



Evaluation of STEMNET's operations and impact 2011-2015 Summary of the independent interim report

"The evidence from this first year of the evaluation demonstrates the highly successful performance of STEMNET's operations and programmes and its range of impressive achievements." NFER

The National Foundation for Educational Research (NFER) has provided STEMNET, its funders and stakeholders with high quality evidence about the effectiveness of STEMNET's operations and the impact of its programmes, as well as information and guidance to enable continuous improvement of its work.

Overall, the findings are extremely positive and reflect the hard work of everyone involved with STEMNET.

Evaluation methodology

The report evaluates the entirety of STEMNET's work and is based on surveys with:

- Over 5,000 pupils across the UK
- More than 400 teachers
- Nearly 3,500 STEM Ambassadors
- STEM employing organisations

How effective is STEMNET for teachers and schools?

STEM Ambassadors are seen by teachers as inspirational role models, able to motivate and enthuse pupils. Teachers also value their knowledge and insight into different career routes and pathways. There were similarly positive views of the support provided for STEM Clubs by STEMNET.

- 87% of teachers report an increased awareness of STEM subjects and their real world applications amongst their students
- 85% of teachers report increased pupil engagement in STEM subjects
- 82% of teachers consider that STEM Ambassador activity improved pupils' motivations and aspirations to study STEM subjects further

The STEM Ambassadors programme helps teachers bring the real world of STEM into the classroom. Teachers also gain an increased knowledge of STEM careers options and the skills required by such careers and report that they have improved relationships with business and industry.

- 77% report increased awareness of STEM career and employment options
- 71% report an increased understanding of STEM business and industry
- 67% report increased use of real life contexts in teaching
- 61% of teachers reported an increased likelihood of remaining a teacher of STEM as a result of running STEM Club(s) in their school

What do pupils think of STEMNET's programmes?

Pupils are also very positive about their involvement with STEMNET's programmes. Case study participants report that they most enjoy activities which challenge their abilities and cover a range of different topics. Their involvement in STEM Clubs appears to be particularly effective, with 74% rating their club as either "very good" or "good."

- 55% of pupils say they enjoy science, this increases to 71% for pupils who have had contact with a STEM Ambassador and 80% for STEM Club members
- 62% of pupils say that they are doing well in Science, increasing to 75% who have engaged with a STEM Ambassador and an impressive 84% who are members of a STEM Club
- 49% of pupils who have had contact with a STEM Ambassador and 61% of STEM Club members want a job that involves STEM, compared to 37% of all pupils

“I think the [STEM Careers event] influenced my A-level choices. I think I might’ve got there in the end but it would’ve taken me longer. I might not have made the decision so consciously. It was more informed.”
(Year 13 pupil)

How effective is STEMNET for STEM Ambassadors?

We know that the opportunity for personal and professional development is a key motivator for STEM Ambassadors to volunteer and the evaluation indicates that STEMNET is fulfilling this. STEM Ambassadors report that their involvement with STEMNET has provided them with the opportunity to network with other like-minded people working in the STEM field.

- 76% report increased personal satisfaction
- 67% report increased confidence working with schools and young people
- 48% of STEM Ambassadors report increased motivation and job satisfaction
- 96% of STEM Ambassadors say that they would recommend the STEM Ambassadors Programme to their friends/colleagues

“It definitely improved my ability to present to a different audience than I’m used to at work.”
(STEM Ambassador)

How effective is STEMNET for STEM employers?

STEM employers report positive impacts from their engagement with STEMNET’s programmes. In particular they noted reputational benefits, such as a greater public understanding of their work. Some employers also observed an improvement in their ability to recruit staff, thanks to their work in schools.

“People are starting to say when they come for interviews...it’s because they can see our involvement in those sorts of activities and it makes them feel that they want to work for a company that has those...values.” (STEM employer)

STEM employers also feel that there is a shortage of appropriately skilled graduates in the workforce. Employers view their involvement with the STEM Ambassadors Programme as a means of helping young people acquire those skills, as well as seeking to attract a greater number of job applications from young people upon leaving education.

Conclusions/recommendations

The evidence from the first year of evaluation demonstrates the highly successful performance of STEMNET’s operations and programmes and highlights a range of impressive achievements.

Of course, there is always room for improvement and STEMNET remains focused on continuous improvement and development and will look at areas in the report where there is opportunity to improve further.