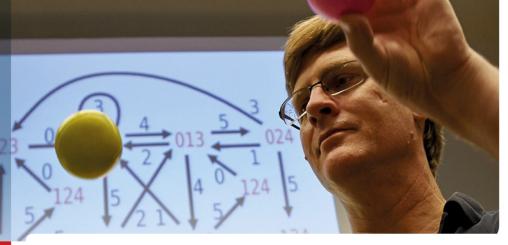
FURTHER
MATHEMATICS
SUPPORT
PROGRAMME



Autumn 2014

London Regional

NEWSLETTER

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The National Picture

The Further Mathematics Support Programme (FMSP) are delighted to see a continuation of the year on year increases in the number of students participating in Mathematics and Further Mathematics, with entries reaching an all time high this summer. Mathematics is now the most popular subject at both AS and A level. AS Further Mathematics continues to grow in popularity, with an 8.5% increase on entries from 2012-13.

Examination Results

In the UK, A level Mathematics entries rose from 88,060 in 2012/13 to 88,816 in 2013/14, a rise of 0.9%. A level Further Mathematics numbers rose from 13,821 to 14,028 over the same period, a 1.5% increase.

For AS level, entries in Mathematics rose from 150,787 to 161,711, an increase of 7.2%. For AS level Further Mathematics, numbers have risen by 8.5%, from 22,601 entries to 24,530.

In 2014-15, the FMSP will continue to work closely with schools and colleges, providing advice and guidance, CPD, enrichment at KS4 and KS5, as well as tuition in Further Mathematics when required.

Tuition

The FMSP offers various models of tuition to meet the needs of schools and colleges and their students. In addition to face-to-face tuition there are opportunities for **live online tuition (LOT)**, and **live interactive lectures (LIL)**. For more information about tuition, please see: www.furthermaths.org.uk/fmsp tuition

The FMSP continues to expand problem-solving enrichment activities, including support for students in preparing for STEP, AEA and MAT examinations. See:

www.furthermaths.org.uk/
step_aea_support

Professional Development

The FMSP offers varied professional development for teachers including:

- Live Online Professional Development (LOPD) courses designed to develop subject knowledge;
- Teaching Advanced
 Mathematics (TAM) a year long course with the option of Masters accreditation;
- Teaching Further
 Mathematics (TFM) a 15
 month programme for
 teachers planning to teach
 Further Mathematics A level.

For more information about CPD opportunities, please see: www.furthermaths.org.uk/cpd

Podcasts

The first four episodes of a new enrichment podcast "Taking Maths Further" were made available prior to the summer break, with many more being released this term via: www.furthermaths.org.uk/podcasts

In each podcast Peter Rowlett and Katie Steckles tackle a mathematical theme interviewing people from the field and setting a related puzzle. Topics so far have included the mathematics used in nautical radar and the use of probability in crime scene investigation.



Professional Development

One day events planned for 2014/15

We have the following events planned for this academic year. The charge is £50 per teacher per day.

Our "Teaching... for the first time" days are aimed at teachers who have not taught that particular module before and focus on subject knowledge with teaching ideas and resources thrown in.

The "Interesting Ways..." days focus wholly on pedagogy and teaching resources. We assume that teachers attending these days have the necessary subject knowledge.

Teaching Further Pure 2 for the first time Tuesday 21st October, Kingston University

Teaching Mechanics 1 for the first timeWednesday 22nd October, St Olave's School Orpington

Teaching Decision Maths 2 for the first time Wednesday 12th November, Kingston University

An Introduction to STEP MathematicsThursday 13th November, Tower Hamlets College

An Introduction to teaching AQA L2 Further Maths Wednesday 3rd December, Tower Hamlets College

Interesting Ways to teach Statistics
Tuesday 10th March, Tower Hamlets College

An Introduction to STEP Mathematics Wednesday 25th March, Kingston University

Teaching Further Pure 1 for the first time Wednesday 10th June, Kingston University

Teaching Decision Maths 1 for the first time Wednesday 17th June, Kingston University

Interesting Ways to teach Mechanics Wednesday 8th July, Tower Hamlets College

Teaching Further Pure 3 for the first time Thursday 9th July, UCL

More information about each day is available on the booking form, which can be downloaded from www.furthermaths.org.uk/London_CPD once dates and venues are confirmed.

If you have any questions about any of these events, please do ask us.

