

Evaluation of Cheltenham Festival of Science 2004

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1 Introduction

1.1 Festival History

The first Cheltenham Festival of Science took place in 2002, and the 2004 Festival was the third Science Festival held in Cheltenham. The Festival ran from 9-12 June 2004, and events were centred around the Cheltenham Town Hall.

1.2 Festival Aims

The Festival aims, as set out by the organisers, are:

1. To present scientific ideas and issues in a festive, enjoyable environment
2. To create opportunities for the public to gain confidence in and have access to Science and the debates around it
3. To explore different ways of getting people participating in discussion about Science and the issues surrounding it - including some people who have not entered such discussions before
4. To effectively target different audiences separately - with each group finding the activities accessible. In particular, adults should see the Festival as sufficiently sophisticated for them, while still being enjoyable for children. There should be different "ways in" for people with different levels of interest.
5. To be seen as a high quality, focused Festival
6. To establish a national and international profile
7. To be seen by the Science Communication community as an 'edgy' Festival, challenging people's perceptions of what a Science Festival is

The Festival will be evaluated against these aims.

2 The Evaluation

2.1 Evaluation Aims

The evaluation aims to gather information on the following aspects of the Festival:

1. Did the Festival meet its aims?
2. What were Festivalgoers' impressions of the Festival?
3. Did the Festival stimulate dialogue?
4. What is the Festival's audience demographic?
5. What did Science Communicators, speakers and the media think of the Festival?
6. What was the impact of the festival on its participants?

2.2 Methodology

Data was collected both by the evaluation team and the Festival office. One of the findings of the 2003 Science Festival evaluation was that the audience surveys were not an ideal method for surveying a random sample of Festivalgoers. For this reason, Festivalgoer demographics were assessed observationally by Festival runners, who were present during the talks and debates. This method had been piloted at the Cheltenham Jazz Festival, as a means of collecting information from a random sample Festivalgoers.

Interviews were also conducted with Festivalgoers by the evaluation team (consisting of one consultant and two trained Festival runners) and the Festival marketing assistant who is also experienced in conducting interviews. Interviews aimed to collect data on Festivalgoer demographics and impressions of the Festival with respect to the research questions outlined in section 2.1. The demographic data collected from the interview sample can be compared to the observational data collected in order to determine the validity of the observational method.

Interviews were also conducted with speakers and science communicators. Talks and debates were observed where possible and media coverage was tracked by the festival office and is summarised here.

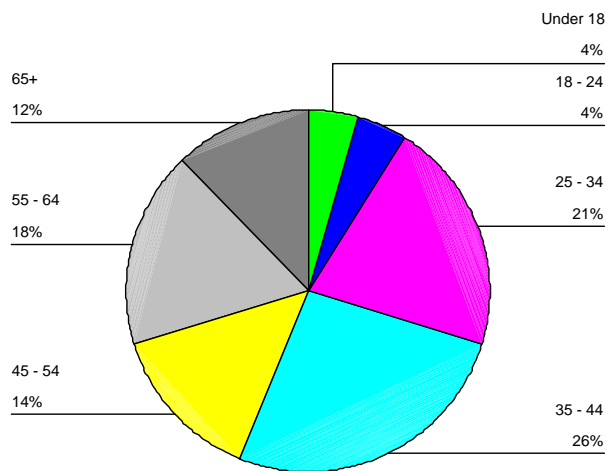
A copy of the interview questionnaire is given in the appendix.

3 Results

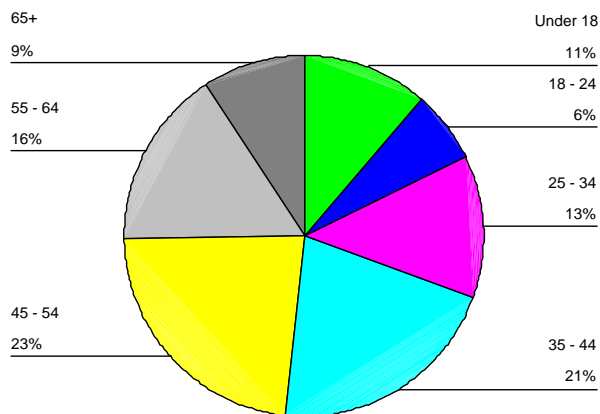
93 Interviews were conducted with Festivalgoers throughout the 5 days. 377 Festivalgoer demographics were assessed observationally.

