



SPOTLIGHT ON EXCELLENCE

CELEBRATING: STEM ACROSS OUR TRUST

Welcome back to our fourth edition of Spotlight. This term, all three schools across Liberty Academy Trust came together for our first Trust-wide STEM Day, led by our Trust STEM Lead, Phil Warrilow. Phil designed a day rooted in curiosity, practical challenge and the excitement of applying Science, Technology, Engineering and Mathematics to real-world contexts.

The result was a joyful, high-energy celebration of STEM learning, with each school shaping the day to suit the strengths and interests of their pupils. The impact was felt in every classroom and workshop across the Trust.



Church Lawton School – Plastics, Purpose and Big Engineering Thinking

At Church Lawton School, KS3 students spent the day exploring the story of plastics, what Phil described as “plastic fantastic... and plastic not-so-fantastic.” Students began by learning about the extraordinary innovation plastics brought to society, before shifting to the environmental impact and global challenges we now face. Phil created materials and student booklets which guided pupils through the learning, with rich opportunities for discussion and problem-solving.

Meanwhile, older students took on an ambitious construction challenge. They worked through the full engineering process: designing, evaluating, building scale models and then constructing full structures with one-metre sticks. The tallest structure stood at 4.1 metres and was a real celebration of teamwork, resilience and creativity.

Principal Paul Scales commented on how valuable the day was for students of all ages, particularly in helping older pupils understand how STEM connects to careers and future opportunities.



Thames Valley School – STEM, Families and Shared Expertise

At Thames Valley School, the day was made even more special by inviting parents to join in the sessions. Families worked alongside their children, joining in investigations, construction tasks and experiments in a warm, supportive atmosphere.

Phil worked closely with Philippa Dinsdale, Thames Valley's Science teacher and Ciara Mallon, Interim Principal. Philippa led the engaging KS3 activities, while Phil delivered the KS4 programme, linking STEM knowledge to careers and real-life applications.

Seeing parents and pupils learning side by side was a highlight of the whole event and created a wonderful sense of shared excitement and curiosity.

Ciara Mallon, Interim Principal at Thames Valley School, said: "Our STEM day was a big success, engaging pupils of all different ages—from the academic to the practical, through to careers advice, the day offered students a lot to learn and think about and I know they got a huge amount out of it."



Vanguard School – Confidence, Collaboration and a Growing STEM Community

At Vanguard School, Phil noticed something powerful as the day unfolded: a visible and steady increase in students' confidence. Some pupils began the morning unsure of themselves or reluctant to take on unfamiliar tasks. But as they moved through the activities, Phil saw their determination grow.

Students became more independent, more willing to take risks and more excited to share their solutions. This shift, from uncertainty to confidence, captured the spirit of the entire day. One student said, "It was the most fun I've had all year!"

Phil also worked closely with Vanguard's science teachers Rah Saleem, Sam Spencer and Deputy Principal Joel North. Phil described the professional collaboration as one of the most rewarding elements of the event. Across recent months, Phil has also led cross-school STEM quizzes and shared topics across the Trust, helping build a connected and supportive STEM community.

Phil reflected that these opportunities have allowed science staff to strengthen their curriculum together, share their expertise and enrich the STEM experience for pupils across all three schools.

Rachael Clements, principal at Vanguard School, commented: "Especially for our older students, these discussions of careers, and how subjects like STEM interact with them, is invaluable."



A Trust Working Together



One of the most inspiring elements of this STEM Day was not just the activities themselves, but the spirit behind them. Schools shared resources, staff collaborated openly, and pupils experienced consistent, high-quality STEM learning tailored to their strengths and needs.

Phil's vision, rooted in curiosity, creativity and connection, shaped a day full of excitement, discovery and possibility. His original message captured it well: a chance for students to explore, imagine and discover "lots to learn and think about."

And at its heart, the success of this Trust-wide STEM Day reflected our shared Liberty values:

Courage

Students stepped into new challenges, tried unfamiliar tasks and pushed beyond their comfort zones, often surprising themselves with what they could achieve.

Determination

They persisted through tricky construction problems, refined their designs and kept going when things didn't work first time. The 4.1-metre structure at Church Lawton was just one example of this determination in action.

Teamwork

From families working with pupils at Thames Valley, to cross-school collaboration at Vanguard, to KS3 groups at Church Lawton problem-solving together, teamwork was visible everywhere.

These values weren't just spoken about; they were lived throughout the entire day. Our first Trust-wide STEM event has set a powerful foundation for the future. With courage, determination and teamwork driving us, we look forward to building an even stronger and more vibrant STEM community across all three schools, one that inspires curiosity, nurtures talent and opens doors for every young person.

Coming Soon

Stay tuned for the next edition of Spotlight on Excellence, where we continue to celebrate the incredible work happening across our Trust. If you have something you wish to feature in a spotlight, please get in touch.