

## TEACHER WEBINAR

**NEW: TEACHING GCSE PHYSICS EFFECTIVELY 1: TEACHING MATHS, PRACTICALS, DIFFERENTIATION TECHNIQUES****FOCUS**

This course offers support and ideas to anyone who wants to improve their teaching of Physics at GCSE. Suitable to NQTs, RQTS and second subject teachers, this course aims to boost pedagogical knowledge of delivering the subject, practical ideas on how to deliver the curriculum and support subject knowledge. This is a fully interactive live online course.

These webinar sessions are led by Physics teacher expert Mark Lawrenson, whose GCSE Physics lessons have been consistently graded Outstanding by Ofsted.

**There are 3 webinars in the series, courses 8226, 8227 and 8228. They can be bought as a series for £260 or standalone webinars for £110.**

**ABOUT THIS SESSION**

In this session, we shall be focussing on the core skills students must acquire in order to be able to succeed at GCSE. We shall also consider the pedagogical framework that apply to all areas of the physics curriculum.

**PROGRAMME**

	TIME
<b>GCSE Physics – the Big Picture</b>	4.00 – 4.15pm
<ul style="list-style-type: none"> <li>● Overview of the core skills of the current physics curriculum, and where the emphasis of assessment lies in regards to AO1, AO2 and AO3</li> <li>● Current teaching approaches in physics teaching. How to accelerate learning using cognitive load theory and when to reduce it.</li> <li>● How to teach writing in Physics, Dual coding and its uses.</li> <li>● Putting Pedagogy into practice</li> </ul>	
<b>Teaching Maths in GCSE Physics</b>	4.15 – 4.45pm
<ul style="list-style-type: none"> <li>● No triangles!: how to teach how to learn equations – revision techniques, mnemonics and practice</li> <li>● Rearranging equations: how to teach maths skills whilst problem solving. Applications of maths and transferable skills.</li> <li>● Problem solving: modelling based problem solving – how it works and how to teach it</li> <li>● Maths questions and question types – teaching students how to respond appropriately, common mistakes, teaching approaches to teaching maths topics that avoid student errors in exams</li> </ul>	
<b>Teaching practical work in GCSE Physics</b>	4.45 – 5.15pm
<ul style="list-style-type: none"> <li>● How is practical work best worked in and taught in GCSE Physics? When practicals should be carried out and when they shouldn't. Experiential investigative learning versus Formal operational thinking</li> <li>● Planning the perfect practical: how to make sure your practical runs smoothly and your students get the results you want them to get.</li> <li>● How to prepare students for the exam questions assessing student's understanding and knowledge of practical activities</li> <li>● Teaching strategies to develop students' abilities in applying what they know to practical situations</li> </ul>	
<b>Differentiation Techniques in GCSE Physics for Exam Success</b>	5.15 – 5.30pm
<ul style="list-style-type: none"> <li>● Stretch and challenge: raising attainment in the most able. How to truly stretch and challenge your top students and boost their grades</li> <li>● Effective practical strategies and approaches to improve understanding and learning in lower ability GCSE Physics students</li> <li>● Exam techniques for students of all abilities – ways to make these work for your students</li> </ul>	
<b>Review and Q&amp;A</b>	5.25 – 5.30pm

**DATE**

**Wednesday 17 March 2021**  
**Thursday 10 June 2021**

**WEBINAR LEADER**

As a highly experienced and dedicated science specialist, **Mark Lawrenson** has led a number of Science Departments as well as a number of Senior Leadership roles. His passion for science and science education have included working with a National STEM Learning Centre, ASE, A Level Physics examiner with a leading awarding body, amongst others. A finalist in the Rolls Royce Science Prize and keep physicist, Mark continues to develop his own teaching as well as others. His Physics lessons have consistently been graded Outstanding by Ofsted.

**BENEFITS**

- Further develop your mathematical abilities through science lessons
- Extend your understanding of practical physics with relevance to exam scenarios
- Target grades 7 – 9 with guidance on how to help students apply their knowledge in the exams