3.1 Audience Demographics

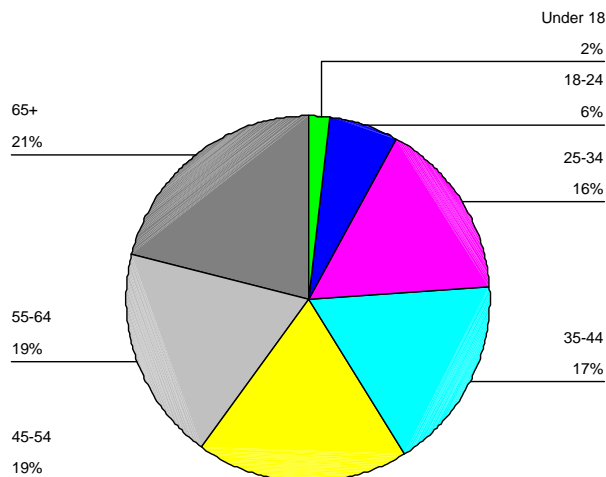
The interview sample gender split was 55% female, 45% male. The distribution of interviewees' ages is shown in the chart below, and data from the 2003 Festival is shown for comparison:



2004 (interview sample)



2004 (observation sample)



2003 (PRS sample)

The number of over 55s appears to have reduced between 2003 and 2004, with more 35-54-year-olds attending. The PRS sample used for comparison was the largest and least biased sample from the 2003 Festival, although the sample was taken from a limited number of events. The large number of under-18s in the 2004 observation sample is probably due to data being collected for both adult and schools events. From these results it would appear that observation is an adequate, if not ideal, technique for judging the age of Festivalgoers.

Almost a third (31%) of interviewees were educated at least to degree level, and most were ABC1 (52%). 17% of interviewees were retired. These figures appear to match reasonably well with the observational percentages (60% and 16% respectively) however the observational sample was on average younger, so both of these values are probably overestimated, especially the ABC1 result.

Observationally, most (97%) Festivalgoers were white.

An overwhelming majority of respondents (99%) had an existing positive attitude towards Science, compared to 82% in 2003. This increase could be because few under-18s were included in the interview sample this year; all adults attending were more likely to be doing so by choice, whereas in 2003 many under-18s were attending as part of a school visit. Most interviewees (71%) visit museums, science centres or science conferences at least 2-3 times per year (compare with 66% in 2003) and most respondents read about Science or use Science media on a roughly weekly basis (55%, 4-5 times per month, compare with 60% in 2003).

3.2 The Festival

3.2.1 Festival Venues

In 2003 Festival talks and debates were held in the Town Hall and Everyman Theatre. Festivalgoers found that the separation of the venues caused problems in arriving at events on time, especially if a previous event had overrun. The Festival organisers also felt that spreading the events over the two venues diminished the Festival's focus, partly because it was not possible to outwardly identify the Everyman as a Festival venue using banners similar to those outside the Town Hall. For this reason a new venue was introduced for the 2004 Festival. The Town Hall Arena was a large marquee situated in Imperial Gardens next to the Town Hall, with a covered walkway linking the two venues. The Arena housed a large seating area, Ottakar's bookshop and some stands. The robot arena moved back into the Discover Zone in the Town Hall.

The venue changes meant that the Discover Zone was considerably more lively than in 2003, especially during the day when school parties were visiting. The evaluation team noted the more child-oriented atmosphere, which became apparent when there were few adults in the Discover Zone with whom to conduct interviews, a change from 2003 where many interviews took place there. The Arena, on the other hand, was quieter and more 'grown-up', with Festivalgoers chatting to speakers in the bookshop area or browsing the stands.

