

Tony Lowery, Head of Science at Chepstow School reflects on his experience in broadening the science curriculum at his school:

Chepstow School has been linked to Oxford Cambridge and RSA Examinations' (OCR) innovative science model since the introduction of the pilot scheme over 5 years ago, and we have seen an improvement in results, a growth in scientific literacy among the pupils, and increased demand for science at post-16.



Before this significant change, pupils and staff used to follow the traditional modular courses on offer at the time - results were deemed acceptable (above the national average), and there was no obvious demand for change. But there was something lacking; pupils and staff were, on the whole, bored. Pupils just weren't stimulated to consider science as a viable career option and this depressed the demand for post-16 science.



The faculty took a calculated risk and became a pilot school offering three of OCR's pathways: the core, the additional and the applied. It was challenging. Staff had to consider new methods of teaching and learning, the assessment criteria was very different to what went before and there was more emphasis on Key Skills. Scientific literacy became the goal.

Our results have gone up from 56% to 66% of cohort for the Science core and to 72% for the Additional GCSE. Sheer bloody-mindedness, an emphasis on CPD linked to the new GCSEs, more focused use of faculty time for developmental work, and the support that OCR and the Oxford University Press gave have all contributed to this success. Also, we took every opportunity to network with like-minded schools at a local and national level.

Estyn noted at our last inspection that our pupils were communicating effectively in a range of mediums. Targeting scientific literacy and using the Key Skills to inform delivery has had an impact on pupil engagement and enthusiasm for science – this year, more pupils than ever are selecting the sciences for post-16! And linked to other developments in the science curriculum at Key Stage 2 and 3, science is becoming exciting for staff and pupils at the school.

With this enthusiasm, we are looking ahead to the new National Curriculum for Science and welcome the freedom this gives us to further develop our pupils' understanding of science. And it gives the Science department more opportunities to contribute to the wider development of Key Skills across the school.

