



SECONDARY

Welcome to the latest edition of our STEMPOINT newsletter! We're excited to share with you some of the latest developments in science, technology, engineering, and mathematics (STEM) education, and to showcase some of the outstanding work being done in these fields.

STEM education is more important than ever, as we face increasingly complex challenges in areas such as healthcare, climate change, and technology. Our students are the future leaders who will tackle these challenges head-on, and we're proud to be part of their journey.

We believe that STEM education is essential for creating a better world, and we hope that this newsletter inspires you to support and invest in this critical field. We invite you to join us in our mission to empower the next generation of STEM leaders, and we look forward to sharing more updates and insights in the future.

Thank you for your interest and support, and we hope you enjoy reading this edition of our newsletter

Rebecca Suzzex

STEM Manager, STEMPOINT

NEW STEM insights primary & secondary magazines!

They are packed with everything you need to support your teaching - all based on your feedback. You'll find topical blogs, CPD tips, links to free resources and much more. Check out the digital versions

Primary: <https://bit.ly/3TVWAij> Secondary: <https://bit.ly/3JUSsdM>



NEWSLETTER



Our STEM Ambassadors are exceptional individuals! They are a mix of professionals from across industry, who are willing to work with young people, to inspire them, which can serve as a stepping stone to their future careers.

Connecting young people with STEM industry experts; STEM Ambassadors help to bring STEM subjects alive and provide real-life examples of industry careers, creating an invaluable link between schools and industry. For the last 20 years, they have been an incredible resource to schools, colleges and communities across the UK and can be requested to support STEM skills across the curriculum and cross-curricular work



STEM Ambassadors make that link really clear between the learning pupils are doing in the classroom and how they will be able to use that in the real world.

Laura Deacon, Head of Science, Pegasus and Orchard Meadow Primary Schools





10-19 March
British
Science
Week
2023

More than 50 STEM Ambassadors delivered talks to students during British Science Week. On Monday, 13th March, Stanground Academy, Peterborough welcomed Ellen Bazeley-White, who spoke about her career and especially her time with the British Antarctic Survey.

A theatre full of students listened intently to Ellen speaking about how she was inspired by her primary school teachers which lead to a lifelong love of Maths and Data.

Ellen really brought data management to life by putting it in context of the roles she has held. From her early career working in museums, to being part of two research cruises on the RRS Ernest Shackleton in the Antarctic.



Ellen answered lots of questions, such as "what was the best part of being in the Antarctic" to which she replied that it was a privilege to work somewhere where few people have been, and which no country has control over due to the Antarctic Treaty, to "can you survive in the Antarctic Ocean in the winter?"

Numerous photographs were shared from her career and Ellen concluded her talk by showcasing the wildlife found in the Antarctic.

School Career Talk – Stanground Academy Science Week 2023

My Career in Science and how I got there

By Ellen Bazeley-White



Thurston STEM Day: Year 12 Pupils and Year 10 Pupils Educate and Inspire Year 6 Pupils



On March 14th, as part of British Science Week, Thurston Sixth at their Beyton campus hosted a STEM Day for 310 year 6 pupils from 13 local primary schools.

The William and Ellen Vinten Trust provided funding towards the schools' transport costs. The event was organised by the Thurston Partnership Trust Coordinator, Teresa Farley.

There were 8 science activity stations – 7 of these were run by 30 year 10 pupils from Thurston Community College and 1 was run by John Parnum, a STEM Ambassador. John demonstrated a Lego sorting device, a tipping truck and a marble randomiser.

The year 10 pupils educated the younger pupils with microscopes, flying tea bags, fingerprints, fizz-pop rockets, optical illusions, electrical conductors and balloons which did not burst when pierced with cocktail sticks.

After the science activities there was a quiz led by 6 year 12, sixth-form pupils. Freya was the quizmaster and Oliver kept score. The year 6 pupils successfully and loudly answered questions about space, the human body, mathematics and wildlife.

"The microscope was my favorite."

"Can we take this home and play with it at the weekend?"

"We've got into the flow now."

"The year 10 pupils explain things very well."

"They all learned something."

