STEMunity

Impact Report

2024/25

www.stemunity.co.uk

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Public Benefit Statement

IN 2024/25:

18,500* young people engaged

118 schools participated

Our mission is to expand access to quality education and empower young people with the skills and confidence to shape their futures.

Since our founding in 2021, we have built sustained measurable progress towards this goal. In 2024/5, we continued this momentum by working directly with schools, teachers and communities across the globe.

To date, we have reached 54,070 students, equipping them with opportunities that extend beyond the classroom. These students represent diverse backgrounds, geographies, and contexts, but they are united by the chance to benefit from learning experiences that open new pathways for growth.

Our programmes have now been delivered in 860 schools across 34 countries, demonstrating the broad and sustained reach of our work. By engaging educators as partners and integrating our approach into school environments, we ensure that the benefits to young people are both immediate and lasting.

The impact we generate is not only measured in numbers but also in the public value of creating more equitable access to education, fostering inclusive opportunities for learning, and supporting the next generation to thrive in a rapidly changing world.

*3,497 students and 13 schools participated in multiple programmes 2024/25

5PARK

In 2025, STEMunity's 5PARK programme delivered high impact STEM experiences across the UK, engaging 6,735 students from 50 schools. Designed to make STEM accessible and exciting, 5PARK offered themed activity boxes such as Water and Space through immersive workshops in museums, schools, and alternative provision settings.

Highlights included the **Mary Rose Museum collaboration**, where 135 students participated in hands-on water engineering challenges, with an additional 90 reached through follow-up sessions. The redesigned educational booklet was embedded into the museum's learning programme, ensuring lasting impact and opening opportunities for inclusion and diversity work linked to Portsmouth's centenary celebrations.

Other notable events included **Space for All** at Magna Science Adventure Centre, involving 17 South Yorkshire schools, and a Water themed day at the National Coal Mining Museum, praised for inspiring first time museum visitors. Teachers reported increased confidence in linking STEM to careers, while students developed problem-solving, teamwork, and scientific thinking skills.

The programme also expanded into new regions, SEND schools, and even international outreach through partnerships like the Steve Sinnott Foundation. Supported by Engineering UK, Innovate UK, and corporate sponsors, 5PARK continues to break barriers, delivering creative, inclusive STEM learning that sparks curiosity and builds future ready skills.

2024/25 IMPACT:

5,150
young people engaged

33
schools participated

STEMunity

5PARK BOX

Land, Sea and Air

The Land, Sea & Air programme engaged 95 students across Portsmouth through hands-on, inclusive, and creative STEM learning.

On 17 June 2024, students from Admiral Lord Nelson, The Portsmouth Academy, Miltoncross Academy, Trafalgar School, and Redwood Park Academy took part in a STEM activity day. Working alongside STEM professionals, students developed their engineering habits of mind, with 91% reporting high enjoyment, 100% interacting with role models, and 82% considering a future STEM career. Each student received a 5PARK pack to continue exploring STEM with their families over the summer.

The programme extended into three further strands of activity. At The Portsmouth Academy, STEM Leaders collaborated with the English department and The Watercress Line to create poetry and film celebrating 200 years of UK rail travel. Students scripted and performed original work, led interviews, and developed a 360° virtual tour in partnership with STEM Ambassadors. A second strand introduced 25 STEM Leaders to drone technology, delivered with The Drone Rules and Drone City, where students learned to fly drones and develop business concepts around their future applications.

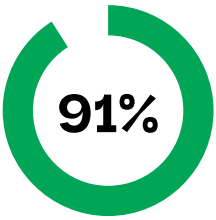
IMPACT AT A GLANCE:

95

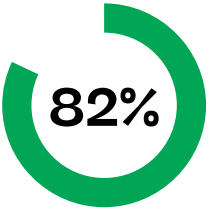
young people engaged

6

schools participated



enjoyment



considering STEM careers

scan this for video!

Big Bang at Schools

The Big Bang at Schools Programme 2024/25, delivered in partnership with EngineeringUK, brought exciting, hands-on STEM experiences directly into classrooms across multiple UK regions. STEMunity supported schools to design and run their own inspiring STEM days, providing practical resources, expert guidance, and ready-to-use activity plans.

The programme engaged students in a diverse range of activities—from robotics and renewable energy challenges to large-scale engineering tasks—encouraging creativity, problem-solving, and teamwork. By tailoring events to the needs of each school, the initiative ensured activities were locally relevant, engaging, and impactful.

