TEACHER WEBINAR

NEW: RAISING ATTAINMENT FOR THE STATISTICS COMPONENT IN A LEVEL MATHS

FOCUS

Statistics in the new A level is attempting to move away from mechanical procedures, and utilise technology more. These two webinars will approach the teaching of the statistics topics with ideas in how to connect and organise it with regards to other topics. Specific teaching strategies, the importance of using precise language, where students go wrong and insights from the first full exam series. There will also be suggestions of strategies to engage students by using more relevant data and what the key take aways are meant to be when working with large data sets. The first session will focus on probability and statistical models, with session two starting with data and sampling and linking this with the first session through hypothesis testing. The content will use examples from exam boards when illustrating key concepts.

£200 for this series or £110 each.

PROGRAMME

TIME

Creating certainty with probability topics

Session 1 – Wednesday 25 November 2020

Welcome and Introduction 4.00 - 4.05pm

Conditional probability 4.05 - 4.25pm
- How to get students to read the question – cue words
- Using the tools correctly – two way tables, tree diagrams and Venn diagrams
- Bayes theorem and how to check back

Binomial distribution 4.25 - 4.50pm
- Links to other parts of the course – binomial distribution
- Key characteristics and how to get students to understand them
- Calculator skills, making the most of the classwiz
- Tackling problems involving Binomial (reading questions carefully again)

Normal distribution 4.50 - 5.15pm
- Links to other topics – calculus and modelling
- Normal vs other CPDs – making it clear it is just one of many models
- Calculator skills and tables
- Tackling problems involving Normal Distribution

Exam strategies 5.15 - 5.30pm
- Main pitfalls and how to get your students to avoid them
- How to revise and generate meaningful practice
- Interpreting answers – what do those numbers mean in context

Session 2 – Wednesday 2 December 2020

Welcome and Introduction 4.00 - 4.05pm

Sampling and importance of language 4.05 - 4.20pm
- Why are sampling methods important – triangle of needs
- Why language is important – getting the concepts clear in your own mind
- Sampling statistics vs parameters

Correlation and hypothesis testing 4.20 - 4.45pm
- Why correlation is a good way into Hypothesis testing
- Where do the numbers in the table come from
- A model for hypothesis testing how it should look like (examiners perspective) including writing conclusions

Binomial hypothesis testing 4.45 - 5.00pm
- Samples vs the Binomial prediction
- Diagrams that help with the hypothesis test
- Critical values

Normal Hypothesis testing 5.00 - 5.15pm
- What's different with Normal distribution hypothesis testing
- Diagrams that help
- Critical values vs p values

LDS and other data sets to engage students 5.15 - 5.30pm
- Why a large dataset, what were the intentions
- What other data sets might work better in teaching overall content
- Links to other subjects

DATE

Wednesday 25 November 2020
Wednesday 02 December 2020

WEBINAR LEADER

Alex Jacques-Williams has recently left teaching after over 20 years in the classroom, he has been an advisor for MEI, a Maths Hub lead and member of various maths panels. His most recent role was Head of Mathematics, and he was also a Maths SLE. He coordinates a network for A level Statistics teachers and has led CPD sessions in problem solving, multiplicative reasoning and curriculum design as well as coaching other Heads of Maths and teachers.

WHO SHOULD ATTEND?

- Heads of Mathematics
- KS3 maths teachers
- LA and Academy chain advisers

BENEFITS

- Better understanding of the subject and how it to structure a coherent approach to the key themes
- Teaching strategies and resources to raise student understanding and performance
- Insights from A level statistics and other subjects where statistics is a core component
- Ideas on how to engage students with relevant data sets