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Robot Thought evaluation summary 2

Venue: Thinktank, Birmingham

Robot experts: Bristol Robotics Laboratory

Dates: October half term 2006 until January 2007
                      October 21st 2006 – January 9th 2007

Number of shows: 51 *Robotic Thought* shows
                      35 Legolab robot workshops
                      35 Robot storytelling sessions
                      2 Meet the Scientist events
                      1 evening lecture

**Audiences:**   Robotic Thought shows ~ 3300 family audience members
                      Legolab workshops ~ 400 Thinktank visitors
                      Robot storytelling ~ 350 Thinktank visitors
                      Meet the Scientist events ~40 Thinktank visitors
                      Evening lecture ~ 30 adults. Video available at
http://video.google.co.uk/videoplay?docid=3580417564642154193&q=kenny+webster

                      Total audience size ~4120

Respondent age distribution

The Robotic Thought show was evaluated using a short questionnaire (n=36) for 12 and unders, and a long questionnaire (n=27) for older children and adults. In addition, some data were collected using Thinktank's own audience survey form (n=62). Where possible, these data are included in this report.
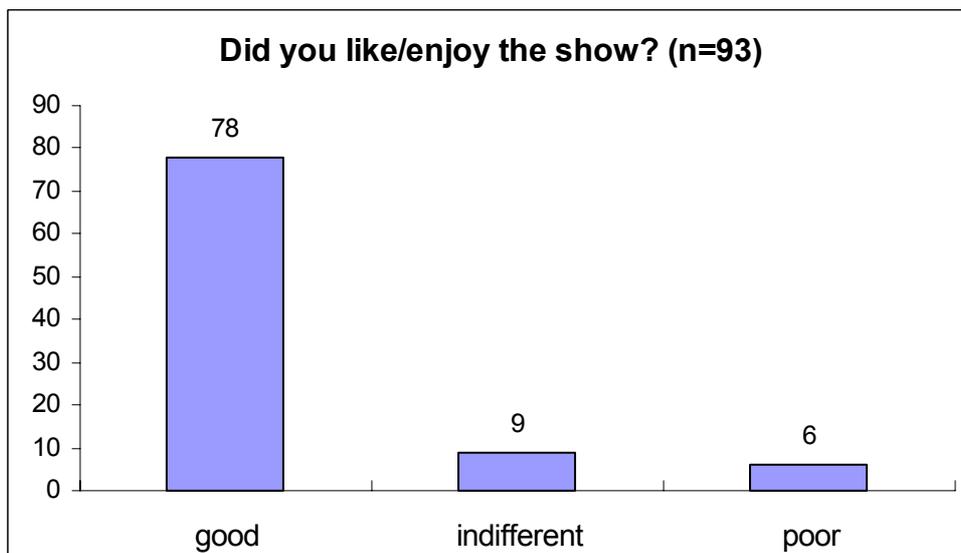

Age of questionnaire respondents (n=57)
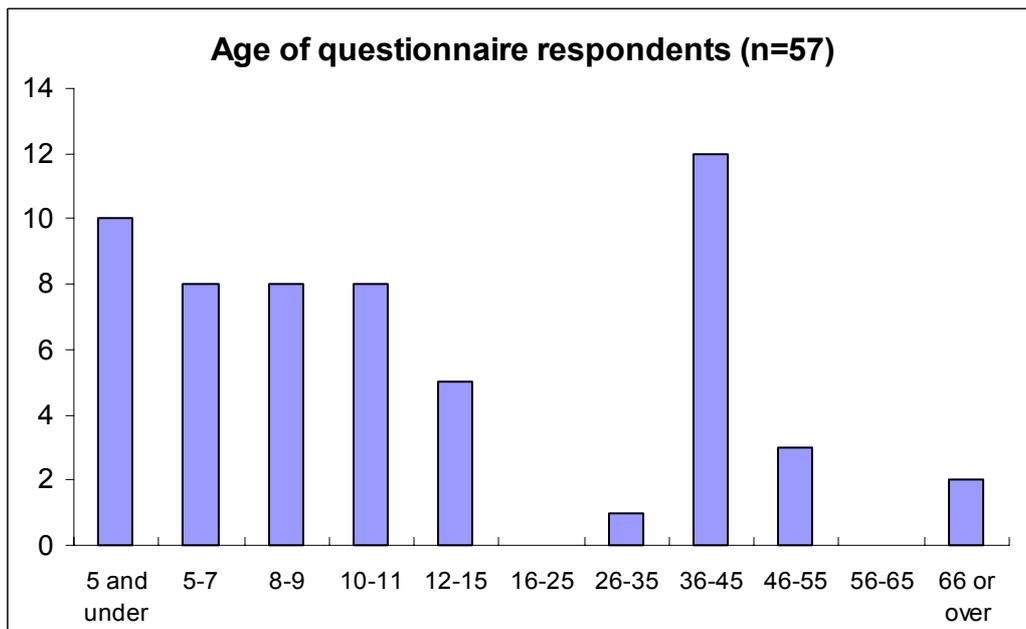
It is likely that the areas of high frequency on the chart correspond to children, and their parents.

Short questionnaire summary

The gender balance for the short questionnaire was 47% male and 53% female.

