What we've learned about evaluating prototype exhibits

Practical tips on testing prototype interactive exhibits with visitors

When you're developing interactive exhibits...

Plan to prototype and test them to check they meet three key criteria:

- Motivation – Does the target audience want to use the exhibit? Do they **enjoy** using it?
- Usability – Can the target audience work out **how to use it**? Do they know what to do with it?
- Content – Does the target audience **understand** what the exhibit is about?

For the best result, exhibit developers, makers and budget-holders should agree a process and programme for testing prototypes and making changes, so there are no nasty surprises for anyone. Prioritise exhibits for testing that are the least tried-and-tested, the most innovative or the most complex. Ideally, plan for **three versions of a prototype** in order to check that changes have been successful.

When testing prototypes...

When a prototype has been made and risk-assessed, you can test using these alternative methods:

- **Cued testing**, where you actively recruit visitors to test an exhibit in a suitable off-gallery space. This yields more detailed data because visitors have agreed to focus on the exhibit. However, they may behave differently when they know they are being watched.
- **Uncued testing**, where you put a prototype onto gallery and let visitors find it. This can yield realistic data more quickly as the interactions are continuous. But you have to be sure the prototype is positioned where the right target audience finds it.

The exhibit developer must define **who** the exhibit is for, and **what learning outcomes** they are hoping visitors will gain. Create an **observation sheet** that lays out evidence for successful interactions, matching these learning outcomes. This also helps identify behaviours you'd like to see but which are missing. **Interview** visitors after you observe them, using questions that identify what they thought the exhibit was about and whether they enjoyed it. You can use pictures or other prompts to understand visitors' thoughts.

Get enough data to support findings, but don't gather the same data over and over. For cued testing we found 10-20 observations and interviews yielded good data, taking 3-5 days. For uncued testing, 1-2 hours of observations in a busy gallery yielded enough data to make conclusions.

When reporting back findings...

Document the set-up, taking pictures to record the arrangement of elements of an exhibit which can guide visitor behaviour. Invite the developer to watch visitors using the exhibit – but beware that they often see what they want to see! Provide feedback quickly, offering top-line findings as soon as possible, and possibly face-to-face so the developer can ask you questions. Pictures and quotes from visitors are very effective. Focus on any **underlying issues**, which may include fundamental problems:

- the exhibit not having a clear challenge
- the activity having too many options so the visitor gets overwhelmed
- the interaction not having a clear starting point that indicates what to do and why
- the exhibit effect being underwhelming to visitors.

Some **good news** goes a long way. If there is a nice quote or example of success, celebrate it.

Further resources:

Find out more about what makes a successful mechanical interactive using our summary of key findings from Science Museum Research reports:

- Science Museum Research Summary: Developing successful mechanical interactives

Contact us on learning@sciencemuseum.org.uk for details of our training courses:

- **Learning in Museums** to find out more about how museums promote informal learning.
- **Audience Awareness** to find out how visitors really use museums.

See a sample evaluation report: www.danacentre.org.uk/aboutus/eventdiy/evaluation_report