However, the soundproofing of the marquee was poor and there was considerable noise pollution both from the bookshop area and nearby traffic. Signs asking people to be quiet while events were underway helped alleviate the problem, although many Festivalgoers were still unhappy with the noise levels. The arena was also often uncomfortably hot, despite the rental of air conditioning units. This was again a source of complaints from Festivalgoers (see section 3.5).

The Arena venue appeared to work well, and there were none of the complaints about travelling between venues from Festivalgoers as there had been in 2003. Refining the venue to improve soundproofing and air conditioning would improve the experience for audiences.

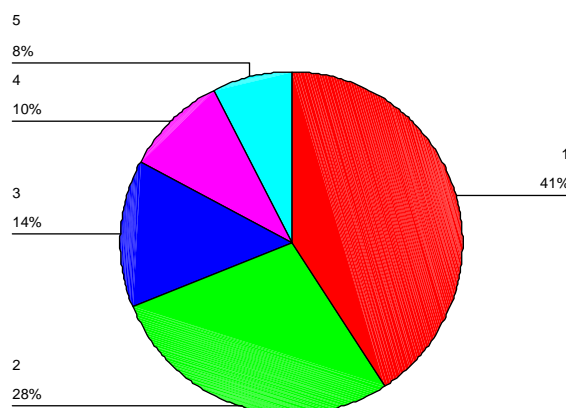
3.2.2 Festival attendance

12824 tickets were sold for events at the 2004 Science Festival, compared to 13062 in 2003, although if the visitors to the free interactive area are included the estimated 2004 attendance was 27000. 81% of interviewees had booked their tickets in advance.

Broken down, the ticket sales are as follows:

Venue	Number of events	Capacity	Average Attendance
Drawing Room	23	180	125
Pillar Room	30	300	150
The Arena	23	400	222

The chart below shows how many days respondents spent at the Festival.



29% of Respondents visited on weekdays only, and 27% visited on the weekend only. Respondents were most likely to visit alone (30%), with family (28%) or with a partner (26%). Most common group sizes among respondents were 2 (42%), 1 (19%) and 4 (14%).

Three quarters of interviewees (76%) had attended a talk or debate, and a quarter had visited the Discover Zone. This compares to 73% and 84% respectively for 2003. This difference may be due to the fact that many interviews were conducted as Festivalgoers were leaving events, and that the 2004 sample was altogether older. However it could be that the livelier

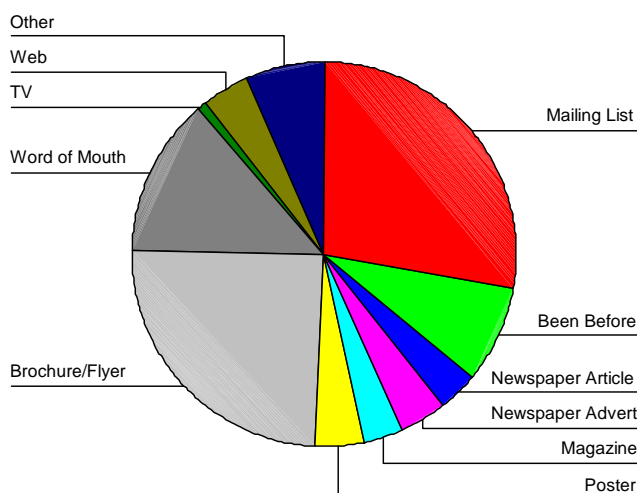
atmosphere in the Discover Zone in 2004 dissuaded adults from visiting it. No respondents had visited the Science Café events, and only one had attended a schools event.

42% of respondents had visited a Science Festival in Cheltenham before, with half of these (22%) having attended in both 2002 and 2003. Most respondents (58%) were attending for the first time. Data from 2003 showed that only a third of respondents had visited the Science Festival before.

When asked their reasons for visiting the Festival, most respondents said it was down to either a general interest or a specific interest in a speaker or topic. A number of respondents also said they had enjoyed previous visits or that the Festival had been recommended to them.

