Robot Thought evaluation summary 4

Venue: Edinburgh International Science Festival, National Museum of Scotland

Robot experts: Edinburgh University

Dates: 5-9 April 2007

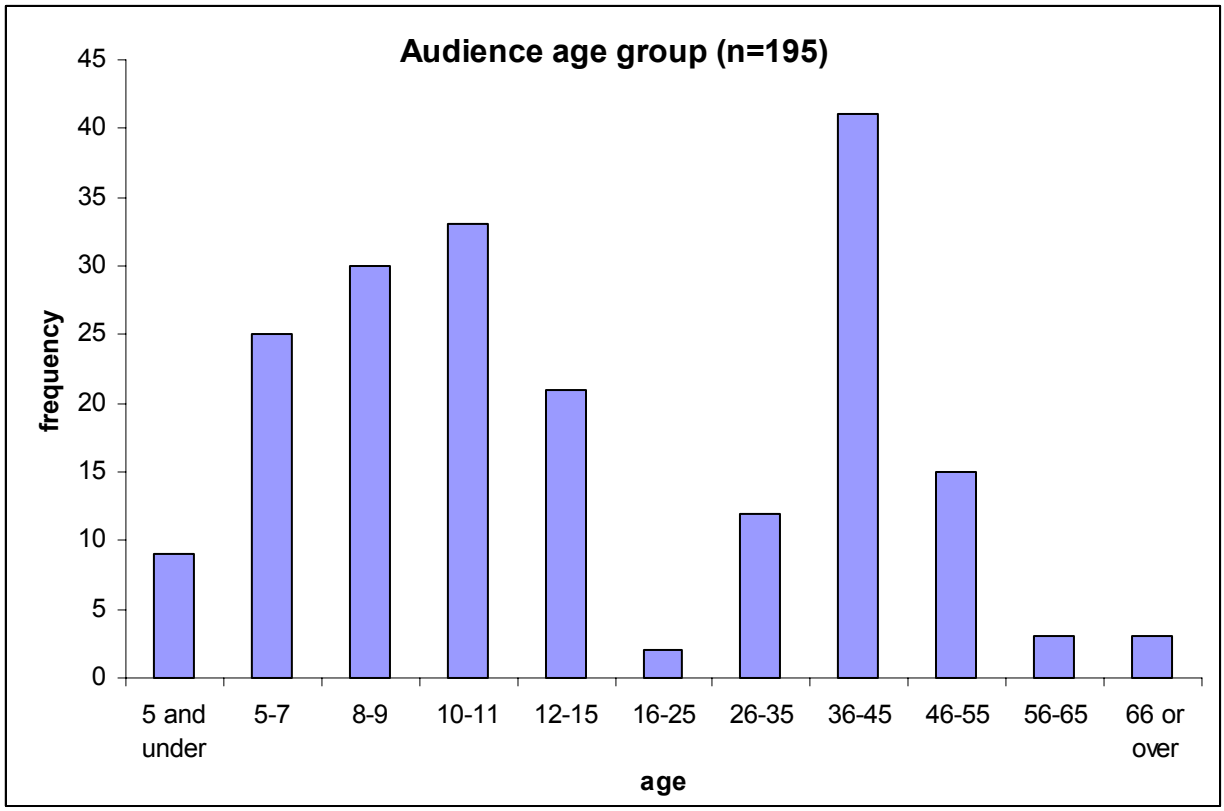
Number of shows: 4 *Robot Thought* Shows
5 days *Ask the Expert / Walking with Robots* drop in day sessions at the museum

Audiences: 515 family visitors saw the show
3854 family visitors attended the drop-in Science Zone where the robot stands were located along with some other stands. Most of these visitors are likely to have visited the robots stands.

