

# LINKING STEM INDUSTRY & STEM LEARNING

Partnerships to inspire the next generation about Science, Technology, Engineering & Maths

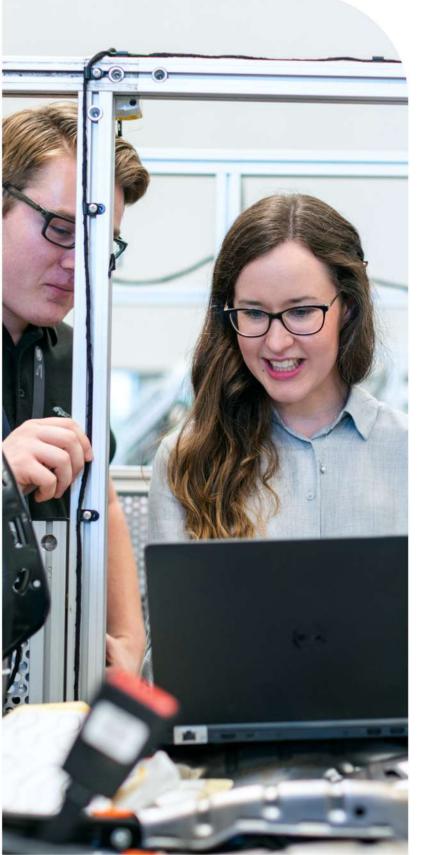


2023

STEMPOINT is a registered charity (number 1094254)



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### STEMPOINT Facts

of Nuffield

participants

came from low

income backgrounds

92% 23,876

STEM Ambassador Volunteering hours in 2022

schools participated in our K'NEX 2022 challenge (Herts & Luton)



## Introduction

## **ABOUT US**

STEMPOINT is an educational charity trusted by schools and community organisations for more than 35 years.

Our aim is to inspire young people about Technology, Engineering Science. Mathematics (STEM) and encourage them to take up a career in STEM.

## Why are we needed?

STEM education is not just about studying the right subjects at school; it is about gaining the right mindset and skills for the workplace, both now and in the future. These skills are of vital importance for innovation and to support our economy, our country and our planet.

## There are some great benefits to supporting our work:

- · Helps meet your organisation's Corporate Social Responsibility goals and **Environmental, Social & corporate** Governance
- · Gives you access to talented future employees
- · Puts you at the heart of your local community
- Provides skills development opportunities for your employees
- Can improve employees' job satisfaction and motivation

## VISION

Our vision at STEMPOINT is to create a world where every individual, regardless of their background or circumstance, has access to high-quality STEM education and resources that will empower them to reach their full potential and make a positive impact on society. We want to create a society where everyone has the opportunity to pursue their passions in STEM and contribute to a better, more sustainable future for all.

## MISSION

STEMPOINT is committed to fostering a community that celebrates diversity, promotes inclusion. and values innovation collaboration. We will inspire and engage learners of all ages to explore, experiment, and discover the wonders of STEM through handson, experiential learning opportunities and through meeting inspirational role models.

What We Do

## OUR CURRENT PROJECTS



During 2021/2022 our schemes, workshops and equipment loans enriched the learning experiences of around 45,000\_pupils. We invite you to support our work in continuing to help develop employability skills and raise the aspirations of the next generation of scientists, engineers, mathematicians and technologists by sponsoring our work.



## STEM AMBASSADOR PROGRAMME

working with role models from the world of STEM, we deliver the STEM Ambassador programme in the East of England, helping to mobilize over 3500 STEM Ambassadors to inspire local young people. STEM Ambassadors are professionals from local business, industry and research – who are available FREE OF CHARGE.



## PRIMARY & SECONDARY WORKSHOPS

In Hertfordshire and Luton, we annually run over 250 hands on primary workshops covering all aspects of the KS1 and KS2 science, technology and maths curriculum. We also work with schools to provide work related learning days for students, organise talks, competitions and challenges throughout the year.



## GO CONSTRUCT K'NEX CHALLENGE

The K'Nex Challenge is annually delivered to more than 100 primary schools in Herts and Luton with over 5000 students taking part in this hugely popular design and build engineering challenge.



