Inspiring Young People in STEM: Planning activities

Where can you volunteer?

Some examples

School based activities

- **Space Port Science** is a microbiology workshop designed by Glasgow Science Festival where secondary school students become the medical diagnostics team responsible for monitoring astronaut health e.g. bone density loss and alien infection.

- **Engineering challenges** are very popular and can be adapted to cover a whole range of different concepts and teaching aims. Here, we explore design, function and renewables, while also racing the vehicles and calculating speed.

- **Remember that schools can come to you.** Students were invited on campus by a team of electrical engineers at the University of Glasgow and carried out a series of workshops in their labs. This was during class time, the students were introduced to a range of staff including lecturers, PhD students and technical support staff. This has the added bonus of exposing students to the university or work environment and access to equipment that would otherwise have been unavailable.

Science festivals

Recent Glasgow Science Festival (GSF) events:

- CSI ‘whodunnit?’ biology experiments. Part of a series of activities young people worked through, to determine who committed the (fictional) crime.

- Fluorescent microbes with samples, ‘Crafty Critters’ felt parasites and colourful postcards with information about the research

- A targeted approach to ‘taking out’ cancer cells. Games are a great way to promote engagement.

- Hands-on work equipment being used to engage the public with research on prosthetics.
Community events

- At a recent takeover of the Kelvingrove Art Gallery & Museum, Glasgow Science Festival invited partners from across the city to deliver activities to thousands of families. Glasgow Caledonian University ran an activity on public health and handwashing. Researchers brought the latest technology which allowed hands to be scanned after cleaning to check for effectiveness. The floor based drawing activity ensured that very young children could also get involved.

- Shopping centres can be a great way to engage with a cross section of the community who might not otherwise come to a STEM event. GSF busked activities showcasing female researchers who lived or worked in Scotland. The trick here is to remember that people are out with errands to run, so keep the activity short and highly visual/engaging.

- Glasgow Science Festival collaborated on two events with a local green space/community garden. The science of Harry Potter, where we made all sorts of lotions and potions (very messy, but lots of fun). A harvest celebration day where we brought along lots of activities including this remote-control vehicle, a fun way for Kevin from the University of Glasgow to share his work on developing the drill bits for the Mars rover.