

# Supporting the Teaching of the New A Level Mathematics Using Technology

NCP17-21



## Overview

The purpose of this Work Group is to explore ways to embed technology into the teaching and learning of A level mathematics, so that the use of technology supports and enhances conceptual understanding, rather than being an add-on. This is not a 'How To Use' course on any particular technology: it should, however, encourage participants to continue to develop their skills.

### Who is this for?

This Work Group is best suited to those who are or will be teaching the new A Level. It will be particularly useful for those with responsibility for KS5 maths.

### What is involved?

Participants will attend three twilight sessions. We will explore teaching with the latest calculators, spreadsheets and graph-plotting software, looking at a range of strategies for integrating the use of technology into schemes of learning.

**Dates:** 21st Feb 2018, 18th April 2018, 16<sup>th</sup> May 2018

**Time:** 4pm - 6 pm, tea and coffee from 3.45pm

**Venue:** Longsands Academy, St Neots PE19 1LQ

***Participants attending all sessions will receive a complimentary Casio FX-991 ClassWiz calculator.***

## Intended Outcomes

Teachers will develop:

- Knowledge of where, when and how to use technology to enhance understanding/learning/experience.
- Confidence and competence to use applications of technology.
- Confidence to develop their own technology skills and further embed the appropriate and effective use of technology.

At a department level, schools will receive support in embedding the use of technology in their A level SoWs, changing department practice to involve sustained use of technology, and signposting to appropriate resources. They will be encouraged to develop professional development approaches, within school, where technology is an integral part of the process.

## The wider context

- DfE 2017 A Level Content states “The use of technology, in particular mathematical and statistical graphing tools and spreadsheets, must permeate the study of AS and A level mathematics.”
- Smith Review Report Recommendation 14: The DfE should seek to improve the evidence base on the role and effectiveness of technology in the teaching of 16-18 mathematics.

Despite a range of currently available mathematics teacher CPD around specific technology skill development and application to teaching, there is little evidence of sustainable, widespread embedding of technology in teaching and learning in all A level mathematics classrooms. This Work Group aims to enhance the teaching and learning of A level mathematics through *embedded* use of technology, to support conceptual understanding.

## Expectations of participants and their schools

Participants will be expected to provide certain school data to assist with evaluation of the impact of the Work Group. This will include completing evaluation forms. Some participants will be asked to conduct short and informal student case studies to consider the impact of the resources on learning.

## Funding

There is no charge for teachers and schools to take part in this Work Group. All costs are met by Maths Hub funds.



***We are delighted to confirm that participants attending all sessions will receive a complimentary Casio FX-991 ClassWiz calculator, RRP £32.99.***

## Who is leading the Work Group?

**Darroch Allden and Ric Pimentel**

**Darroch** has been teaching maths in schools for the last 17 years. He has worked in various roles including Head of Department and AST/Lead Practitioner.

**Ric** is an experienced maths teacher who is passionate about the use of technology in his classroom. He has been head of department and has worked at both secondary schools and sixth form colleges.

## If I'm interested, what next?

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**Book at <https://cmh-aleveltechnology.eventbrite.co.uk>**