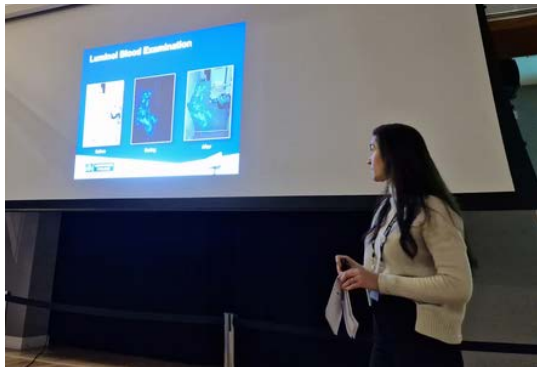
Student-led activities are a great way of getting STEM activities off the ground, and many schools use them for STEM clubs as well as events like this. Get in touch for more advice and to find STEM Ambassadors to support you.

STEMPOINT were delighted to award 2022-23 funding grants! Here's how some of the money is being used:



St Ives Home Education Club, Cambridgeshire hosted an interactive session led by STEM Ambassador Sarah Higgs from the London Metropolitan Police. The students watched a presentation explaining what her job as a Forensic Examiner is like and the routes into a career like hers.

The talk was followed by a hands-on activity involving getting suited up in hazmat suits to investigate a crime scene. Clothing was tested to find real blood splatter.



WOMEN IN ENGINEERING DAY 23RD JUNE



To celebrate Women in Engineering Day we have put together an informative booklet for teachers and students. The booklet contains information on Engineering Careers, Meet some of our STEM Ambassadors who work within the fields, useful links to websites, YouTube videos and some interesting statistics. [Request your copy today!](#)



St Alban's Catholic High School in Ipswich are running a weekly afterschool STEM CLUB. Each week they carry out investigations and experiments like:

Polymer Worms
Investigate if polymer worms can be useful

Make a Hologram!
Experiment with refraction and reflection

Quicksand
Find out about Non-Newtonian fluids

Make Ice Cream You will make (and then eat) ice cream!

Chocolate Experiments
Examine crystalline structures of chocolate, YUM

Make a spirometer What is your lung capacity? Let's find out

Make your own robot
You will make a small robot buggy

SECONDARY SCHOOL STEM CLUB SUPPORT AND ACCREDITATION

Complete an action plan and get £50* for your STEM Club. Contact j.oreilly@stempoint.org.uk for details

Register for a STEM Club Quality mark and receive £100* for your club! [click here](#)

Ask a Space expert a question

Book a Space expert for your STEM Club

SPACE EDUCATION CURRICULUM

The Space Education curriculum is produced by the Space Prize Foundation, which is dedicated to preparing students for the growing space economy and for humanity's rapidly approaching multi-planet future. The eight chapters here cover not only an introduction to space science and the history of space exploration, but also why space matters to people on Earth, what is happening in the new space economy, and longer-term philosophical concerns such as ethics, governance, and sustainability throughout the solar system and beyond. [read more...](#)

Bring space into your teaching



Space CPD

Book onto ESERO-UK's high-impact CPD and bring space into your classroom.

Primary CPD

Secondary CPD



Space resources

Hundreds of curriculum-linked and quality-assured space resources.

Primary resources

Secondary resources



Space Inspirations

Inspire the next generation of space professionals by bringing Space Ambassadors into the classroom.

Explore Space Inspirations

Request a FREE copy of our Journey into Space Booklet - a resource for teachers and students:



Jo O'Reilly
STEM Enrichment Co-Ordinator
for STEMPOINT
Email: j.oreilly@stempoint.org.uk

*Grants are limited and will be allocated on a first-come-first-served basis
[Terms and conditions here](#)

SPACE INSPIRATIONS



Teachers - Thinking about what to do on transition day? Why not ask your feeder schools to run SuperStar activities by CREST Awards, starting now. They will need to run 7 x 1 hour activities before they arrive at your school, then you can run the 8th 1 hour activity when they arrive. You can also award them after they finish by purchasing their certificates and badges beforehand for only £1 per pupil! There are lots of activities and topics to choose from.

CREST Discovery 'Machines of the Future' Project

Calling all Technology Teachers!

Free Teacher Training to run the CREST Discovery Machines of the Future Award in school!

CREST Discovery Awards Overview

- Hands-on science, technology, engineering and maths (STEM) projects
- Great for 10 to 19-year-olds
- Open-ended, student-led, an enquiry-based learning approach with real-world context
- Perfect for STEM enrichment days
- Enhances Science Capital

If you would like to register for your free teacher training session to run this fantastic, low resource CREST project, please register **HERE**. The session will last no longer than 1 hour including questions via Zoom, and it can be at any time of day that suits you and your colleagues, usually twilight works better for teachers.

