



## **ENTHUSE Partnerships – impact and effectiveness Summary of independent evaluation by CUREE, June 2017**

### 1. Background and Context

ENTHUSE Partnership funding enables groups of four to eight schools and colleges to work together, with support from STEM Learning on a two-year intensive programme to raise aspiration and achievement in STEM subjects. Each Partnership can access up to £15,000 worth of support, including face-to-face CPD, in-school consultancy and a contribution towards cover costs. There have now been five cohorts of ENTHUSE Partnerships since 2014, supporting a total of 248 schools (201 primary and 47 secondary).

An independent evaluation of ENTHUSE Partnerships has recently been completed by the respected Centre for the Use of Research and Evidence in Education (CUREE). A short summary of the evaluation findings is given below.

This evaluation is important for informing future work, as an expansion of ENTHUSE Partnerships, sponsored by a range of organisations and targeting schools and colleges in particular need of support, sits at the centre of the next phase of Project ENTHUSE 2018-23.

### 2. Impact of ENTHUSE Partnerships on Young People

CUREE report that

*“Our evidence suggests a positive impact on pupils outcomes [through their schools’ involvement in an ENTHUSE Partnership], both in terms of academic attainment but especially in relation to pupil engagement and enjoyment of STEM subjects, particularly in science. Many colleagues reported that pupil understanding of the value and applicability of STEM subjects and careers had increased at primary and secondary level.”*

Specifically, as a result of activities made possible by the ENTHUSE Partnership:

- 96% of school leaders and 84% of teachers agreed that involvement in the ENTHUSE Partnership had positively impacted pupils’ attainment in STEM subjects.
- All school leaders and 90% of teachers reported that pupils’ engagement and interest in STEM subjects had increased.
- Crucially, 52% of school leaders and 56% of teachers reported that pupils were more aware of career paths made possible through study of STEM subjects, with 68% and 58% respectively finding that pupils’ understanding of the value of STEM subjects in business and industry had improved. This is encouraging given the number of primary schools involved in early cohorts. With an increased emphasis on careers and a larger proportion of secondary schools in new cohorts, these figures are expected to show further significant increases.

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- Also importantly, primary pupils receiving Free School Meals (FSM) increased their attainment in science in all cohorts of the ENTHUSE Partnerships so far. In some cases, FSM pupils made greater rates of progress than non-FSM pupils (1 in 4 FSM pupils moved up a category, compared to 1 in 5 for pupils overall).

### 3. Impact of engagement in ENTHUSE Partnerships on teachers and schools

CUREE found strong evidence of positive impacts on schools' teaching practice through their participation in the ENTHUSE Partnerships, including increased confidence and skills in practical science.

*“A particularly strong area of development was the teaching of practice, enquiry-based science and the confidence, ideas and skills to do so. Improvements were also commonly found reported around forming cross-curricular links with science, and especially for developing maths through science.”*

All school leaders and 83% of teachers agreed that staff subject and pedagogical knowledge had increased through their involvement in the Partnership activities, with 81% and 79% respectively reporting an increased understanding of how to embed STEM information and ideas into teaching and the curriculum.

92% of Partnership leaders reported increased collaboration with other schools as a result of the ENTHUSE Partnership, with 65% also reporting increased collaboration with other non-school organisations including business and industry. Through the work made possible by ENTHUSE, Partnerships have been able to secure a range of funding, including sponsorship and donations from local businesses, so building sustainability. Success of Partnership activities and the increased profile of science has helped head teachers to see the value of investing in science beyond the Partnership period.

Crucially, 82% of Partnership leaders reported that involvement in the programme had increased their enthusiasm for STEM subjects and helped inspire them to remain in teaching, with 58% of teachers reporting the same. This is an important finding, particularly in light of current concerns over teacher retention in all areas, but specifically in STEM.

STEM Learning, June 2017.

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