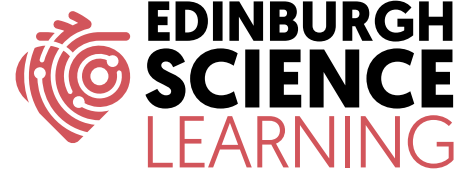


# We are Edinburgh Science

The Edinburgh Science Foundation is a charity that inspires people of all ages and backgrounds to experience the wonder of science and technology. Characterised by a commitment to immersive, hands-on experiences, our extensive portfolio of science-themed events and activities aim to engage people with the world around them, to create a scientifically aware and literate society which can be part of informed decisions, debate and the future planning for our world. We are best known for running the Edinburgh Science Festival – the first festival of its kind in the world – as well as our science education outreach programmes *Generation Science* and *Careers Hive*.

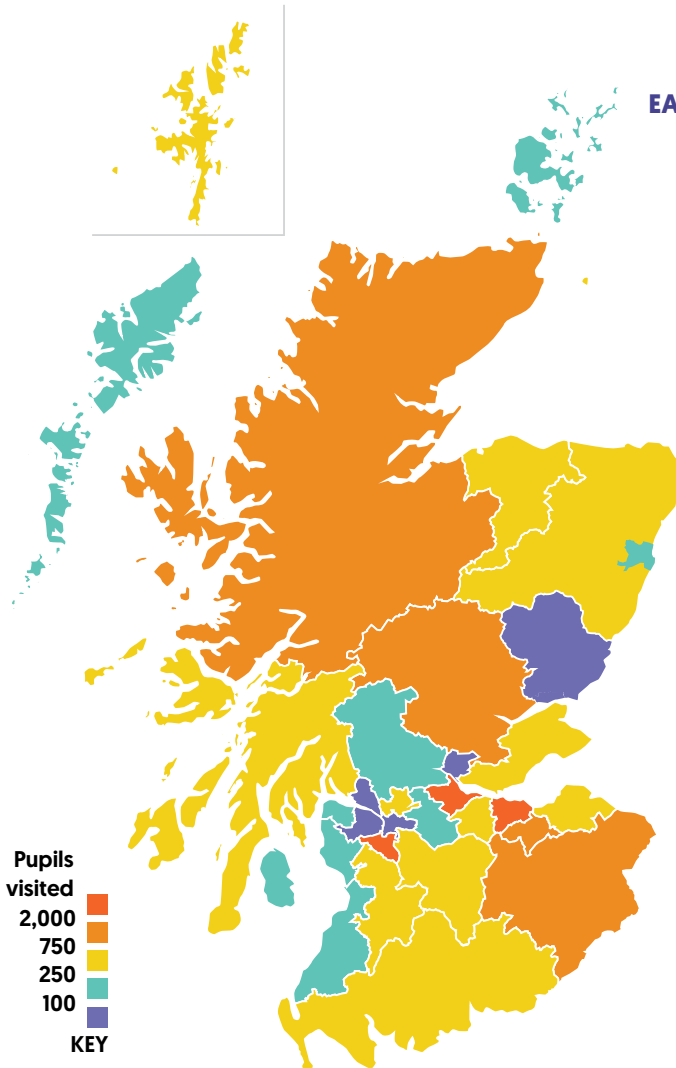


## Generation Science

*Generation Science* is our touring education programme designed to raise the interest and attainment in science, technology, engineering and maths (STEM) subjects of primary school pupils across Scotland and to support their teachers to do the same. As a nationwide programme, its aim is to help address educational inequality across the country, to ensure no child is left behind.

Our shows and workshops bring science to life in a fun and high-energy environment. We use a mix of theatre, live demonstrations, pupil participation and hands-on experiments to involve every pupil, including those who don't typically engage with traditional in-classroom STEM education. The experience of the session being delivered by someone different from their everyday teacher provides pupils with a fresh learning experience, making the session more memorable.

Educational enhancement activities like *Generation Science* help increase children's interest in STEM subjects from an early age, acquire new skills and understanding, raise future aspirations and discover that science can be fun and is for anyone. Thanks to the generous support of our funders, we've been able to make a real difference to pupils across Scotland.

