



# Teaching Statistics in AS and A level Maths

## Bristol

28th February 2019

### Overview

This is the first in a series of three twilight PD sessions on statistics in A level Maths. Teachers can attend all three or just those most relevant to them.

Session 1 – Working with data

Session 2 – Probability and Distributions (Binomial and Normal)

Session 3 - Hypothesis Testing (Binomial, Normal and Correlation)

### Aims

- To consider approaches to teaching statistical concepts.
- To develop confidence in working with real data using technology.
- To improve statistical subject knowledge.

### Who will benefit from attending?

Teachers who are currently teaching the statistics element of A level maths, or who may do so in the future.

### Content

Session 1 - Working with data, 28 February

This session will consider how the awarding body large data sets can be used to construct questions that test students understanding of concepts such as data collection, location and spread, representing data graphically and correlation. There is a greater emphasis on interpretation skills in the linear A level so it is important to give students opportunities to practise these skills whilst building familiarity with the large data set.

Session 2 – Probability and distributions, 7 March

This session will consider approaches to introducing the Binomial and Normal distributions, their properties and how to use a calculator to work out probabilities.

Session 3 – Hypothesis testing, 21 March

This session will consider approaches to teaching hypothesis testing for the Binomial and Normal distributions and for the significance of the correlation coefficient. We will look at how the enhanced scientific calculator and other technologies such as GeoGebra can be used in teaching this topic. Knowledge of the Binomial and Normal distributions will be assumed for this session.

## Materials and Equipment

Session 1 - Working with data.

Please bring a laptop with the large dataset for your specification downloaded and GeoGebra Classic 5 (<https://www.geogebra.org/download>) and a spreadsheet installed.

Session 2 and 3 - Probability & Distributions and Hypothesis Testing

Please bring an enhanced scientific calculator or a graphical calculator if you have one (but we can lend you one if not).

## Other Information

Tea, coffee and light refreshments will be available.

## Cost

£25 per teacher. Trainee teachers may attend free of charge if attending with a fee paying teacher from their placement school.

## Key Facts

<b>Event ref:</b>	#5465
<b>Audience:</b>	Teachers
<b>Curriculum focus:</b>	A level Mathematics
<b>Mathematical focus:</b>	Statistics, Use of technology
<b>Event format:</b>	Face-to-face Professional Development
<b>Event length:</b>	2.75 hours
<b>Region:</b>	South West
<b>Venue:</b>	Castle School, Park Rd, Thornbury, Bristol, BS35 1HT
<b>Date:</b>	Thu 28th Feb 2019
<b>Course times:</b>	16:00 - 18:45
<b>Fee:</b>	£25

## Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/5465>