Inclusivity was central to the programme's delivery, with targeted efforts to reach underrepresented groups and provide accessible opportunities for all learners, including those with additional needs. By connecting young people with real-world STEM role models and showcasing potential career pathways, the programme inspired thousands of students to see themselves as future scientists, engineers, and innovators.

2024/25 IMPACT:

15,111

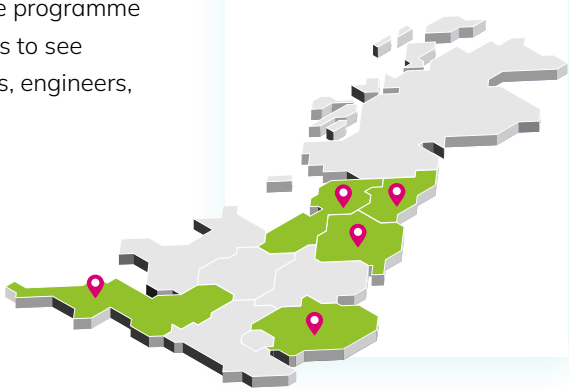
young people engaged

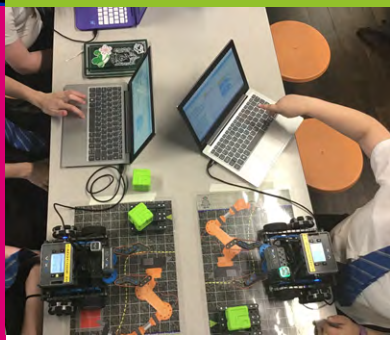
65

schools participated

LOCATIONS:

North West, North East, Yorkshire & Humber, East, South West





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Energy Quest

In 2024/25, the facilitator-led Energy Quest programme engaged students across schools in London and the South East.

Through half-day STEM workshops, students aged 11–13 tackled survival-themed engineering challenges, including building filtration systems, fruit batteries, and insulation designs. Alongside hands-on learning, the programme provided CPD for teachers and technicians, embedding practical STEM strategies in schools and maintaining a strong focus on equity, diversity, and inclusion.

Building on this foundation, the new project phase launched in February 2025, with facilitators trained and schools booked ahead of delivery. The programme was rolled out between April and July 2025, supported by industry role models and STEM Ambassadors to inspire students with real-world career pathways.

scan this for video!

As this delivery fell within the current reporting year, detailed outcomes and impact data will be shared in the next reporting cycle. This will include student participation figures, teacher feedback, and insights into how Energy Quest continues to raise awareness of engineering careers while fostering creativity, teamwork, and problem-solving.

As part of this work, STEMunity also ran the Energy Quest stand at the Big Bang Fair in Birmingham. Over three days, our team engaged 674 students in hands-on activities, while EngineeringUK colleagues focused on teacher engagement. Feedback highlighted the high quality of delivery, with Energy Quest continuing to raise awareness of engineering careers while building teamwork, problem-solving, and creativity among young participants. Outcomes from this event will be reported in detail in the next cycle.

2024/25 IMPACT:

1,170

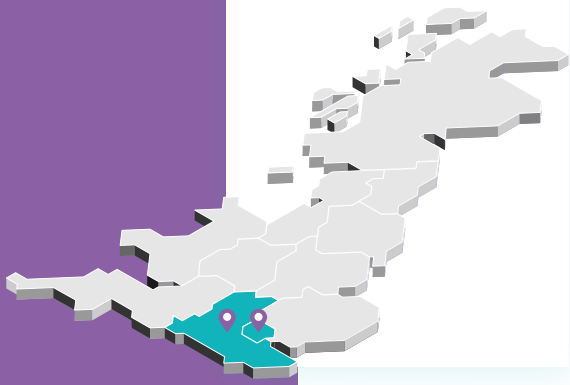
young people engaged

20

schools participated

LOCATIONS:

London, South East



Science Fair

On Friday, 7th March 2025, Key Stage 1 pupils from Portsmouth came together at St Mary's Church for a city-wide Science Fair. This celebration marked the conclusion of the ENTHUSE Portsmouth programme and the start of British Science Week, bringing science to life through playful, hands-on exploration.

Young people immersed themselves in ocean-themed STEM activities such as "ocean in a tube," marine exploration, and challenges on pollution and microplastics. These interactive workshops were supported by IET First Lego League Discover sets, enabling students to design, build, and problem-solve collaboratively. In addition, every child took home a family 12-block Duplo kit, generously donated by the IET, extending STEM learning beyond the classroom and sparking conversations at home.