## **CREST AWARDS**

We are the Regional CREST Support Organisation for the British Science Association's CREST (creativity in science & technology) awards, giving young people the chance to develop their skills in scientific enquiry and teamwork by rewarding students' project work. At both primary and secondary levels.



## RESEARCH PLACEMENTS

Each year we co-ordinate Research Placements for over 300 year 12 students across Herts, Beds, Bucks, East Anglia & London catalysing the careers of STEM professionals of the future. We seek to work with companies and organisations who can offer high-quality research placements.

## **Professional Team**

## **OUR STAFF**



Helen Spencer
Managing Director



Helen Bailey
Schools coordinator/CREST
& Accounts



Elena Evryviades **Business Support Manager** 



Vanessa Nash
STEM Engagement
Administrator/ K'nex



Sally Moore

Research Placement

Lead



Julianne Law

Research Placement

Coordinator



Julie Cattermole

Research Placement

Coordinator



Rebecca Sussex

STEM Ambassador

Hub Lead



Joanne O'Reilly

STEM Engagement

Coordinator



Dr Alex Perry

STEM Engagement

Coordinator

## STEM AMBASSADOR PROGRAMME



STEMPOINT is the STEM Ambassador Hub for the East of England covering Bedfordshire, Buckinghamshire Cambridgeshire, Hertfordshire, Norfolk and Suffolk.

STEM Ambassadors are role models to young people and can get involved in outreach in a number of ways, depending on the needs of your business and your overall aims. For example; to improve the talent pipeline. Many other youth groups and events also benefit from STEM Ambassador engagement, such as Guides, Scouts, and STEM festivals.

STEMPOINT can help you make the most of your organisation's STEM Ambassadors and publicise events and initiatives to local schools, acting as an intermediary and advocate.

We work with STEM Learning on enrichment activities, such as sector-themed initiatives including Space, Climate/Sustainability and the Built Environment.



In the academic year 2021-22, STEM
Ambassadors in our region provided more than 20,000 hours of volunteering in almost 90% of the secondary schools in the region

Join our growing group of STEM Ambassadors today. There is no cost to sign up and all STEM Ambassadors receive a free DBS check.

Would you like to know more?
Contact v.nash@stempoint.org.uk







# PRIMARY & SECONDARY SCHOOL WORKSHOPS



We have been providing high-quality, fun, educational workshops to local schools for over 35 years.

We have workshops which cover all age groups and abilities and every area of STEM. We have recently updated our workshops to reflect changes to the curriculum, especially in meeting requirements for increased computer science and programming skills.

4,279 pupils engaged with in 2022

Some sponsors support workshops that closely match their own aims or area of business or choose to support a group of local schools. PROJECT HIGHLIGHT

"Give them the time and the space to wonder. Give them the means to be inspired by each other and to discover and question the world around them."

Katy Hancock, science teacher

Please note: our workshops are currently only available in Hertfordshire and Luton, but please get in touch to discuss further options.

Contact our Workshop lead, Helen Bailey for more info: h.bailey@stempoint.org.uk





# GO CONSTRUCT K'NEX CHALLENGE

The aim of the K'nex Challenge is to provide primary school children with an introduction to the exciting world of engineering and technology in a fun and educational way. The challenge, organised by STEMPOINT, is suited to Years 5 and 6 as a classroom activity for up to 36 pupils per session, and is suitable for children of all abilities.

The challenge is delivered by a trained engineer, normally a STEM Ambassador. In 2022, more than 120 schools in Hertfordshire and Luton took part in this popular annual event, valued by both teachers and pupils.

Thanks to sponsorship by Endava and the CITB, we have expanded the challenge to schools in Suffolk for 2023.

PROJECT HIGHLIGHT

In 2022 we completed 221
K'NEX challenges across 120 schools with 6,349 pupils in Hertfordshire and Luton.

Would you like to get involved?

Contact our K'NEX lead Vannessa Nash: v.nash@stempoint.org.uk







# CREST AWARDS AND RESOURCES



CREST is the British Science Association's flagship education programme. The scheme inspires young people to think and behave like scientists and engineers by hands on investigations. CREST is suitable for a wide range of age groups (aged 5-19) and abilities.