Total audience size ~ 4000

Respondent age distribution

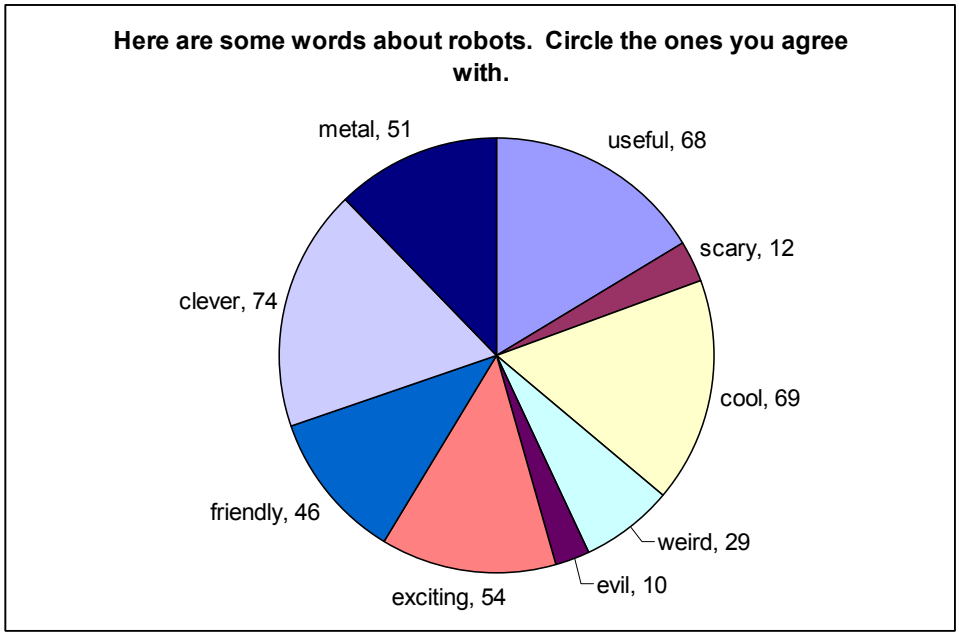
The *Robot Thought* show was evaluated using a short questionnaire (n=99) for 12 and unders, and a long questionnaire (n=97) for older children and adults. This document presents the findings from the audience survey.



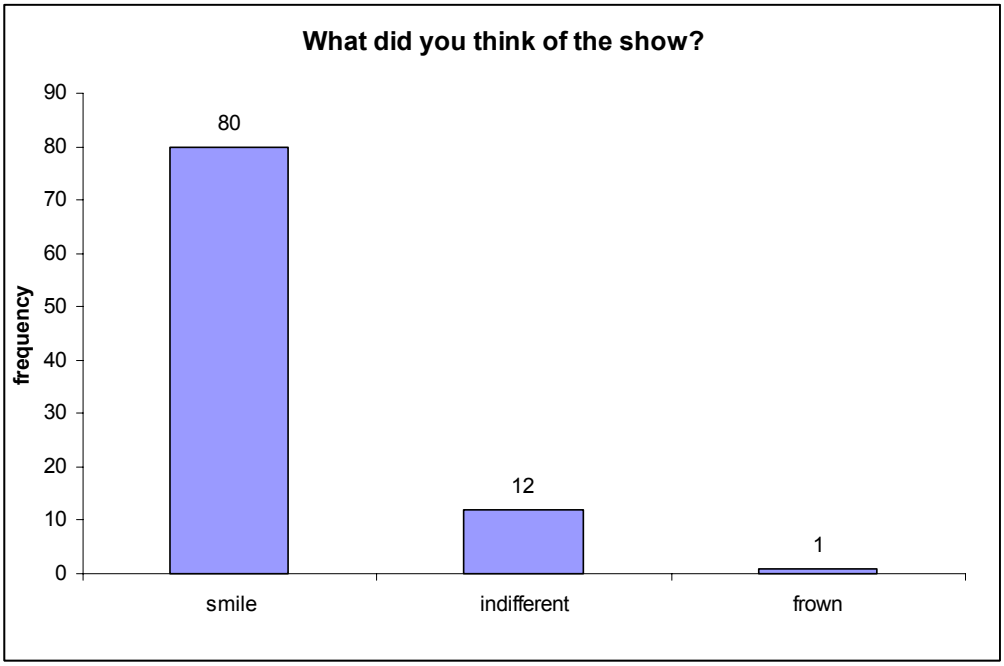
The young people that came to see the show were very mixed in terms of their age groups. Specifically there were larger proportions of young people aged 10-11 and 12-15 than at previous venues.