3.2.3 Festival advertising & publicity

Interviewees were asked how they had heard about the Festival. Responses are shown in the pie chart below:



The mailing list, flyers and word of mouth were the most common means of finding out about the Festival.

The Festival generated considerable media coverage:

24 items in the national press (compare to 27 in 2003)

4 items in the regional press (compare to 2 in 2003)

37 items in the local press (compare to 27 in 2003)

3 items in the specialist press

2 national TV items

3 radio items (1 national, 2 local)

For further details please refer to the report prepared by the Festival press and publicity officer.

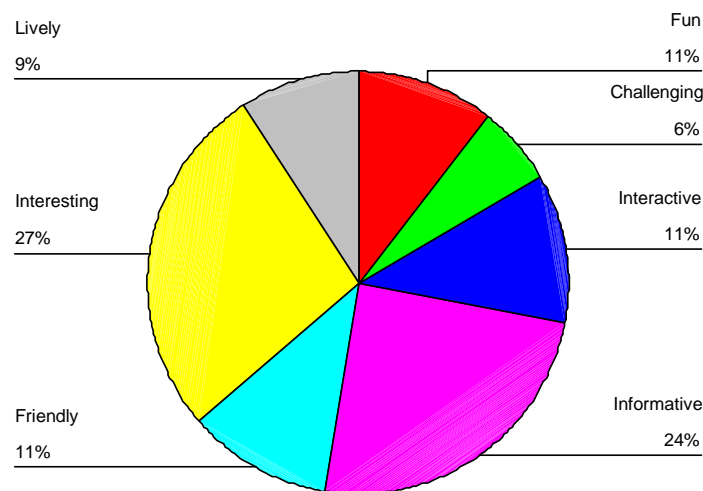
3.3 Festival Experience

3.3.1 Rating the Festival

An overwhelming majority of respondents (99%) rated the Festival as ‘good’ or ‘very good’. 90% said they would come again next year and 99% would recommend it to a friend.

Interviewees were asked to circle three words that described their impressions of the Festival. The list of words was developed from the responses to the open interview questions asked in 2003, where Festivalgoers gave three words that described their Festival experience. A copy of the list is given in the Appendix with the evaluation materials.

No interviewees circled negative responses. A summary of the responses is shown in the chart below:



3.3.2 Best and Worst Parts of the Festival

Interviewees were asked what they had enjoyed most and least about the Festival. The most popular parts of the Festival with respondents were the talks and debates,

“Excellent speaker” (35-44 male)

“Interesting topics” (25-34 male)

and the Discover Zone:

“discovering things in an interactive way” (35-44 male)

“learnt things” (18-24 female)

“great hands-on fun” (35-44 male)

When asked which part of the Festival they had enjoyed the least, the most common response from interviewees was 'not sure' (85%). Many commented that they had enjoyed all parts of the Festival, or that they had not looked around sufficiently to be able to comment. Some respondents commented on the lighting, uncomfortable heat or noise pollution (see section 3.5, Improving the Festival)

3.3.3 Festival Impact

Most interviewees felt that they had learned at least a little Science from the Festival (86%), with half (52%) feeling they had learned 'some' science and 15% feeling they had learned 'a lot'. In 2003 results were 94%, 71% and 21% respectively.

99% of respondents had an existing positive attitude towards Science, however almost a third (31%) felt that attending the Festival had left them more interested in Science, compared to 42% in 2003 (where 82% had an existing positive attitude).

Almost a third (29%) of Festivalgoers interviewed had asked questions of a speaker or taken part in a discussion or debate, and most respondents (89%) said that they had been prompted to discuss issues raised at the Festival outside the Festival. Compare to 27% and 77% in 2003.

3.4 Improving the Festival

Interviewees were asked if they had any ideas as to how the Festival could be improved. The main points raised were as follows:

- More effective air conditioning in the venues
- Reduction of noise pollution in talks and debates from the bookshop area, traffic and the Discover Zone
- The bright/strobe lighting was unpopular with some respondents
- More interactives or stands aimed at adults
- Improve parking by reducing charges or publicising park and ride
- Longer sessions or more time for questions
- Ensure events keep to the publicised times
- More talks/debates/activities

Festivalgoers were asked for further comments, and the majority were along the lines of '*keep up the good work*'. Respondents also appreciated the fact that many activities were free of charge.

