# Robot Thought evaluation summary 1

**Venue:**                Science Museum, London

**Robot experts:**        University of Wales, Aberystwyth
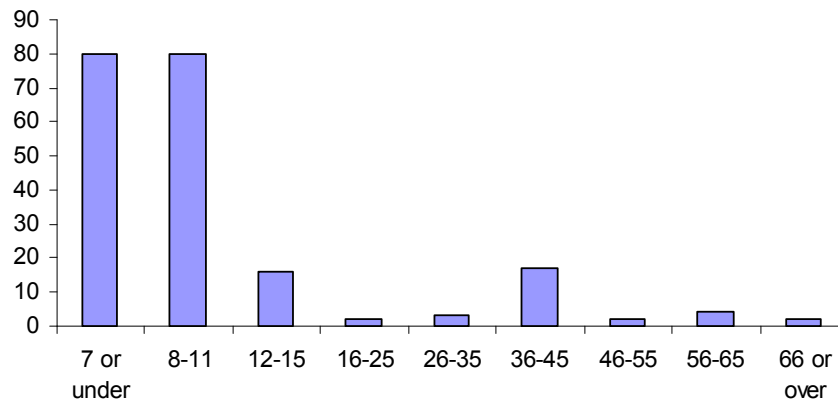
**Dates:**                        May half term 2006
Saturday 27 May – Sunday 4th June inclusive.

**Number of shows:** 18 *Roborama* shows
10 Mechanical moving masks workshops

**Audiences:**            Roborama ~ 844 children, ~627 adults; total ~ 1471
Mask activity ~ 415 children, ~250 adults; total ~ 665
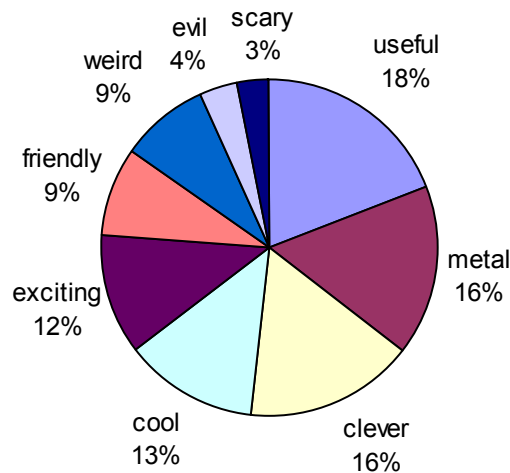
## Short evaluation summary, n=211

**Age distribution - short questionnaire**



Of the under 7 age group, only 10 respondents were younger than 5 years old (eight 4-year-olds and two 3-year-olds).
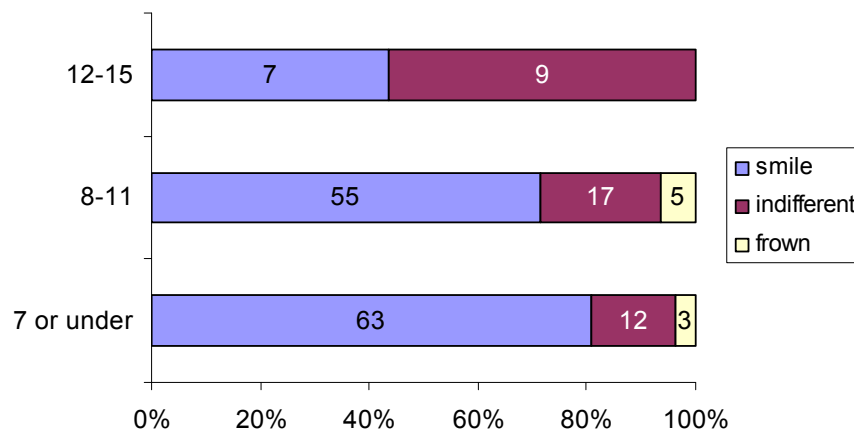
Gender balance for respondents was 51% male and 49% female.