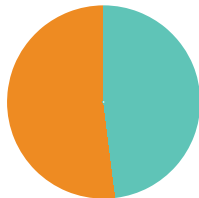


### PUPILS VISITED IN EACH LOCAL AUTHORITY

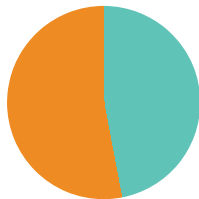
Aberdeen City	120
Aberdeenshire	741
Angus	70
Argyll and Bute	343
Clackmannanshire	64
Dumfries and Galloway	268
Dundee City	74
East Ayrshire	672
East Dunbartonshire	465
East Lothian	529
East Renfrewshire	48
Edinburgh City	5557
Falkirk	2204
Fife	356
Glasgow City	2089
Highland	1871
Inverclyde	212
Midlothian	832
Moray	495
Na h-Eileanan Siar	130
North Ayrshire	161
North Lanarkshire	147
Orkney Islands	239
Perth and Kinross	1004
Renfrewshire	45
Scottish Borders	901
Shetland Islands	288
South Ayrshire	224
South Lanarkshire	590
Stirling	206
West Dunbartonshire	24
West Lothian	591

## Statistics

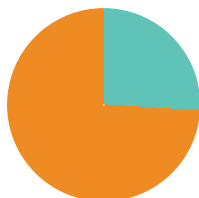
**FREE ACTIVITIES**  
48% [332]



**ACTIVITIES IN AREAS OF SIMD 1+2**  
47% [371]



**ACTIVITIES IN REMOTE & RURAL COMMUNITIES**  
26% [205]



## Generation Science Highlights

This year, over the spring and summer terms, *Generation Science* was back on the road and brought hands-on science fun to primary school children. From city centre schools to remote rural communities, our travelling teams visited **314 primary schools** across the country – from the Scottish Borders to the Shetland Isles – delivering **790 STEM-themed workshops and shows**. We are proud to be one of the few education providers with a national reach, visiting every local authority area in Scotland.

We believe every child should have the same great *Generation Science* experience, regardless of their location or circumstance, helping to address educational inequality many children face. We use the Scottish Index of Multiple Deprivation (SIMD) – the Scottish Government's tool used to identify places in Scotland where people are experiencing disadvantage across different aspects of their lives – to identify areas of most need.

Thanks to our valued sponsors and funders, we can bring *Generation Science* to schools at a heavily subsidised cost of just 30% of the full cost, allowing our funding to reach as many children as possible. However, for some schools even this low cost is too much and with the help of our supporters, we are able to visit many of these schools with free *Generation Science* shows and workshops ensuring that no child misses out. In 2024 almost half of our programme was delivered for free.



*“Thank you so much to your team for these wonderful workshops, we really appreciate your support!”*

**PI TEACHER, DAY OR NIGHT?, EDINBURGH**



### TOPICS

This year *Generation Science* toured with 10 different topics, each directly linking to Curriculum for Excellence learning outcomes to enhance what pupils are covering in the classroom. With a mix of activities for both younger and older pupils, we saw the return of old favourites such as our forces themed Ready, Teddy, Go! and hands-on chemistry workshop Fizz, Boom, Bang. Thanks to funding from The ScottishPower Foundation, we designed and delivered two brand new activities for this year's tour – The Green Machine and Our Changing Climate. These were created in response to teacher demand for support teaching climate and engineering topics and proved extremely popular.

By regularly reviewing our portfolio and creating new, relevant content, we aim to maintain our place as one of Scotland's leading STEM education providers and continue to meet the needs of primary school children and teachers across the country.

### REMOTE & RURAL COMMUNITIES

The unique geography of Scotland poses an extra challenge for children living in remote and rural areas of the country. Access to days out at museums and science centres can be problematic and options of educational providers travelling longer distances at affordable prices are limited. Schools also face low teacher numbers, mixed aged and ability classes and less funding available to buy tools and equipment to enhance hands-on science learning.

This year, nearly a third of our activities took place in schools in remote and rural areas of the country. This included three of our teams visiting 49 island schools in Orkney and Shetland, Inner Hebrides and the Western Isles. Many of our smallest schools joined together for a shared show or workshop, helping to include even more children in these local communities. Our Creative Coding team were delighted to welcome a pupil from Raasay (one of Scotland's smallest island schools with just 4 pupils and 1 teacher) to join in activities at Portree Primary School in Skye.

*“They absolutely loved it. Want to do more science in class.”*

**P1, P2 & P3 TEACHER, READY, TEDDY, GO!, HIGHLANDS & ISLANDS**



## SUPPORTING TEACHERS & ENHANCING EDUCATION

One of the most popular reasons for booking a *Generation Science* activity is to provide a hands-on science experience often limited in schools due to lack of resources, time and specialised expertise. As we bring along all the kit and equipment needed for every activity there are no additional costs for children to get hands-on with science equipment.

