

Science Museum Research Summary: What teachers want from a science show

This summary is based on key findings from a Focus Group report by Tony Dent in May 2010 commissioned by the Science Museum's Outreach Team. Please contact us on learning@sciencemuseum.org.uk if you would like more details.

Where should shows be held?

Most teachers felt that venues accommodating about 150 children were ideal. Theatres with inclined seating and projector screens are the most suitable locations, but are not always available – meaning some of the audience may have trouble seeing what's happening. There are various ways to avoid this, for example by holding experiments up in the air, bringing them around the audience on trays, ensuring tables are clear of obstructions, placing volunteers and experiments carefully and using large props or costumes. You can even use a video camera to show experiments on a large screen. For larger schools, it's worth repeating shows to keep audience numbers down.

How long should shows be?

About 45 minutes to an hour is the preferred length – although 90 minutes isn't necessarily too long even for primary school pupils if the content is sufficiently engaging. It's important to get the structure right, so think of the 'story' of the show and have the first hands-on experiment near the start. Interesting slides, humorous pictures and funny costumes all help.

What proportion of the audience should be directly involved?

As many of them as possible. Children will learn more if they're taking part – so think about how to include them, even if only in small ways. Take into account children's personalities where possible – sensitive children may not like taking part in experiments that will make them look silly. It's also worth considering how many of the children may not have English as a first language – so speak to the school about how best to work with them.

What content and style are teachers interested in?

The three qualities teachers most want a show to have are interactivity, a 'Wow Factor' and visual strength. Some also felt that the informal dress and relaxed manner of the presenters helped engage pupils. Topics in which teachers showed particular interest included chemistry, forensic science, forces, rocks/stone, changing states, electricity, statistics, maths/numbers investigations, plants, teeth, health and 'stuff that cannot be done in school'.

How much should you charge?

Teachers have been clear that only a low fee of about £3 would be acceptable because any higher sum would mean that some parents could not (or would not) afford it. A maximum of £4 was suggested for schools in wealthier areas.

Further resources:

Find out what parents say they'd like to get from a science show by consulting a further sheet summarising Science Museum Research:

- Science Museum Research Summary: What parents want from a science show

Find out about developing shows and workshops by reading sheets in our practical *What we've learned* series:

- What we've learned about writing and performing science shows
- What we've learned about developing workshops