



Spring 2018

London

Regional

NEWSLETTER

Support for Advanced Maths

The Smith Review of post-16 Mathematics in 2017 recommended that the government should continue to fund national support and professional development for AS/A level Maths, Further Maths and the new Core Maths qualifications. The review also recognised that many schools and colleges struggle to afford to deliver Further Maths and Core Maths courses economically. It recommended increasing funding for these subjects.

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Regional Events and Updates: Teacher Events

The government's response has been to firstly announce £16m funding, over two years, for a national support programme for level 3 maths. MEI, which currently manages the FMSP, successfully bid for this new contract. The Advanced Maths Support Programme (AMSP) will continue the work of the FMSP, providing support for students and teachers for AS/A level Maths and Further Maths, as well as higher tier GCSE Maths and support for university mathematics entrance exams. In addition the new programme will provide support for schools and colleges to establish a Core Maths offer. The AMSP, starting in May 2018, will run for 2 years initially. FMSP support will transfer to the new programme during the summer term, see:

furthermaths.org.uk/amsp.

The DfE also recently provided more information about the Advanced Maths Premium. This extra funding will be paid to schools/colleges for each additional student studying level 3 maths. The aim is to help schools and colleges overcome some of the financial barriers to offering the full range of level 3 maths qualifications.

For many years the FMSP has supported schools and colleges to deliver Further Maths by providing professional development to increase teaching capacity, promoting to

students the benefits of studying maths, and by providing resources to enable Further Maths to be taught in a more cost effective way. However we know that in some institutions provision is threatened with being withdrawn as cohort sizes are small. Core Maths qualifications, designed for those students who pass GCSE Maths but decide not to take AS/A level Maths, are currently offered in relatively few schools and colleges. Post-16 funding currently provides no specific finance for this additional course, which is equivalent to an AS level and enables students to continue developing their quantitative and problem-solving skills alongside other A level subjects and so that they are better equipped mathematically for employment or university study. The potential growth in numbers of students taking Core Maths is huge.

The additional funding from the Advanced Maths Premium: furthermaths.org.uk/advanced-maths-premium together with support from the AMSP will help schools/ colleges to maintain or increase provision for AS/A Maths and Further Maths and encourage more schools/colleges to establish Core Maths.

Kevin Lord, Programme Leader.

Student Enrichment

Promoting the study of mathematics to students

Enrichment Events

This term saw a free enrichment event at UCL attended by Year 10 students from all over London. The guest speakers were mathematicians Katie Steckles and Richard Lissaman.



Above Katie Steckles on the mathematics of pancake flips.

Another free event, this time for Key Stage 3 students, called **Dragons and Magic**, took place at Trinity School in Croydon. Feedback included these comments:

'Kids loved the magic and thrived on the teamwork in the quiz' (teacher)

'Very interactive and a great experience' (student)

'It will get you a lot more interested in maths' (student)

'It was very enjoyable and fun to learn about the magic tricks. It was nice to see the maths behind the magic tricks and to work with other people' (student)

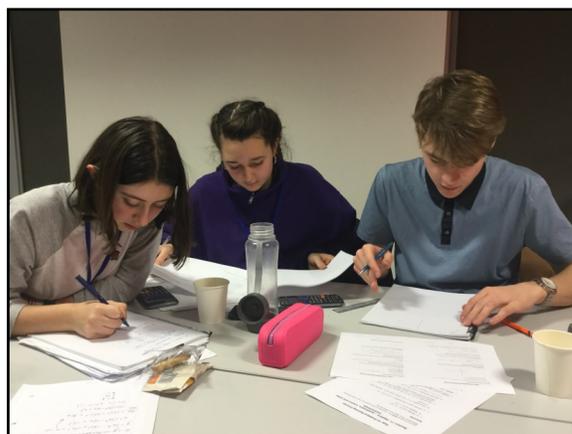
'It is really exciting' (student)

We have also had many Year 10 Maths Feasts taking place across London this term.

Watch this space for more Year 10 Enrichment events at venues across London, in June and July; registered schools will be emailed with information once confirmed.

Year 12 Problem Solving Classes

Our Year 12 Problem Solving classes at Kingston University and Queen Mary University of London have been hugely successful this year, with enthusiastic students thinking deeply on unfamiliar questions involving number, algebra and geometry. Here are some of the students at Kingston University concentrating on the problems:



London Maths Hubs

Get involved with your local Maths Hub: mathshubs.org.uk/find-your-hub/

Looking for Core Maths resources?