Here are some words about robots. circle the ones you agree with

metal, 21

useful, 26

scary, 4

clever, 27

cool, 21

friendly, 20

weird, 7

evil, 3

exciting, 23
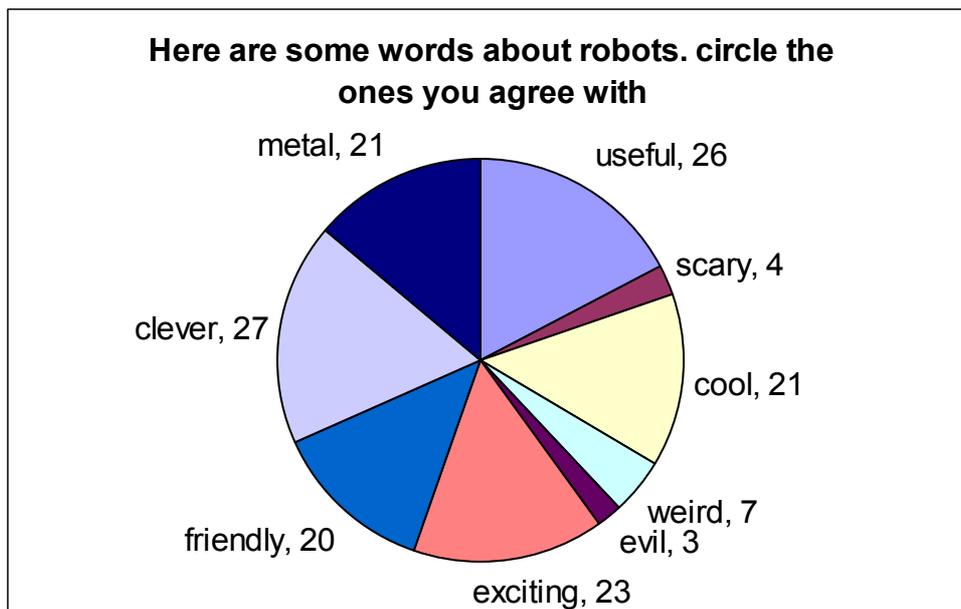
Respondents circled a range of words, notably those with positive connotations. 18 respondents used the space to write some more words about robots, again these were largely positive, and many repeated the words on the list above.

Did you like/enjoy the show? (n=93)

good — 78

indifferent — 9

poor — 6

The short questionnaire used a three-point smiley face scale, while the Thinktank questionnaire used a three point thumbs up/thumbs down scale. The data here are combined. It is clear that a large majority of respondents (84%) enjoyed the show.

When asked to comment on the show, the most frequent responses were 'interesting' and 'fun' or 'funny'. Most responses were positive, but a couple of respondents who found the show boring or unexciting also left their views. Some comments on the show included:

"It was great it made me think about what robots could do in the future" (8 year-old male)

"It was great I enjoyed it so much I was staring!" (8 year-old female)

Long evaluation summary

Information collected on the audience is summarised here.
- Gender balance for the long questionnaire respondents was 43% male and 57% female.
- Most respondents (91%) were attending with their family.
- Of those who were accompanying children, most (91%) accompanied one or two children.
- Most respondents were of White British origin (81%)
- No respondents considered themselves Disabled.

Results from the evaluation are summarised here:
- Most of the respondents had heard about the show after they arrived at Thinktank. Of the two that had heard about the show prior to their visit, one had heard about it from a friend, and the other from the roboticist taking part on the day.
- When asked to write down three words that described the show, the most common responses were: 'interesting' and 'fun' or 'funny'
- Over three-quarters (79%) rated the show as 1 or 2 on a five-point scale from good to bad. 8% rated it as 3 on the scale.
- Most (61%) said that the science was pitched at the right level, although some (30%) felt it was too easy. This is not unexpected for the older respondents to this questionnaire.
- Over half (55%) felt that the language was at the right level. Some felt it was too easy (28%) and some that it was too hard (17%).
- Several elements of the show were highlighted as the 'best bits': The swarm robotics demonstration, the audience interaction and the robot eating crisps demonstration.
- Only a few respondents said there was a 'worst bit' of the show. One said it was a bit long for small children, and another said there was 'too much talking'
- There was an interesting response to the scientist's involvement. One respondent listed this as the best bit of the show, and two listed it in the worst bit. One gave the reason that his explanation was too technical for the children. The roboticist and the presenters had some constructive comments to make about this aspect of the show, which are discussed in more detail in the 'successes and challenges' document.
- Respondents' prior knowledge of robotics varied. On a scale of 1 (lots) to 5 (nothing), 35% rated their knowledge as 1 or 2, 35% as 3 and 30% 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). Most (86%) gave ratings 1, 2 or 3, with over half (59%) rating their learning as 1 or 2.
- The most common learning points were related to what robots can do, e.g. 'robots can be powered by food' or 'robots can do the thing with the frisbees like the people did',
- Half of the respondents (50%) said that the show had made them more interested in science.

Electronic voting

Three electronic voting questions were asked of the audience after one of the half-term shows. The results were not displayed to the audience at the time as this may have biased the responses. The results to the voting questions are presented in the three graphs below:

What did you think about the show?

Response	Value
GOOD	102
BAD	6
NEITHER GOOD OR BAD	14

Do you think you will continue to discuss/talk about robots after the show?

Response	Value
YES	76
NO	20
MAYBE	53

Has the show changed the way you feel about science?

Response	Value
MORE INTERESTED	90
LESS INTERESTED	3
STAYED THE SAME	51