Aspire to STEM programme: positively impacting disadvantaged young people

Aspire to STEM (AtS) was funded by the Department for Education's Teaching and Learning Improvement Fund. It ran from October 2017 to March 2020, targeting disadvantaged areas and schools supporting students facing high levels of multiple disadvantage. Over 200 schools worked collaboratively with each other and with STEM Learning in 40 partnerships aimed at improving pupil outcomes in science, technology, engineering and mathematics (STEM).

An initial independent evaluation found evidence of:

- **Improved subject leadership**: targeted teacher professional development (CPD) enabled subject leaders to develop STEM curricula to engage and inspire their students, alongside developing their own leadership and management skills. Participating in CPD also improved planning and links with feeder schools, and helped to build a culture of continuous improvement.

- **Enhanced teacher retention**: support from the AtS programme helped stabilise staffing in departments that had been struggling with high staff turnover, a key challenge for many schools in disadvantaged areas.

- **Improved quality of teaching**: the highly practical and relevant CPD offered by STEM Learning increased teachers' pedagogical skills, STEM knowledge, enthusiasm and confidence, enabling them to support and stretch students who were not previously fulfilling their potential.

- **Improved student engagement and progress**: teachers reported that students improved progress in STEM knowledge, skills and understanding, as well as confidence, motivation and engagement. Whilst too early to track via exam results, improvements were seen in teacher assessments and mock exams.

- **Community events engaged students and families**, boosting STEM uptake. For example, one school used community activities facilitated through the partnership to engage low-income families, so increasing the numbers wanting to take Triple Science from two - too few to run the option - to 18 students.

STEM Learning, April 2020.