

SCIENCE MUSEUM GROUP

TOP TIPS: EXPLORING STEM CAREERS USING MUSEUMS

Careers guidance and education doesn't need to be limited to the classroom. Museums are a dynamic space which offers lots of inspiring opportunities that can support young people to make well-informed choices about their future careers.

Here we share some of our top tips for exploring careers using museums...

1

RECOGNISE YOUR OPPORTUNITIES

With authentic objects and hands-on experiences, museums are full of inspirational stories of how science, technology, engineering and maths (STEM) has shaped our modern world. This makes them a great place to explore and spark discussion about the wide range of people who have used STEM in their jobs and careers, and to introduce the potential of new and exciting opportunities in, and from, STEM.

2

USE CAREERS BENCHMARKS AND SUPPORT SCHOOLS IN MEETING THEM

Reflect on how your museum experiences can support groups to meet the [Gatsby careers benchmarks](#), a statutory framework for good careers information and guidance (benchmarks 4, 5 and 6 are especially relevant). Provide information for group leaders to use and embed a museum visit into their careers programme. Highlight where there are opportunities for groups to expand their knowledge around future jobs and workplaces.



3

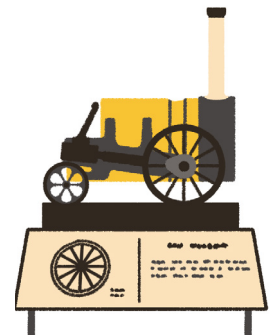
SHOW WHERE SCIENCE AND MATHS LEAD

By connecting the past, present and future of our modern world, museums show how an understanding of STEM – alongside art and design – can improve and transform our everyday lives. By linking and making connections to curriculum topics, and finding examples which are relevant to people's interests and their lives, you can broaden the perception that science and maths are just subjects learned in school and show that they open doors to many different jobs and opportunities.

4

SHOW HOW AND WHERE PEOPLE HAVE SHAPED STEM

From their passion and inspiration to their hard work and determination, a wide range of people have all played their part in shaping and improving the world around us – and will continue to do so in the future. Everything we use is the product of hundreds of people, all bringing their own skills and efforts to make things happen. Showcase stories of the people behind technology and innovations – not just the inventors, but also all the people who make things happen and all the different roles involved in developing technology.



5

HIGHLIGHT, USE AND DEVELOP STEM SKILLS

As society changes, the one constant is the skill and passion that drives progress. Museums hold stories of how work and careers have changed and evolved throughout time. From communication and creativity to problem-solving and teamwork, highlight the skills which are valuable and transferable to a range of different jobs and careers in and beyond science.

6

USE THE JOURNEY OF AN OBJECT

Everything in a museum has been imagined, designed, engineered or manufactured. Every object has travelled a path which involved the input of many different people, with a broad range of knowledge, skills and passion. Highlight all the different processes and stages that are involved in producing these things. For example, start from how the raw materials were extracted and turned into useful materials, continue with how the product was designed and tested, and finally look at how it ended up with its owner or even how it came to be in the museum.

7

PROVIDE REAL LIFE ENCOUNTERS

Nothing beats a real-life encounter and connection with people. Provide as many opportunities as possible for young people to meet and interact with a wide diversity of people doing STEM-related jobs to share their real-world experiences and broaden perceptions of people who have science-related careers. Inviting people in to support a museum visit will bring in an authentic voice from someone who can talk about their role and everyday work, and how it stemmed from and built on the science and technology that can be found across the museum.



8

TALK ABOUT YOUR OWN JOBS, SKILLS AND EXPERIENCE

A museum is a vibrant and varied workplace. Every member of staff has an essential role to play in the running of the museum – whether it's in visitor experience, learning and education, estate management, marketing, media and digital, conservation and curatorial, or creating exhibitions and events. Welcome and invite groups to ask staff about the role that they play and what skills they use every day.

9

INSPIRE AND IMAGINE A PROGRESSIVE FUTURE

Open groups' eyes to the possibilities and the value of challenging themselves and trying new things that link to their interests, passions and know-how. Anything is possible with imagination and inspiration – as objects in a museum can testify. What could the future look like? What could be improved? What can be made more efficient or cheaper?



10

SPARK MEANINGFUL DISCUSSIONS

Design experiences which encourage and spark conversations to support groups to think and talk about careers during and after a visit. Did anything they experienced align with their interests, skills or personality? Did anything surprise them? Was there anything that they wanted to find out more about? Give groups opportunities to contribute and share their knowledge and experience, and to ask questions to find out more or follow up at home, with friends or back at school.

EXPLORE MORE

To find out more about Science Museum Group Learning, including resources to use in informal learning experiences, at home and in the classroom; training opportunities; and insights and research around STEM engagement, visit: learning.sciencemuseumgroup.org.uk

For further information, contact us at: SMGAcademy@sciencemuseum.ac.uk

Please write 'Top Tips: Exploring STEM Careers Using Museums' in your email subject line.