Further Mathematics Support Programme

Live Online Professional Development in Mathematics

A range of courses to enable teachers to teach A level Mathematics and A level Further Mathematics with confidence.

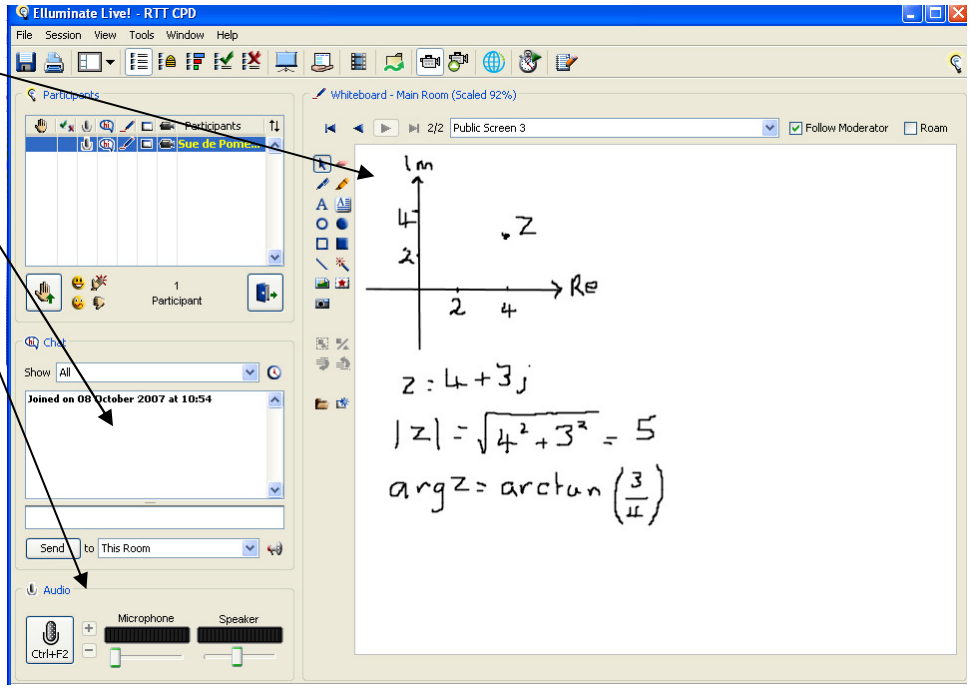
A modern approach to professional development; rather than attending a one or two day course, delegates meet weekly for live, interactive online sessions with a tutor and a small group of teachers.

These courses focus on developing subject knowledge and discussing approaches to teaching.

How does the live online tutoring work?

We use a web-based facility which is easy to use and allows a tutor and delegates to communicate live online using audio, handwriting on a shared virtual whiteboard and instant messaging via the internet.

- Shared whiteboard
- Instant messaging
- Audio conferencing
- Application sharing



This equipment is readily available to purchase on the high street or from online retailers for about £40

What you need to participate

- A broadband internet connection
- A recent version of Java (free to download)
- A headset for communication
- A graphics tablet and pen

Spring 2012 – Statistics 3 (Edexcel) - Cost £85

Applications preferably before: ***Friday 24th February 2012***

Course Structure

The course will consist of

- An brief introduction to ensure that participants are familiar with the functionality of the online classroom and the Integral online resources
- A total of five 60 minute live online sessions led by a tutor

IMPORTANT: This course is focused on the S3 Edexcel specification it is a 'bespoke' course that has been scheduled as a result of a request from a teacher seeking support with teaching this module (tips and techniques). However, other teachers who may benefit from some support for S3 are welcome to apply. Topics have been approximately mapped for Statistics exam specifications as outlined in the table below:

Date / Time	Topic	Content	Edx	AQA	MEI	OCR	MEI STAT	AQA STAT
Tue 6th March 5.30pm-6.30pm	*Introduction* Combinations of random variables Sampling	Using audio, drawing diagrams etc. How to combine linear combinations of independent normal random variables Types of sampling techniques and advantages and disadvantages.	S3	S1/3	S3	S3	Z1	SS01/4
Tues 13th March 5.30pm-6.30pm	Estimation, confidence intervals	Standard Error, Confidence and Bias Distribution of the sample mean Central Limit Theorem Unbiased estimators Confidence intervals	S3	S2	S3	S2/3	Z2	SS03/5
Tues 17th April 5.30pm-6.30pm	Hypothesis tests	Testing the mean of a normal with known variance Testing the difference between means of two normal distributions with known variance	S3	S2/3	S3	S3	Z2/3	SS03
Tues 1st May 5:30pm – 6:30pm	Goodness of fit and contingency tables	Degrees of freedom Testing a discrete distribution as a model Testing a continuous distribution as a model Contingency tables	S3	S3	S2/3	S3	Z2	SS03
Tues 8th May 5.30pm-6.30pm	Regression and correlation	Spearman's Rank Correlation Coefficient Hypothesis testing that a correlation coefficient is 0	S3	S3	S3	S3	Z2	SS03

Please note this schedule may be subject to minor changes

All participants will receive

- A link to the online classroom
- Access to online resources for the module being studied
- Course delegates will also be issued with a username and password to access an online forum which is for all teachers taking LOPD courses; this can be used to access ongoing support from other course delegates and LOPD tutors.
- Email support from a course tutor
- Certificate of attendance

For further information and an application form visit:
http://www.furthermaths.org.uk/teacher_area/rpd.php

Enquiries contact: LOPD@furthermaths.org.uk

The **Further Mathematics Support Programme** is managed by MEI and funded by the DfE