Parents reported how inspired their children were, proudly sharing test tube experiments and new discoveries. Teachers praised the programme's balance of creativity and scientific rigour, highlighting how it encouraged teamwork, communication, and environmental awareness. For many pupils, this was their first opportunity to experience science in such an accessible and engaging format.

The fair also played a crucial role in equity and inclusion. As Portsmouth is a Levelling Up priority area, with over 27% of children eligible for Pupil Premium and 22% from ethnic minority backgrounds - the event ensured wide access to inspiring STEM experiences. Made possible through funding from the Portsmouth ENTHUSE programme and a donation from IMechE West Sussex, alongside the dedication of volunteers and STEM Ambassadors, the fair leaves a lasting legacy of curiosity, confidence, and opportunity for Portsmouth's youngest learners.

2024/25 IMPACT:

471

young people engaged

7

schools participated

Volunteer contributions

Volunteers are the heart of STEMunity, dedicating time and expertise to inspire young people and expand STEM access. In 2024/25, our network grew to include STEM Ambassadors, industry professionals, mentors, and university students, bringing real world experience into schools and community events.

They led coding workshops, engineering challenges, and supported large-scale STEM days through the Big Bang at Schools programme. Their efforts powered flagship events like Big Bang regional activities, 5PARK days, the Land, Sea and Air project, and Energy Quest workshops, connecting thousands of students with hands-on STEM learning.

Support also came through resources: IMechE West Sussex provided materials for the KS1 Science Fair, reaching 470 pupils with fun, accessible activities. Volunteers served as role models, sharing career journeys and inspiring underrepresented groups including SEND students, young women, and disadvantaged learners to see themselves in STEM careers.

We are deeply grateful to our volunteers and partners. Their passion makes STEMunity's programmes more impactful, inclusive, and far reaching than ever before.

Fundraising performance

The charity raised £187,788 in total income, more than doubling last year's £77,243. Funding came from grants, donations, sponsorships, events, corporate partnerships, and earned income.

Grant income totalled £102,500, up from £54,615, with support from organisations like TGET and STEM Learning. This enabled targeted STEM activities, including the Land, Sea and Air project, which engaged students from five Portsmouth schools in immersive, hands-on learning with industry professionals. Activities promoted problem-solving, teamwork, and confidence in STEM pathways.

Through Engineering UK, we expanded Big Bang at Schools from three to five regions and led Energy Quest in the South East, reaching more schools and underrepresented groups. We also delivered a workshop at the Big Bang Fair in the Midlands.

The KS1 Science Fair was funded by IMechE West Sussex and supported by ENTHUSE, STEM Ambassadors, First Lego League kits, and local partners, ensuring an inspiring event for hundreds of pupils.

Of the total, £102,500 was restricted for projects like 5PARK and Land, Sea and Air, while £85,288 was unrestricted for operational needs. We carried forward £37,719 restricted and £27,514 unrestricted to sustain major projects into the next year.

IMPACT AT A GLANCE:

£187,788

total raised by the charity

£102,500

total grant income

Financial review

On behalf of everyone at STEMunity, we want to share our heartfelt thanks to the Teachers Group Educational Trust (TGET) for your generous donation and for believing in our vision to make STEM accessible, engaging, and inspiring for every young person.

Your support has been instrumental in delivering our 5PARK programme, including Transport, Space, and Water activities, to schools across the UK. Since the launch of the programme, we have reached 7,500 students in 130 schools, bringing hands-on STEM learning directly to classrooms and communities.

Thanks to your funding, students have launched rockets, designed sustainable transport solutions, and, at the Mary Rose Museum, explored the engineering of water through the 5PARK: Water Box. Over 100 students from eight schools took part, investigating oil spills, tackling building challenges, and experiencing the ship's story through a 4D theatre. As one student said: "The 5PARK Box was my favourite activity because it got us involved, activated, and able to use our brains."

Teachers and ambassadors saw first-hand how the activities brought STEM to life: "If you give them a project with meaning, they understand why engineering matters, they come up with smart ideas and really concentrate on solving problems." Students also valued meeting STEM professionals, asking countless questions and discovering new career possibilities.

> *"It's a good way to learn, it gives us more opportunities to grow and improve our education... I think kids learn more through fun activities."*

The impact extended beyond the classroom. Every student took a 5PARK activity home, sharing experiments with family and keeping the learning alive. Many highlighted how hands-on STEM boosted creativity, concentration, and confidence.

