

Welcome to the fifth edition of the Boolean Maths Hub termly bulletin

Subject Knowledge Enhancement Courses

Due to popular demand, a new cohort of each of these FREE courses is due to start in September.

- Mathematical Confidence & Growth Mindset
- Mastering Maths through Subject Knowledge Enhancement (Primary)
- Developing Maths Teaching through Subject Knowledge Enhancement for Secondary teachers

These courses are a combination of half-day and twilight sessions and will require an agreement of attendance from your establishment.

Up to two places can be allocated per school, per course.

In September 2016 we will also be offering a new six session SKE course specifically for GCSE Mathematics teachers currently working in Further Education. These sessions will be delivered in September and October, ahead of the November resits.

National Collaborative Project 5: Development of Primary Maths Teaching for Mastery Specialists

Each Maths Hub recruited four primary Mastery Specialists last year, the Boolean Maths Hub Mastery Specialists teach in schools in Thornbury, Bristol, Weston Super Mare and Corsham. This year, each is developing teaching mathematics for mastery in their school supported by a training programme led by Debbie Morgan, Primary Director of the NCETM. In addition to this, they work collaboratively with teachers from other schools in pilot Teacher Research Groups (TRGs). Each TRG is led by a Mastery Specialist and involves two teachers from each of five other schools, with one of each pair being the subject leader. The aim of the pilot TRGs is to support participating teachers in developing teaching for mastery in their own school. As a pilot, it is also important to learn lessons about the use of TRGs, so that the process can be refined for future use.

Although we have filled the places for this year, during the next academic year the Primary Mastery Specialists will be running a new series of TRGs. Please note the closing date for applications is Wednesday 8th June.

One of our Primary Maths Teaching for Mastery Specialists, Rebecca Westcott, tells us more about her role:

Over the past year I have spent 10 days in my capacity as a Primary Maths Teaching for Mastery Specialist. During this time, I have attended residential courses that have been invaluable in developing my understanding of teaching for mastery in maths. I have also spent four days running a research group with ten teachers from five local schools. The teacher research groups have given me the chance to collaborate with other maths enthusiasts and discuss mastery in action in different schools. These meetings often involve a lesson observation followed by a discussion of the features of mastery shown and the 'journey' of the lesson. This opportunity to reflect with like-minded professionals is rare in UK schools but it can have a profound impact. Some schools in my group were brand new to teaching for mastery and so have made many changes this year to introduce this style of teaching to their classes. Other schools were already familiar with teaching for mastery but have used the research groups to share what has worked well for them so far and to enhance their practice further. I am really enjoying the Mastery Specialist role and I am looking forward to next year where I will be working with more schools in other research groups and visiting individual schools to provide more specific support.

BURSARY APPLICATIONS

This is your final call to apply for a £500 bursary from the Boolean Maths Hub for action based research projects to deliver local needs of our hub region.

For an application form please visit our website www.booleanmathshub.org.uk
Applications will be discussed at the Boolean Maths Hub Strategic Leadership Group's next meeting on **Tuesday 21 June**

Mastery in Action days

Emma Mignaud, who attended one of the Mastery in Action Days held recently at St Stephen's C of E Primary School in Kingswood, Bristol said about the day "The day at St Stephen's Junior School was informative and inspiring. The two teachers leading the event were passionate about mathematics and it was great to hear their journey so far however, they weren't complacent and were still striving to improve Maths in their school. The lesson I observed was a Year 5 lesson on angles; it was great to see the structure of a lesson and how this fits in with the mastery approach. The lesson was quick paced and all the children made good progress. It was an inspiring morning with plenty of ideas to take back and implement in my own school. "

Places are still available at the next Mastery in Action day on **Tuesday 21st June**. Please contact Rhian Skinner, the Boolean Maths Hub Administrator not St Stephens School to book. The cost is £30 for one teacher or £50 for two teachers.

We are also offering the following **Teaching Maths for Mastery CPD sessions** this term at a price of £15 per session or £40 for all three:

Session 1: Thursday 23rd June 4-5.30pm - Introduction (their lesson structure, growth mind set, mixed ability pairing etc) also addition and subtraction through their CPA (concrete-pictorial-abstract) approach.

