEGE LONDON MATHEMATICS TEACHERS' CONFERENCE 2023

Join King's College London at the annual King's Mathematics Teachers' Conference, for an afternoon of exciting speakers and discussions on supporting and engaging pupils in the maths classroom and beyond. This in-person event in central London is open to mathematics teachers from London and beyond, as well as graduate students interested in maths education. We are delighted to have as our keynote speaker bestselling maths writer Rob Eastaway, author of 'Maths on the back of an envelope' and regular contributor to BBC's More or Less. We will also be featuring talks on using problem-solving in maths and on maths & AI.



Register now by completing the online form via the button below.

Registration deadline: **Tues 13 June**

In the case that the conference is over-subscribed, priority will be given to maths teachers at non-selective state schools in London.

Please complete the application form by Tuesday 13th June. We will offer places on Thursday 15th June. Please then confirm your place with us by Friday 30th June. Any places not confirmed by this date will be offered to the waiting list.

REGISTER NOW