> ***"If it's more hands-on, you remember more and you do better in exams."***

Importantly, these events helped challenge stereotypes: "It's essential to show children early that STEM is for everyone. I never thought I'd have a future in science, but now I'm a PhD student in plant microbiology, I'm so glad I was given that opportunity."

TGET's commitment to innovation and equity has enabled us to create experiences that are memorable, inclusive, and transformative. You haven't just funded resources, you've sparked curiosity, built skills, and opened doors for the next generation of scientists, engineers, and innovators.

Structure, Governance and Management

The charity ensures effective governance through a robust trustee induction and training programme, equipping trustees with knowledge of charity law, governance, and their responsibilities.

Our organisational structure is designed to maximise impact, with a small core team supported by volunteers and partnerships with organisations such as EngineeringUK, local school groups, and STEM industries. These collaborations enable the delivery of impactful programmes that expand access to STEM education and foster innovation.

In 2024/25, we strengthened our governance further by appointing two new trustees: Khouloud, who brings expertise in educational computing, and Paul, whose background in maritime engineering enhances our regional relationships in the Solent. The board continues to draw upon diverse expertise in business, leadership, and education to shape strategy, review policies, and ensure robust processes. Looking ahead, we remain committed to broadening expertise on the board to support sustainable growth and long-term impact.

Trustee board

The charity's board of trustees consists of the following members, who bring a diverse range of skills and experience to ensure effective governance and oversight.

STEMunity maintains strong governance through a comprehensive trustee induction and training programme, ensuring all trustees understand charity law, governance, and their responsibilities.

Our lean organisational structure maximises impact, with a small core team supported by dedicated volunteers and strategic partnerships with organisations such as Amazelab, local school groups, and STEM industries. These collaborations enable us to deliver high-quality initiatives, including projects with Engineering UK, that widen access to STEM education and spark innovation.

The trustees' varied expertise in business, leadership, and education guides the charity's strategic direction, shaping processes and policies to ensure our work is effective, inclusive, and sustainable.

Andrew Harrison-Chinn
Chair

Harry Riley
Trustee

Graham Watford
Trustee

Amanda Martin
Trustee

Paul Wilson
Trustee

Khouloud Ghanem
Trustee

Core Team

The charity is supported by a dedicated team.

Both senior staff bring extensive experience in STEM education and programme management, driving the charity's mission forward.

This team provides a solid foundation for the charity's governance, ensuring alignment with its objectives and compliance with legal and operational standards.

Laura Watford
Chief Executive Officer

Jorden Birch
Chief Operating Officer

Aimi Kilgannon
Project Manager

Millie Gelder
Admin Manager

Matt Weston
Digital Manager

Future plans & initiatives

Looking ahead, STEMunity is focused on consolidating growth and expanding impact through new partnerships, resources, and regions.

We have formed an exciting partnership with Australian company MakeDo, whose philosophy of learning aligns with our own focus on the Engineering Habits of Mind. Together, we are developing the next generation of 5PARK Boxes as whole-class resources. Upcoming releases include the 5PARK: Maritime Box, created in collaboration with the South Hampshire College Group and Maritime UK Solent, and the 5PARK: Sustainable City Box, designed to help students explore urban challenges through engineering and creativity.

Regionally, we will continue our planned growth to reach seven UK regions, including a new area in Scotland and the Midlands, further extending access to inclusive STEM learning. Internationally, we are working with the Steve Sinnott Foundation to collaborate with teachers in The Gambia and Haiti, building on existing relationships with locally-led education centres to deliver sustainable, teacher-driven STEM learning.

These plans demonstrate our commitment to developing innovative learning resources, strengthening partnerships, and expanding both nationally and globally, ensuring that STEMunity continues to inspire and empower young people everywhere.

This is our STEMunity

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Steve Sinnott Foundation

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Bryanna Bone

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STEMunity Volunteer

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LimbBo Foundation

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Lisa McCal
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Maritime UK Solent


Lucy Fleetham
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Matt Weston
Website & Digital Lead


Mia Antar
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Michael Nelson
CAD2CODE / Big Bang Regional Ld.


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Pamodzi Creatives


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Head of Professional Dev. & Quality


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Stephen Shaw
Raising Robots


Wendy McCormick
University of Portsmouth


William Arinze
TDR

Thank you

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Thank you

If you have any questions or would like to know more, please do not hesitate to contact us at: **jorden@stemunity.co.uk**

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