For more information contact Helen at: h.bailey@stempoint.org.uk



Want to know more?
Get in touch with Helen Bailey
h.bailey@stempointeast.org.uk

For more info:
<https://primarylibrary.crestawards.org/all-superstar-challenges/61747644>

SECONDARY

Getting started guide

Develop your students' project skills and make science personally relevant to them with CREST Bronze, Silver and Gold. **Typical age: 11-19**



Find out how to build practical CREST projects into secondary science lessons using our **free teacher guidance pack**. Supporting this guidance are easy-to-use, free-to-download mapping workbooks, which match individual Bronze, Silver and Gold CREST Award projects with each area of the secondary science curricula





STEM careers in the UK are diverse and in high demand. Some popular STEM fields in the UK include software engineering, data science, artificial intelligence, cybersecurity, renewable energy, and biotechnology. The UK government is actively investing in STEM education and initiatives to encourage more people to pursue STEM careers.

SKANSKA

A variety of exciting apprenticeship, internship and graduate programme opportunities at Skanska.

<https://www.skanska.co.uk/about-skanska/careers/early-careers/>

AECOM

Graduates and early careers opportunities at AECOM

<https://aecom.com/careers/graduates-and-early-careers>

GSK

Work experience, placements and internships at GSK

<https://www.gsk.com/en-gb/careers/early-talent/work-experience-placements-and-internships/>

MORGAN SINDALL

Resource for educators to use to promote Degree Level Apprenticeships

[Click here to learn why a construction apprenticeship is a great career](#)

IOP Institute of Physics

PLANET POSSIBILITY

Physics careers advice: Explore your career options. Start planning your next step. Kick-start your career in physics!

<https://www.planetpossibility.co.uk/>

BAE SYSTEMS

BAE Systems Work Experience Programme

<https://www.baesystems.com/en/careers/careers-in-the-uk/getting-ready-for-work/work-experience>

neon

ALL ROUTES INTO ENGINEERING

Download the new resource

neonfutures.org.uk/allroutes

2 Careers & Apprenticeship Fairs

Add your Careers Fair dates to our Padlet - shared with local employers and STEM Ambassadors

<https://bit.ly/viewcareersfairs>

IMI INSTITUTE OF THE MOTOR INDUSTRY

IMI Skills Competitions



The secondary science teaching and learning conference is here!

Date: 14 July 2023

Location: The National STEM Learning Centre, York

Who is it for? Any secondary science teachers, whatever stage of your career you are at.

Price: £200+VAT

Join us at the National STEM Learning Centre in York to invigorate your science teaching and;

- Spend the day getting hands-on in workshops
- Experience exciting lab-based sessions
- Listen to speeches from experts in education including Professor Rob Coe and David Bailey
- Spend time with STEM Ambassadors and learn how they can enhance your teaching
- Choose the workshops best suited to your development on topics such as curriculum and leadership

BOOK NOW

SAMSUNG



Solve for Tomorrow Next Gen



New resources for 2023!
Tech-for-good design sprint and competition

FIND OUT MORE



national schools partnership

Amazon Future Engineer Programme



Royal Academy of Engineering

The bursary scheme is part of Amazon Future Engineer, Amazon's comprehensive childhood-to-career programme to inspire, educate and enable children and young adults from lower-income backgrounds to try computer science and related engineering courses.

<https://www.amazonfutureengineer.co.uk/>

EEEGR
EAST OF ENGLAND ENERGY GROUP

EEEGR need 100,000 people to go into the offshore wind industry by 2030..... [read more](#)



careermag
FOR PARENTS, CARERS & GUARDIANS

Flick through and discover:
5 questions to help your child to think about their next steps
Work Experience in demand jobs
Apprenticeships: A Go to Guide
Preparing for your child to leave for uni
Spotting the signs of bullying
T Levels & Much more!



Helping you to help them

sector sponsors
Nuclear Industry Accountancy Construction

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MOVEMENT TO WORK GSI PIXL
Commissioned for Parents, Carers & Guardians
Issue 12 March 2023

Careermag acknowledges that Parents and Guardians hold significant sway over a young individual's future decisions. When adolescents inquire, "What should I do next?" their parents may feel daunted. Since their own school/college days, many aspects have evolved, which is why Careermag for Parents, Carers and Guardians strives to enlighten parents so that their young ones can receive support, whether they intend to enroll in University, pursue an Apprenticeship, gain Work Experience, or opt for T Levels. This publication is sponsored by Go Construct and The National Construction College and has the backing of PiXL, Movement to Work, CDI, and numerous others!

STEM Ambassadors are volunteers who work for some of the following employers:



and many more!