KS4 Extension and Enrichment

This two-day course will be running again in London this year, with exact dates tbc. We will look at resources and strategies for stretching your A/A* GCSE students, including material developed by the FMSP specifically for this course.

The course is for Key Stage 4 teachers working in state-funded schools, colleges and academies. It is relevant for any teacher who wishes to develop their Key Stage 4 teaching, whether they are in the first years of their career or have longer experience.

See: www.furthermaths.org.uk/ks4eande for more information about this course.





KS5 Teacher Networks

Our teacher networks provide a great opportunity to share ideas and discuss the challenges of curriculum change! We have active networks in Bexley, Enfield, Greenwich, Hackney, Haringey and Tower Hamlets. If there is not one in your area and you would like to get one started, do contact your local Area Coordinator.

Others news from the London FMSP

Key Stage 5 Conference

Queen Mary University London, July 2014

This was the fourth annual KS5 London Network Conference and once again it was a huge success with nearly 70 teachers attending. Stella Dudzic, the Curriculum Programme Leader at MEI gave an overview of the forthcoming changes to qualifications and we got the chance to ask a series of tricky questions which Stella answered with her usual authority and good humour. Robert Bowles who is Admissions Tutor for Mathematics at UCL gave us an insight into the decision making process for selecting students. The session will certainly help enormously when it comes to advising students on their UCAS applications next year.

There were three workshops focussing on practical approaches in Decision Mathematics, Statistics and Mechanics. Nadia Dellagana from Bow School shared a whole range of practical activities that really make Decision Maths come alive. Francis and Alison (FMSP) explored a quality control problem using jelly beans and delegates in the Mechanics session tried out some practical activities that exactly replicated exam questions with Jenny (FMSP).

The feedback for all the sessions was really positive but as always the main accolades were reserved for the delegates themselves who really excelled this year in bringing with them an impressive range of really imaginative activities; these were shared in the first session of the day and via the USB datasticks that were distributed at the end of the conference. Every delegate was asked to bring along the activity that worked best for them over the past year. There were activities on parametric equations, integration, differentiation, radians, projectiles (this involved serious weaponry!.....well, OK....it could have....) circles, core maths, binomials, APs and GPs, memory, trig, quadratics, a quiz league, rates of change, tarsias, TSP, normal distribution, a paper chase, a murder mystery, a buddy system, differential equations, reusable whiteboard, linearising data, two treasure hunts, a Romeo and Juliet mechanics problem...and a Valentines Card with a parametric heart.....

A great day and a reminder that there really is a wealth of teaching talent in London schools. Thank you to all who contributed to making the day such a success. I am already looking forward to 2015 and a booking form will be available nearer the time at: www.furthermaths.org.uk/London_CPD.

Transition and Continuity of Learning Mathematics: 14-19

This is a cross phase project that aims to smooth the transition between KS4 and post-16. There are three separate projects based in Islington, Tower Hamlets and Walthamstow.



For KS4 teachers we aim to develop an understanding of the changes in the new Secondary National Curriculum and how these progress into Post-16 courses. You will be working with Post-16 teachers to develop cross-phase approaches to teaching algebra and gain a better understanding of the requirements of A level Mathematics and Further Mathematics. By collaborating with other A level Mathematics providers we hope that this will smooth transition for students. You will also learn about other Mathematics qualifications at KS4 that can extend and enrich student learning.

For A level teachers we aim to gain a better understanding of the curriculum and assessment structures at KS4 and the additional skills students might develop within the new Secondary National Curriculum. It will offer the opportunity to collaborate with KS4 teachers and influence teaching strategies in order to better prepare students for the challenges of A level Mathematics. You will also be working with Key Stage 4 teachers to develop cross-phase approaches to teaching algebra.

The project includes: Three daytime sessions, twilight sessions, associated range of resources and ongoing support and collaboration via an online forum.

For more information please visit our web page at: www.mei.org.uk/?section=teachers&page=lsef-transition

Contact Us



If you don't know who the FMSP Area Coordinator is for your borough, check the contact details below.

Do get in touch with us about any aspect of KS5 Mathematics.

We are especially keen to hear from teachers who are looking to introduce Further Mathematics at their school or college, or who would like some help with promoting the subject to their GCSE group or getting the subject firmly established on the timetable.



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London Events pages:

For teachers:

www.furthermaths.org.uk/London CPD

For students:

www.furthermaths.org.uk/London enrich ment

