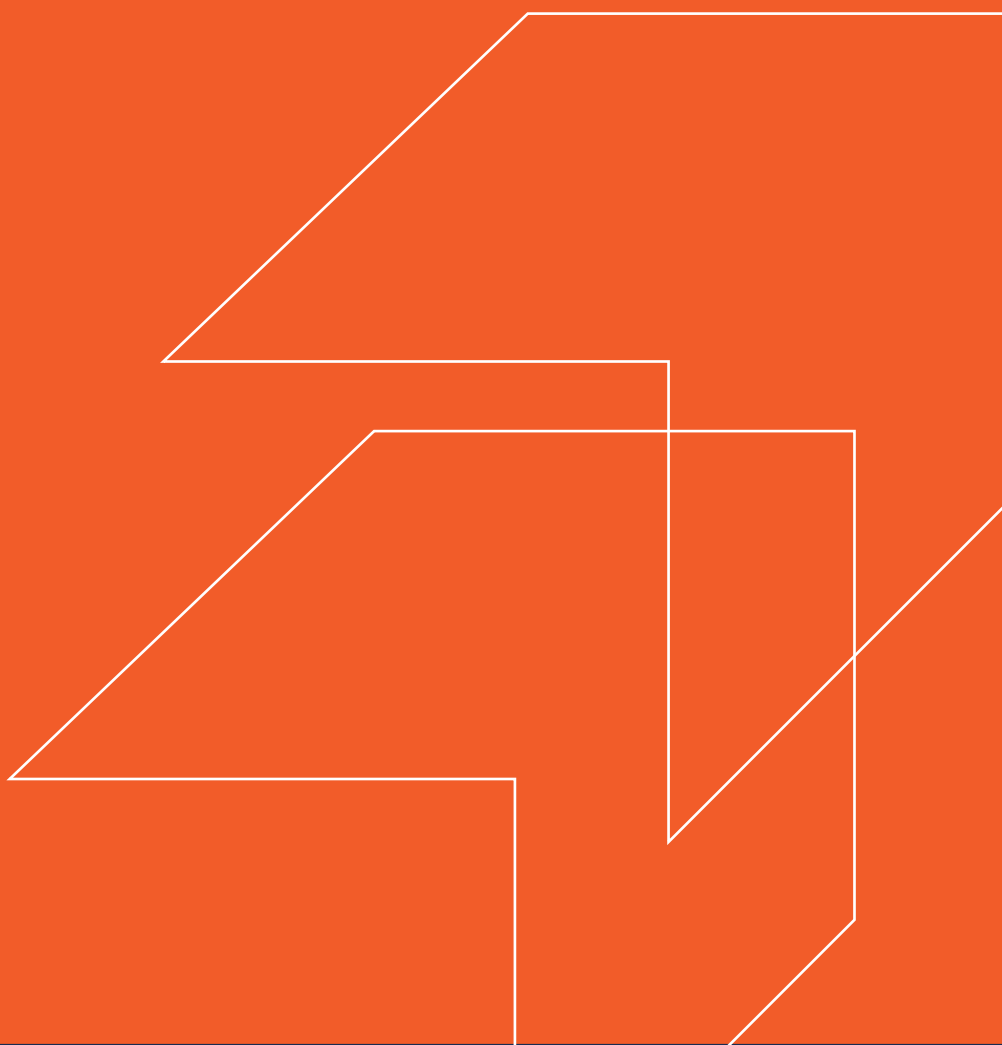




Primary Teacher Encounters

Case Study

Delivered by



Teacher Encounters Programme: Engineering Pathways in Primary Education

Between January 2024 and January 2025, primary teachers from six North East schools took part in the Teacher Encounters programme, coordinated by the North East Combined Authority. The initiative aimed to deepen teachers' understanding of apprenticeship pathways and engineering careers by immersing them in both a training environment and a live workplace. The experience was designed to help teachers bring real-world career insights back into their classrooms, enriching careers-related learning (CRL) for pupils at an earlier age.

The first visit, in January 2024, involved teachers from Shiremoor and Redesdale Primary Schools. The second, in January 2025, welcomed teachers from Toner Avenue, Monkton Academy, Central Walker, and West Boldon. Both visits followed a similar structure: a morning at TDR Training in Newcastle, a specialist provider in engineering and manufacturing apprenticeships, followed by an afternoon visit to either Siemens Energy or British Engines.

At TDR, teachers engaged in hands-on workshops on the shop floor and observed classroom-based training, gaining a comprehensive view of how apprenticeships function in practice. They also met current apprentices, learning about their journeys and the skills required to succeed in technical roles. The afternoon visits to Siemens Energy and British Engines offered a deeper look into real-world engineering environments and career opportunities, with staff sharing insights into their roles and the future of the industry.

Teachers described the experience as transformative. One teacher from Toner Avenue said, "It was so refreshing to be a student again. Seeing the environment first-hand gave me a clearer idea of what these professions involve. I can now guide pupils more honestly and explain what a factory looks and feels like." Another from West Boldon reflected, "The event was extremely well-organised. Staff at TDR were welcoming and knowledgeable, and Siemens left a lasting impression with their commitment to supporting young people in our region."

A key strength of the programme was the opportunity for teachers to collaborate. On the second day of each visit, they worked together to develop curriculum resources that linked their learning to classroom content. This included lesson plans in maths and design & technology (DT), with real-world applications such as calculating ratios in engineering contexts or exploring the mechanics of gears and pulleys. These resources were designed to challenge stereotypes, highlight local labour market opportunities, and introduce pupils to vocational pathways like T Levels and apprenticeships.

The impact extended beyond teacher development. At Redesdale Primary, the experience informed a six-week careers block for Year 6 pupils, focusing on apprenticeships, local industries, and essential workplace skills. Pupils particularly enjoyed the T-puzzle activity from TDR, which encouraged teamwork and problem-solving. Teachers noted that pupils had limited prior knowledge of career pathways but quickly grasped the benefits of apprenticeships and vocational learning.

At Shiremoor Primary, the visit inspired a redesign of the Year 5 DT curriculum. Practical tasks such as measuring, cutting, and assembling were aligned with skills observed at TDR. The school also began integrating careers content into maths lessons, using real-life scenarios from engineering and manufacturing to teach concepts like percentages, geometry, and data handling.

The programme also highlighted the importance of preparing pupils for encounters with industry. Teachers discussed how to scaffold these experiences with pre-visit lessons and follow-up activities, ensuring pupils could make meaningful connections between what they learn in school and the world of work.

Looking ahead, participating schools plan to embed the Teacher Encounters model into their long-term careers provision. Redesdale Primary is developing a careers long-term plan (LTP) to ensure consistent exposure across KS2, with aspirations to expand industry visits to other year groups. A follow-up visit to TDR is already planned for another school, including a mock apprenticeship application process to further immerse pupils in the realities of vocational pathways.

The Teacher Encounters programme has proven to be a powerful tool for upskilling educators, enriching the curriculum, and inspiring pupils. By connecting teachers with local employers and training providers, it bridges the gap between classroom learning and future careers—ensuring that every teacher becomes a teacher of careers.