Many Festivalgoers asked for more events or a longer Festival, which indicates that they enjoy the Festival programme and would like to see it extended.

4 Opinions of Science Communicators, Speakers, Stallholders and the Media

7 informal interviews were conducted with speakers, Science Communicators and media representatives. Several interviewees were members of more than one of these groups.

All interviewees felt that the Festival was high quality:

“I think it’s brilliant” (male stallholder)

“the whole atmosphere makes it an event” (female speaker/science communicator)

As in 2003, speakers were impressed with the attention to their needs, with one commenting *‘I felt quite pampered!’* The technical support was also described as excellent, and again speakers were grateful for the help in setting up for their presentations. The only negative comment from a couple of speakers was that they felt the party was not as good as in 2003. One interviewee suggested it would be nice for speakers to socialise in the evenings if meeting for a meal or drinks was organised.

The new Arena venue went down well with speakers, who also appreciated the chance to talk to Festivalgoers informally in the bookshop area. One speaker felt that previously she had perceived the Everyman to be the *‘serious’* venue, and that now there was a more equal balance. Stallholders interviewed felt that the clear focus of the Festival venues meant *‘added value’* as more passers-by were likely to engage with their stands than at other science festivals.

Stallholders in the Discover Zone were happy with the flow of human traffic, although one stallholder whose stand was upstairs admitted to being concerned at first that, despite signposting, nobody would visit the stand. However people did move upstairs after looking around the hall, and there was no problem overall. Stallholders in the Arena felt that they would have appreciated more visitors especially nearer the start of the Festival, and that it was difficult to talk to visitors quietly when there was a talk on in the Arena.

From conducting these interviews, one impression was that Cheltenham has gained a reputation for slick organisation, a quality programme and a great atmosphere. Several interviewees commented on their *‘high expectations’* of Cheltenham; which they felt had been met.

5 Conclusions

The Festival was once again seen as a success by its visitors, who rated it highly in terms of educational and entertainment value, and said they would be keen to come again and recommend the Festival to friends.

Festivalgoer demographics were similar to those in 2003, predominantly white, middle class and well-educated with a balanced gender split. The average age of adult Festivalgoers appeared to be slightly younger than in 2003, and most had a positive attitude towards Science.

A significant, but smaller, proportion of respondents reported a shift in attitude towards Science than in 2003, possibly because a larger proportion held positive attitudes already.

In 2004, a greater proportion of respondents had taken part in a discussion or debate than in 2003, and a larger proportion said they would be continuing to discuss the issues raised than in 2003. This indicates that the Festival is a good arena for stimulating debates around scientific issues.

The Arena venue worked well in concentrating the focus of the Festival, however further refinements are needed for it to match the comfort of the Pillar and Drawing rooms.

The success of the observational method for assessing Festivalgoer demographics was limited, but provided a more representative sample than the self-complete audience surveys used in previous years.

The talks and debates and the Discover Zone were the most popular parts of the Festival with respondents. The Discover Zone appeared to be targeted more towards children in 2004, which added to its atmosphere but possibly excluded older groups.

Speakers and Science communicators were found to have high expectations of the Festival, indicating its growing profile within the Science Communication community. Again these groups were impressed with the Festival.

6 Recommendations

1. Festival Venues

The Arena greatly added to the focus of the Festival, however it was unsatisfactory in some ways. Effective soundproofing and air conditioning are essential if this venue is to be used again for future Festivals. A quieter location for the bookshop was appreciated and both speakers and visitors appreciated using the space for informal discussions and book signing.

