

VISION *of the* FUTURE

Science and technology super centres are firing young minds, writes **Anne Cuthbertson**

In 1956, Logie Bruce-Lockhart, the headmaster of Gresham's School in Holt, north Norfolk, stepped in to help a nine-year-old boy whose father, the school's Classics teacher, had suddenly died. He gave the boy the financial support to continue his education, an act of kindness and generosity that was to prove one of the wisest investments in the school's history.

The boy grew up to become a household name in industrial design. Indeed Sir James Dyson's recent gift of £18.75m to Gresham's has been the largest in the school's 565-year history. In September this year, construction completes on the Dyson Building, a state-of-the-art centre for Science, Technology, Engineering, Art and Mathematics (STEAM) education.



PERFECT CHEMISTRY **Above:** Pupils enjoying science experiments at Woldingham School, Surrey
Below: A hands-on approach at the Patrick Engineering Centre at Oundle School, Peterborough

“To prime a pipeline of young people who want to study engineering, we must inspire them at the earliest possible stage – I hope this building will do just that,” says Dyson. “I’ve observed that, from the age of around six, children are very engaged: they are inventive, dreaming up ideas, and curious, wanting to know how they can

be made. But these traits get stamped out of them, partly by the system and partly because the teaching of these subjects in schools has not kept up with the pace of technological change.”

The glass building has been designed by the Stirling Prize-winning architects Wilkinson Eyre, whose work has been seen in the restoration of Battersea Power Station and the new stands at Lord's Cricket Ground. It is located at the heart of the co-ed school campus and next to the centuries old chapel. It will enable new approaches to teaching, with the latest tools and technology including robotics and programming, AI (Artificial Intelligence) and machine learning.

The Dyson Building is an extraordinary legacy with an expansive impact. “We look forward to working with the James Dyson Foundation to develop new and inventive ways of teaching,” says Douglas Robb, the headmaster. The school attracts pupils from all over the country and internationally. London-based children have the option of full or





CLEAR DIRECTION Top: A CGI of the Dyson Building which will be completed at Gresham's School this September **Above:** Children reap the benefits of the facilities at Bryanston's Sanger Centre

weekly boarding and buses to the school operate from Norwich and Cambridge.

Seventy miles away in Peterborough, Oundle School is another at the forefront of STEM teaching. In 2016, the co-ed day and boarding school completed its vision with a new mathematics department built adjacent to the science-based SciTech. SciTech is home to a wind tunnel, 16

dual classroom labs, scanning electron microscope and more. In addition, its Patrick Engineering Centre – where cars and hovercrafts have been designed and restored – has been described favourably by visitors as feeling “nothing like a school”.

Oundle has partnered with engineering heavyweights Imperial College London and the Swansea University Engineering

department. Outreach fellows from Imperial teach biology and chemistry along with various science clubs. Twenty Oundle students have recently gone on to win Arkwright Engineering Scholarships and on average 60 pupils each year go on to study STEM subjects at university.

Bryanston, a mixed boarding school in Dorset with some day pupils, has been reaping the benefits of a bespoke science and maths creative space since 2007 when its huge Sanger Centre was first constructed. Designed by Hopkins Architects, the three-storey building houses five labs each for biology, chemistry and physics to promote investigation and experimentation. A hive of activity, it allows amongst other things the Bryanston Racing club to design, build and race electric vehicles, checking the aerodynamics in the school's wind tunnel.

Extra-curricula clubs also reinforce the strong science offering at Woldingham, a girls' boarding and day school in Surrey, just a 40-minute train journey from London Victoria. Along with Chemistry Society, Chemistry Cosmetics, Med Soc and Dissection Club, Café Scientifique invites speakers to give talks on recent discoveries. With its nine-laboratory centre, the school's fresh approach to science is producing the results. In the past three years, one in four Woldingham pupils has gone on to study a STEM subject at university. **■**

greshams.com; oundleschool.org.uk; bryanston.co.uk; woldinghamschool.co.uk