Short questionnaire summary

The gender balance for the short questionnaire was 62% male and 38% female. Around half (49%) had been to the science festival before.



Respondents circled a range of words, mostly those with positive connotations. 39 respondents used the space to write some more words about robots. The most common were 'fun' or 'funny', 'interesting', 'helpful' and 'amazing'. All of the words were positive apart from two respondents who wrote 'silly'.



Most of the young people (86%) that completed the questionnaire liked the show, and circled the smiley face on the three-point scale. Twelve respondents circled the face with the indifferent expression, and one did not like the show. Considering the spread of ages for this audience, this is an especially positive result.

88 of the young respondents commented on the show. Of these comments, 74 were positive, 9 were neutral or suggested improvements and 4 were negative. Comments included:

> *"I thought it was very good and very funny but still at the same time you learnt something"* (10 year-old female)
>
> *"I think you need to make it more exciting"* (9 year-old female)
>
> *"It was very interesting how robots acted just like insects"* (11 year-old male)

Long evaluation summary (n=97)

Information collected on the audience is summarised here.

- Gender balance for the long questionnaire respondents was 40% male and 60% female.
- Most respondents (88%) were attending with family.
- Half of respondents (50%) had attended EISF before.
- Of those who were accompanying children, most (82%) accompanied one or two children.
- Most respondents (88%) were White British. White – other, Indian, Chinese and mixed race groups were also represented in the audiences.
- Just two respondents considered themselves Disabled – one was dyslexic and one had a broken leg.

Results from the evaluation are summarised here:

- Most respondents heard about the show either through festival literature or through the museum (staff or announcements). A few respondents had found out about it via word of mouth or the festival website.
- Most respondents said that they had attended because the show 'sounded interesting' or to accompany their children. The fact that the tickets were free was also a motivating factor for many.
- Two thirds (66%) rated the show as 1 or 2 on a five-point scale from good to bad. A large majority (90%) rated it as 1, 2 or 3. 7% rated the show as 4 and 3% as 5.
- When asked to describe the show, 81% of the words written down were positive. The most common were 'fun', 'funny', 'interesting', 'educational' or 'informative' and 'interactive'. Some words (12%) were neutral, either because they expressed neutral sentiments about the show such as 'ok' or because they could have been positive or negative, such as 'weird'. 7% of the words were negative.
- Over half (60%) said that the science was pitched at the right level, although a third (36%) felt it was too easy.
- Two thirds (67%) felt that the language was at the right level. However quite a few people felt it was too easy (30%).
- The demonstrations were most often cited as the best bits of the show. The real robots were popular, especially the e-pucks. The Seanbot demo with the crisps was also a favourite part of the show. Some respondents also liked the interaction with the audience.
- Many respondents said there was no worst part to the show. From those that did comment several factors were identified. Firstly, several respondents weren't keen on 'Robot or Nobot', perhaps because there was no clear answer about what a robot is (adding more explanation here was suggested in the 'comments and improvements' item of the questionnaire). One respondent suggested this section could be used to 'build up a working definition of a robot'. Some people felt the sensor demonstration with the metal pole was a bit drawn out. Some people commented on general aspects of the show: nine people said it was too short and two felt it was too long. Several people commented that the show lacked a conclusion; one said it 'did not answer the questions posed at the start as to what was a robot'.

- Over half of the respondents (61%) said they were likely to continue to discuss robotics after the show.
- Respondents' prior knowledge of robotics varied. On a scale of 1 (lots) to 5 (nothing), 20% rated their knowledge as 1 or 2, 41% as 3, and 39% as 4 or 5.
- Respondents were asked to rate how much they had learned about robotics on a scale from 1 (lots) to 5 (nothing). Nearly half (45%) rated their learning as 1 or 2, with a third (32%) rating their learning as 3. 8% felt they learned nothing.
- The most common learning point was summed up by one respondent as 'difficult to define what is or is not a robot'. Other learning points related to robot sensors and programming, and the fact that robots can be simple or can mimic insects.
- Two thirds of the audience (64%) rated their prior interest in science as 1-3 on a scale of 1 (really interested) to 5 (not at all interested). 12% rated their prior interest as 5.
- 29% said that the show had made them more interested in science, with the majority (66%) reporting no change.