London Central and NW Maths Hub are leading the development of an extensive set of teaching and revision resources for Core Maths. There are a set of 15-minute videos that introduce new topics such as Taxation, Fermi Estimation and APR that many teachers have found helpful in preparing lessons. Some teachers are even using them with students as a flipped learning resource. Alongside the videos are printed resources on each topic with fully worked-out solutions. All the print resources including links to the videos can be found at the Core Maths Online dropbox here:

www.dropbox.com/sh/5kp06t852b3nbtr/AADTMwmgpTRaAwf90zy7ihhRa?dl=0

It is hoped that a full set of practice papers for the AQA specification based on this year's preliminary materials will be available by Easter.

For further information contact Nick McIvor at n.mcivor@stmaryleboneschool.com

A Level Booster Conferences

The London South East Maths Hub ran two FREE booster conferences for A level students:

Saturday 17th March, 11am—3.30pm

C3 and C4 revision for Year 13 students.

The sessions included: Exam techniques and use of mark schemes in revision work, Trigonometry, Differentiation, Integration

Saturday 24th March, 11am—3.30pm

Mechanics and Statistics in the new A level for Year 12 students.

The sessions included: A briefing from an Examiner, hypothesis testing, suvat equations, Forces and Acceleration

Both events took place at the University of Greenwich.

Workgroups at London Thames

Technology in the new A level

What has happened so far?

6 participants from 5 different schools
Smaller groups-deliberate to try and focus on quality
Participants attended a day of training with Tom Button (MEI) on Use of Technology in the new A level.

What is currently happening?

Teachers plan an activity that incorporates technology; this is either something teacher led, or student led and send plans to Work Group lead to check before delivering. Evaluations are written after delivery.

What is going to happen?

2 more tasks scheduled for the rest of the year, with resources, plans and evaluations to be published.

Feedback

"I have enjoyed talking about ways to use technology in school"

"The workgroup has clear outcomes and benefits of using technology in lesson"

"It's made me think about tasks to do for future lessons"

The plan is for this workgroup to grow next year. For further information contact Godfrey Almeida on godfrey.almeida@harrisfederation.org.uk.

Core Maths

What has happened so far?

14 participants across 11 schools.
Development of practice and teaching approaches, including contextualised problem solving.

What is currently happening?

Plan and teach a Core Maths activity that uses contextualised problem solving, collaborative approaches and discussion with a class (does not have to be Year 12).

What is going to happen?

Adapt a scheme of work for the course for their own institution.

Feedback

"The course cleared up my misconceptions, Core Maths is Not A Level but an option for students after GCSE. The teaching of the course will require a more student driven approach".

"This course is different – it emphasises doing maths in context, interpretation and discussion of maths, particularly data, and using collaborative approaches"

For further information contact Gill Leahy on gill.leahy@harrisfederation.org.uk.

Teacher Events this summer

Support with the new A levels

This summer we will be running one day courses in London on the follow topics:

Teaching Statistics for the First Time

Teaching Mechanics for the First Time

Decision/Discrete for A level Further Mathematics (one day for beginners and another for teachers who have experience of teaching the old D1 module)

An Introduction to STEP Mathematics

An Introduction to AS Further Pure Mathematics

An Introduction to A level Further Pure Mathematics

Once the details are confirmed, registered schools will be emailed and more information will be available at www.furthermaths.org.uk/London_CPD.

Don't forget the other professional development opportunities available from the FMSP: www.furthermaths.org.uk/cpd.

Contact your local Area Coordinator (see details below) if you would like to discuss the support required by your school.

Resources sharing and quiz!

It's back, back, back!

Last year, with all the hectic preparations for the new A level, our quiz night had to take some time out. But it's back and improved with the following event:

Key Stage 5 Resources Sharing followed by quiz

5pm, Friday 6th July

Venue tbc

This event will start with an opportunity to share A level resources with colleagues. Each teacher will be asked to bring one resource which has worked well for them this year (it can relate to any aspect of A level Mathematics or Further Mathematics) - and will go home laden with scores of resources from the other teachers!

We won't give too many spoilers about the quiz, except that there will be some (simple) mathematics involved and we don't plan to take it too seriously.



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London Event Pages

For teachers:
www.furthermaths.org.uk/London_CPD

For students:
www.furthermaths.org.uk/London_enrichment

