

# Live Online Professional Development in Mathematics

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

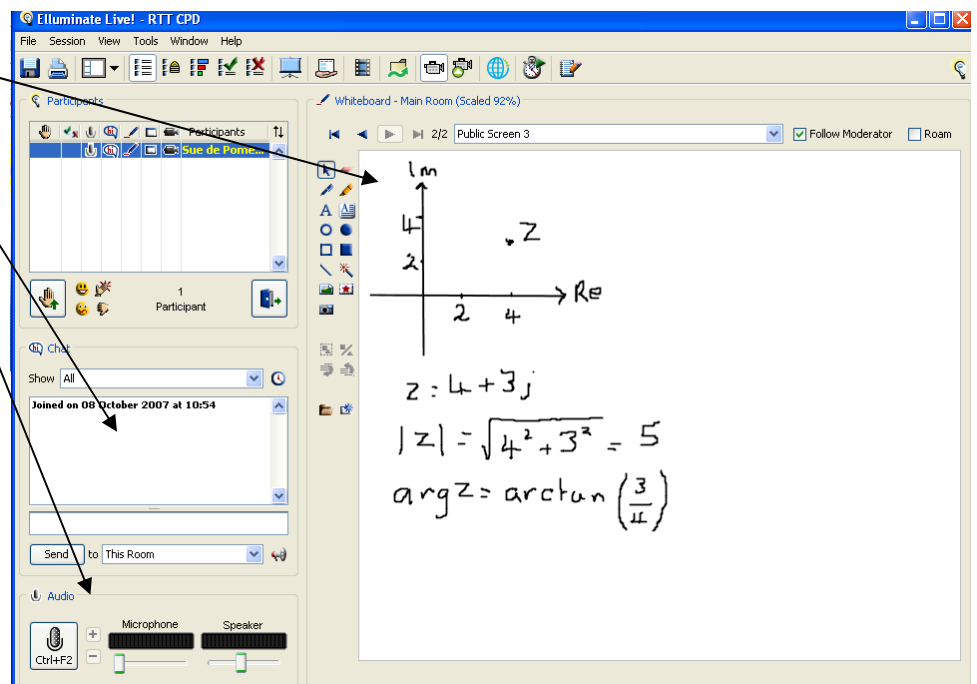
A modern approach to professional development; rather than attending a one or two day course, delegates meet weekly for live, interactive online sessions with a tutor and a small group of teachers.

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 2010 – Further Calculus & Hyperbolic functions

Course fee £75

Deadline for applications: **Friday 21st May 2010**

### Course Structure:

- An introductory session; ensuring participants are familiar with the functionality of the online facility and online teaching and learning resources produced by MEI
- Four 60 – 90 minute live online sessions led by a tutor

DATE	TIME	TOPIC
Wed 9 <sup>th</sup> June	16.30 – 17.30	Introduction
Wed 16 <sup>th</sup> June	16.30 – 18.00	1. Inverse trigonometric functions; derivatives and recognition of integrals. Use of trigonometric identities.
Wed 23 <sup>rd</sup> June	16.30 – 18.00	2. Hyperbolic and inverse hyperbolic functions and their derivatives. Logarithmic forms.
Wed 30 <sup>th</sup> June	16.30 – 18.00	3. Hyperbolic and inverse hyperbolic functions; applications to integration
Wed 7 <sup>th</sup> July	16.30 – 18.00	4. Recognition of standard integrals. Use of reduction formulae for definite integrals.

### All participants will receive

- Online access to resources relevant A2 Further Pure Mathematics modules
- A course handbook
- Email support from the course tutor

**Further Information:** This course is one in a **series of seven short courses** that are offered to support teachers' subject knowledge of A2 Further Pure Mathematics.

Module	FP2	FP3	FP4
<b>AQA</b>	Complex Numbers <b>Calculus &amp; Hyperbolics</b>	Differential Equations Polar Curves & Power series	Vector Geometry Matrices
<b>Edexcel</b>	Complex Numbers Polar Curves & Power series Differential Equations	Vector Geometry <b>Calculus &amp; Hyperbolics</b> Matrices	
<b>OCR</b>	<b>Calculus &amp; Hyperbolics</b> Polar Curves & Power series	Group Theory Vector Geometry Complex Numbers Differential Equations	
<b>MEI (OCR)</b>	Complex Numbers <b>Calculus &amp; Hyperbolics</b> Polar Curves & Power series Matrices	Group Theory Vector Geometry	

Application forms: [http://www.furthermaths.org.uk/teacher\\_area/rpd.php](http://www.furthermaths.org.uk/teacher_area/rpd.php)

Enquiries: [sharontripconey@furthermaths.org.uk](mailto:sharontripconey@furthermaths.org.uk)

The Further Mathematics support programme is managed by



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children, schools and families