## Some Benefits...

With CREST Star and Superstar, Primary aged children have fun developing their problem solving and communication skills.

In addition to giving young people the opportunity to undertake hands-on science, CREST Awards also build skills that are transferable to other subjects, further education and future employment (time-management, project management, teamwork and communication).

It can be run in schools, after school clubs, other organisations or at home. CREST Awards challenges pupils to work creatively with freedom and independence throughout, they will have fun developing their problem solving and communication skills and links well to the national curriculum.

PROJECT HIGHLIGHT

"CREST is engaging and fun, you can explore your own interests. Getting an award was a big accomplishment for me and made me happy"

Luke - CREST Student

For more information and sponsor a CREST Award, please contact Helen Bailey at: h.bailey@stempoint.org.uk or call 01438 419451







## RESEARCH PLACEMENTS



We have delivered Research Placements for over 25 years, offering students in Year 12 (aged 17-18) the opportunity to work alongside scientists, engineers, mathematicians and technologists for two weeks of their summer holiday. The students work on a specific project and at the end produce a report and attend a Celebration Event. Most students also go on to achieve a Gold CREST Award for their work.

66% female participation in 2022

92% of participants came from low income backgrounds

80% of participant were from ethnic minority groups

Students from low income backgrounds and those who will be the first in their family to go to university are prioritised.

We are looking for organisations and companies who can provide these experiences and supervise a student during the summer and provide sponsorship to allow even more students to take part. PROJECT HIGHLIGHT

"Without STEMPOINT and the Nuffield Research Placements we would not have known where to start with our STEM outreach activities. I am impressed with the amount of support that is available for both the company and the student"

-Dr Ela Smiljanic-Hurley, STEM Ambassador, LifeArc

Could you supervise a student with a STEM project?

Contact: s.moore@stempoint.org.uk







## BRITISH SCIENCE WEEK

onally-recognised

British Science Week is a nationally-recognised initiative led by the British Science Association. STEMPOINT has offered events linked to British Science Week free to schools for many years.

In 2022, we had speakers from a diverse range of backgrounds in all fields of science and engineering, offering lectures in exciting and interesting subjects.

1,980 students benefited from these talks

Our BSW Challenge 2023 - Create-A-Bird

A free, fun, practical, problem-solving competition for all primary school children to take part in during British Science Week either in school or at home.

PROJECT HIGHLIGHT

For the Primary Paper
Engineering Challenge
for BSW 2022 – Createa-Plant we had 195
schools with around
35,000 KS1 & KS2 pupils
register to take part
across East of England
including Essex.

To sponsor our British Science Week activities, or offer an expert talk

contact: h.spencer@stempoint.org.uk









## Want to get involved?

## **HERE'S HOW...**

Many employers have outreach programmes to inspire young people about STEM. Perhaps you've just started out, or wish to expand the reach of what you do.

We can help you develop your activities and bring them to target audiences, for example; in areas of economic deprivation, rural or coastal communities or for people who are currently under-represented in STEM industry.

We don't just work with schools and colleges, but community youth groups too. You can also become a main sponsor for STEMPOINT to help us achieve even more...



Partnering
with
STEMPOINT
and other
employers
to promote
STEM
careers
through
bespoke
school and
community
activities

## Sponsoring a Workshop

Sponsoring a school workshop can cost as little as £390.00

## Sponsoring a Research Placement

No direct cost. All we ask for is your time to help a student(s) develop their interest in STEM by offering a 2-week work placement with your organisation over the summer holidays. Disadvantaged students need funding to reach their placements, could you help provide sponsorship?

## Developing your organisation's STEM Ambassador Programme

No direct cost, just time and dedication in helping us raise the engagement within your organisation

## Sponsoring STEM activities in schools and community groups

Please discuss with us to help fit your budget

## Sponsoring a CREST award

A Discovery award can start from £90 for a class of 30 students



## WITH THANKS TO ALL OF THE ORGANISATIONS THAT HAVE SUPPORTED US IN 2022-2023 INCLUDING:

































GallifordTry





University of Hertfordshire













NetworkRail

















## Contact

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