2. Target audiences

The Discover Zone was targeted more clearly towards younger visitors in 2004. In 2003 the 'Evolving Art' activity engaged adults in the Discover Zone, and many commented that they had enjoyed visiting the other stands. The noise levels and busy atmosphere in the Town Hall may also have put adults off. It is recommended that ways in which the lively atmosphere can be retained while acting as less of a deterrent to adults be considered.

3. Evaluation methodologies

Observation is generally not considered a valid method for assessing visitor demographics, especially ethnic origin and occupation. This method, while not ideal, was adequate in assessing gender and age of visitors. The advantage of this method was that it captured a random sample of Festivalgoers, the 2003 evaluation showed that the sample captured by the self-complete audience surveys was very biased. Neither method is ideal, so it is recommended that interviewing or supervised completion of questionnaires be used as more effective methods in the future. The evaluation interview used for this survey could easily be adapted to purely closed form questions, and made shorter. In this way data could be collected by Festival runners present in each event, with minimal training. Feedback forms could also be developed for speakers, science communicators and stallholders. A large in-depth evaluation is probably not necessary from year to year unless the Festival changes significantly, although some feedback from audiences and contributors will be essential for its continued success.

4. Future success

This report lists few recommendations; at the end of the third Festival the Organisers and Directors have applied lessons learned from previous Cheltenham Festivals in order that the event runs smoothly and successfully. A responsive programme that feeds the interest of audiences will therefore become the key to the ongoing success of the Festival.

Appendix

Interview questionnaire

Interviewer

FESTIVAL EVALUATION

We are interested in your opinions about this year's Cheltenham Science Festival. The interview will only take a few minutes and your comments will help us plan future events.

1. Please indicate which days you have visited/will visit the Festival?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wed 9	Thu 10	Fri 11	Sat 12	Sun 13	not sure

2. Did you book in advance or drop in?

<input type="checkbox"/>	<input type="checkbox"/>
Book	Drop In

3. Which parts of the Festival have you visited/will you visit?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discover Zone	Work Shop	Schools	talk/debate	Science Cafe	other

4. Have you attended previous Science Festivals in Cheltenham?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2002	2003	No

5. How did you hear about the Festival (tick more than one of necessary)?

<input type="checkbox"/> Mailing List	<input type="checkbox"/> Brochure/flyer/leaflet
<input type="checkbox"/> Been before	<input type="checkbox"/> Word of mouth
<input type="checkbox"/> Newspaper article	<input type="checkbox"/> Radio
<input type="checkbox"/> Newspaper advertisement	<input type="checkbox"/> TV
<input type="checkbox"/> Magazine	<input type="checkbox"/> Web
<input type="checkbox"/> Poster	<input type="checkbox"/> Other.....

6. Why did you decide to visit the Festival?

13. Do you think that the Festival has changed the way you feel about Science? In what way?

Much more Interested More Interested No change Less Interested Much less Interested Not Sure

14. Whilst at the Festival, have you asked any questions of speakers/panels, or taken part in any discussions or debates?

Yes No

15. Have you been prompted to discuss any of the issues raised at the festival outside the Festival?

Yes No Not Sure

16. Overall, how would you rate the Festival?

Very Good Quite Good Neutral Quite Bad Very Bad

17. Would you come again next year?

Yes No Not Sure

18. Would you recommend it to a friend?

Yes No Not Sure

19. How do you think that the Festival could be improved?

20. Any other comments?

FINALLY SOME QUESTIONS ABOUT YOURSELF...

21. Which of the following age brackets do you fall in?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<18	18-24	25-34	35-44	45-54	55-64	65+

22. Gender

<input type="checkbox"/>	<input type="checkbox"/>
Male	Female

23. Who are you here with?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School	Family	Friends	Alone	Partner	Community Group.....	Other

24. How many people are in your party (including yourself)?.....

25. How many times a year would you say you visit a science centre, science based events or conferences?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2-3	4-5	6-7	8-10	10+

26. How many times a month would you say you read the science pages in the national broadsheets or articles in specialist magazines?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1	2-3	4-5	6-7	8-10	10+

27. What is your occupation?

28. What is your highest qualification?

29. What are the first four digits of your postcode?.....

Thanks!