*“Children had expressed an interest in learning about batteries and circuits. Knowing we didn’t have the equipment in school to teach this in the most engaging way, we felt that the *Generation Science* workshop would benefit us and the children without dampening their enthusiasm!”*

**P6 TEACHER, ELECTRIC EXPLORERS, MIDLOTHIAN**

To help schools prepare for our visit, we provide notes for teachers in advance. These outline the learning outcomes and curriculum links for their chosen topic, an explanation of the science behind the activity and links to other external learning resources to help build on what they have learnt once we have left. They include follow-up activities teachers can run with their class, ensuring the learning can continue after we have left the classroom.

The *Generation Science* experience helps teachers who lack the specialism or confidence to teach more complex STEM issues or run practical experiments. Our experienced teams lead children through the topic and activities with ease, giving teachers the opportunity to gain ideas.

*“As teaching science is not a strong point of mine, I wanted the children to experience good quality teaching and learning in a fun way. I also wanted to gain some ideas on how to teach science in a fun way.”*

**P2 TEACHER, ELLA’S WOBBLE, GLASGOW**

## OUR TEAMS

*Generation Science* wouldn’t be possible without our science communicators, the trained staff whose enthusiasm and love for science bring the topics to life. Each year we recruit experienced science communication specialists who work in pairs delivering interactive performances, live demonstrations and leading children through hands-on activities.

*“I had a genuinely wonderful time on tour – so much so that many days didn’t feel like work at all, I was having so much fun! Feeling incredibly lucky to have had the opportunity to go on the road and see so many wonderful pupils and teachers.”*

**CREATIVE CODING SCIENCE COMMUNICATOR**

*“The two ladies presenting *The Green Machine Workshop* really caught the imaginations of the P6 children who loved the accents, drama and comedy involved.”*

**P6 TEACHER, THE GREEN MACHINE, SCOTTISH BORDERS**

## Our Impact

We’ve worked to measure the impact of our activities by asking questions in a teacher feedback survey post-*Generation Science* visit to identify levels of science capital.

### WHAT IS SCIENCE CAPITAL?

Science Capital is the sum of all science-related knowledge, attitudes, experiences that an individual builds up through their lives. Through our projects we showcase the central role STEM plays in all our lives and the world around us, explore the possibilities they hold for the future and demonstrate that STEM can be for everyone.

### THE RESULTS

#### 43% PUPILS HAVE MEDIUM OR LOW SCIENCE CAPITAL

This indicates that *Generation Science* is reaching a large number of pupils who aren’t typically engaged with science, an important step in breaking down barriers to STEM.

#### 67% TEACHERS HAVE MEDIUM OR LOW SCIENCE CAPITAL

The majority of teachers *Generation Science* reaches have medium-to-low science capital, indicating that the support in delivering science topics to their classes is vitally important.

#### 100% TEACHERS AGREED “THE ACTIVITY BROUGHT STEM ALIVE FOR PUPILS”

#### 97% TEACHERS AGREED “THE EXPERIENCE MADE THEIR PUPILS WANT TO EXPLORE THE TOPIC FURTHER”

#### 96% TEACHERS AGREED THEIR CLASSES “TALKED TO EACH OTHER ABOUT WHAT WE HAD SEEN AND EXPERIENCED”

Agreeing with these statements is a way of demonstrating that an activity is building upon someone’s science capital.

By contributing to the building of Science Capital through our engaging and immersive *Generation Science* activities, we help children across the country to open opportunities for their future, contribute to a science literate society and support changes that leads to a better world, all while having fun!

*“Some of my pupils are totally disengaged with school work therefore this kind of workshop was perfect for those children . We had lots of ‘best day ever!’ comments for the rest of the day! “*

**P5 & P6 TEACHER, CREATIVE CODING, INVERCLYDE**



## Generation Science 2025

Our *Generation Science* teams will be back on the road from Spring 2025, bringing our much-loved activities to primary schools across the country. To hear more about our learning programmes *Careers Hive* and *Generation Science* for the year ahead, and opportunities to get involved, get in touch with [development@scifest.co.uk](mailto:development@scifest.co.uk).

*“Best day ever! Can we please ask them back to do another workshop?”*

**P2 & P3 CLASS, OUR CHANGING CLIMATE FALKIRK**