Session 2: Thursday 30th June 4-5.30pm - Multiplication and division through their CPA approach and AfL/hinge questions.

Session 3: Thursday 7th July 4-5.30pm - Fractions, decimals and percentages through their CPA approach and reasoning.

To reserve a space please contact Rhian Skinner before Monday 13 June

University of Bath, 28 June 2016, 10:00 to 15:30

The Further Maths Support Programme and the University of Bath would like to invite Year 12 mathematics students and their teachers to attend a mathematics enrichment and development day.

This is a FREE event for teachers and students in statefunded secondary schools or colleges, which are registered with the FMSP, and is being supported by the FMSP and University of Bath. Places will be limited to 2 teachers and a total of up to 15 students from year 12. Students should bring a packed lunch. Lunch will be provided for teachers.

To reserve places complete the form here: http://goo.gl/forms/iS09FQgN8C

For more information please contact Patrick Cobb Email: patcobb@furthermaths.org.uk Phone: 07583345228



The Jo Walters Trust are offering, for the first time, a grant to help Maths teachers put an inspirational idea into practice. It's available for amounts **up to £1000** and the deadline is the end of July.

Here is the link for further information about how to apply:

www.jowalterstrust.org.uk/grant-

awards/2016-

grantawards/157-2016-maths-

2016-maths grant.html



Please be aware that we will soon be advertising for a Level 3 Lead (s) as part of our Hub structure for next year.

Further details to follow ...

Year 10 "Maths Feast"

On Wednesday 13th April a group of Year 10 students attended a "Maths Feast" at Bristol Metropolitan Academy, run by the Further Maths Support Network. They were introduced to some of the ideas that they would meet if they take A-level maths, and worked in pairs with students from other schools to compete in a maths competition. The winning team of four took home prizes of books, Rubik's cubes and chocolate. The students were encouraged to think more about studying mathematics to a higher level, and a good time was had by all.

Please let us know if you would like to host or take part in a "Maths Feast".

Managed by MEI Innovators in Mathematics Education

Post 16 Summer School

Places are still available for current Year 11 students to attend the second Boolean Maths Hub Post 16 A Level Summer School on Monday 22nd and Tuesday 23rd August. The purpose of this summer school is to bridge the gap between GCSE and A' Level Mathematics for any student who has applied to study A' Level Mathematics at any sixth form centre in the coming academic year. We will support students in building their Mathematical skills and aim to prepare them for success in their A' Level Mathematics course.

The content of the course will include topic areas such as:

- * Algebraic Fractions
- * Coordinate Geometry
- * Differentiation and Integration of Polynomials
- * Remainder and Factor Theorems

In addition, teachers will share more on the application of Mathematics and its uses beyond the study of GCSE Mathematics.

University of Bristol are delivering a one day course on Tuesday 5th July focusing on the development of problem solving skills at Key Stage 5 and strategies for preparing students for the STEP and AEA examinations.

This course will be of interest to any teachers who are interested in developing their deeper mathematical problem-solving skills.

The focus for this will be the Sixth Term Examination Paper (STEP) and Advanced Extension Award (AEA) mathematics examinations but the course will include materials suitable for use in general classes.

Teachers should be familiar with the content from the A-Level Core (C1 to 4) and this will be assumed knowledge during the day.

Fees for this course are £25 per teacher thanks to support from the University of Bristol. Places for PGCE students are free.

To apply, please complete the online form at: http://goo.gl/forms/d68hYYni6M For more information email: patcobb@furthermaths.org.uk



Dates for your diary

8 June—Deadline to apply to work in a TRG with PMSTS

8 June—NEXUS TSA Teachmeet 5.30-7.00pm

14 June — Bristol Maths Conference at UWE

23 June— CPD session 4.00-5.30pm

28 June—Take Maths to the Limit FMSP/University of Bath

30 June—2 July MEI Conference, University of Bath

30 June—CPD session 4.00-5.30pm

5 July—STEP course University of Bristol

6 July (Bristol) & 7 July (Evesham) - Free AQA GCSE

Conference 9.30am-4.00pm

7 July—CPD session 4.00-5.30pm

22 & 23 August—Post 16 Summer School for students



For further information about anything in this newsletter (unless otherwise specified) please contact Rhian Skinner: rhian.skinner@clf.cabot.ac.uk

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