**Here are some words about robots. Circle the ones you agree with:**

A pie chart showing:
- useful 18%
- metal 16%
- clever 16%
- cool 13%
- exciting 12%
- friendly 9%
- weird 9%
- evil 4%
- scary 3%

Respondents were given the space to write more words about robots. 41 people responded to this, and the most frequent response was that robots are '*fun*'. Many respondents also wrote words that described robots, such as '*shiny*' or '*strong*'.
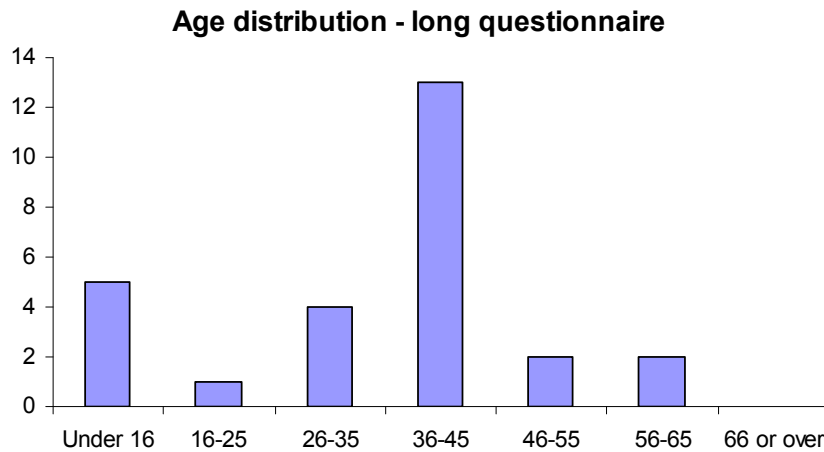
**What did you think of the show?**

A horizontal bar chart showing responses (smile, indifferent, frown) by age group:
- 12-15: smile 7, indifferent 9
- 8-11: smile 55, indifferent 17, frown 5
- 7 or under: smile 63, indifferent 12, frown 3

The show was evaluated using a three-point smiley face scale. Most respondents in the target age range enjoyed the show. Teenagers appeared to be more likely to feel indifferently about the show, which is unsurprising as the level was pitched below their age range.

When asked to comment on the show, the most frequent responses were '*fun*', '*cool*', '*exciting*', '*funny*' and '*interesting*'. A large majority of responses were positive, although there were a few negative comments from people who found it boring.

## Long evaluation summary, n=28

**Age distribution - long questionnaire**



**Other information collected on the audience is summarised here.**
- Gender balance for the long questionnaire respondents was 19% male and 81% female – so the sample was quite heavily gender biased. Possibly because more females take responsibility for childcare during half term.
- Most respondents (82%) were attending with their family.
- Of those who were accompanying children, most (81%) accompanied one or two children.
- Of these children, most (58%) were aged 4-7 and some (33%) were aged 8-11.
- Most respondents were of White British origin (78%)
- Of the 28 respondents, one considered themselves a disabled person, their impairment was autism.
- Only one respondent had an occupation that could be classed as routine or technical, or 'working class'

**Results from the evaluation are summarised here:**
- Most of the respondents had heard about the show after they arrived at the museum. Eleven had seen it advertised in the map leaflet, and five had heard an announcement. Four respondents had heard about the show via the internet/science museum website.
- When asked to write down three words that described the show, the most common responses were: '*educational*' or '*informative*', '*entertaining*', '*fun*', and '*interactive*'.
- Three-quarters (76%) rated the show as 1 or 2 on a five-point scale from good to bad. 16% rated it as 3 on the scale.
- Most (74%) said that the science was pitched at the right level, although some felt it was too easy.
- Two-thirds felt that the language was at the right level. The others felt it was too easy (although those who responded in this way were all adults).
- Two elements of the show were highlighted as the 'best bits': interaction with the audience (especially the volunteers and robot dancing), and the demonstrations (especially the marshmallow man in the vacuum flask)
- The most commonly reported 'worst bit' of the show was the panicbot, when it didn't work. Two respondents also felt that the description of robots could have been improved by using more examples.
- All of the respondents said they were likely to continue to discuss robotics. A third (30%) said they '*definitely will*'.

- Most (86%) said they would come to a similar show again, 29% said they 'definitely would'.
- Prior knowledge of robotics among respondents varied. Two said they 'knew lots' about robotics, while six said they 'knew nothing'. Most respondents (xxx %) had little prior knowledge of the topic.
- Respondents were asked to rate how much they had learned about robotics on a scale from 1 (lots) to 5 (nothing). Most (92%) gave ratings 1, 2 or 3, with a third (33%) rating their learning as 1 or 2.
- Over half of the respondents (54%) said that the show had made them more interested in science.

The audience were asked to write down one thing they had learned from the show. Responses included:

> *"Sending a robot into space is better than sending a human" (8 year-old female)*

> *"My washing machine is a robot" (46-55 female)*

> *"That they are more involved than we know – that's OK except when we don't know" (12 year-old female)*

One respondent also commented that the show had:

> *"Generated a wider interest as to how we can explore robots at home" (36-45 female)*

A few respondents suggested improvements when asked. They can be summarised as '*more robots*' and '*more experiments*'. One person suggested using video clips.