

SCIENCE SPECTACULAR REPORT 2016

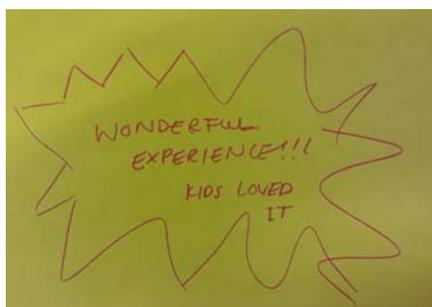
*“It had it all: fun, factual learning, accessible education, hands-on experiences...
and lots of rewards for the kids.”*

The Manchester Science Festival is an eleven-day programme of events held throughout the City and Greater Manchester. It aims to “create a place for innovative, surprising and meaningful experiences, where people of all ages can ignite their curiosity in science”. This year marked the 10th birthday of the Festival and the end of Manchester as European City of Science.

Staff and students from The University of Manchester contributed to the Festival and, as in previous years, a small co-ordinating group organised a key event, **Science Spectacular**, from 10am-4pm on 29 October 2016 where families could explore interactive exhibits and take part in science challenges. This year the event was solely based in Manchester Museum where it ‘took over’ the whole building and the courtyard outside.



Despite a smaller scaled event, Science Spectacular 2016 was very successful in engaging a large number of visitors, mainly families, from across Greater Manchester and beyond. All those who took part enjoyed the experience and thought it was an amazing, fun and inspiring day where they all learnt about science together.



FACTS AND FIGURES

- 1,421 people attended the event
- 44% visitors came from Manchester
- 29% visitors came from other areas of Greater Manchester
- 182 researchers took part
- 29 stands (41% were new to the event)
 - 13 stands from Faculty of Science & Engineering
 - 12 stands from Faculty of Biology, Medicine & Health
 - 1 stand was cross-faculty
 - 3 stands from other organisations
- 3 MSF Volunteers
- 12 student volunteers (some were also buskers)
- 22 science buskers

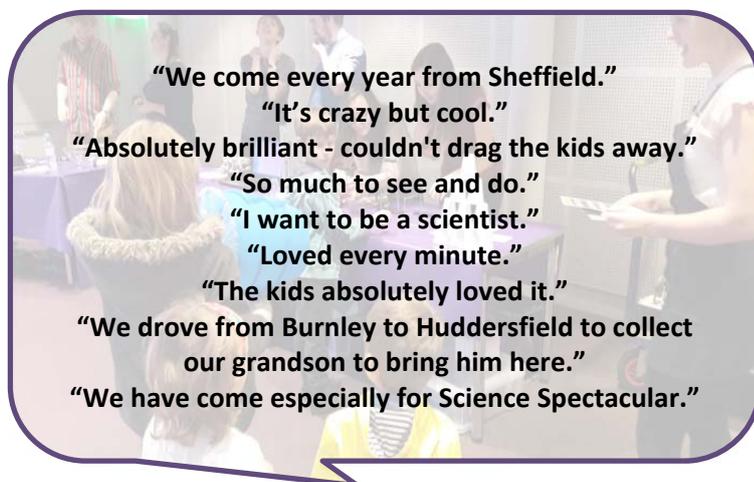
What the visitors said ...

"Science is even more fun when it's not in the classroom!"

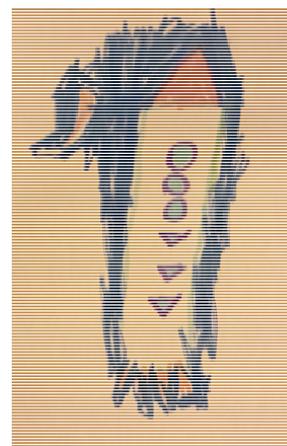
Young Science Spectacular Visitor

Visitors of all ages were asked to post what they thought of the day on a graffiti wall. 120 comments and drawings were posted on the wall. Most spoke of a **fun, amazing and inspiring** day with 16 activities specifically mentioned by name with the volcano, rockets, and chocolate biscuit impact testing being the most popular. There were also 48 drawings from children illustrating the highlight of their day. Two comments stated that they will come back next year.

When asked what they were taking away from their visit, **most adults felt that Science Spectacular encouraged them to experience science together as a family** and that the event inspired their children (and themselves) to learn more about science.



Anecdotal comments collected by staff



What the researchers said ...

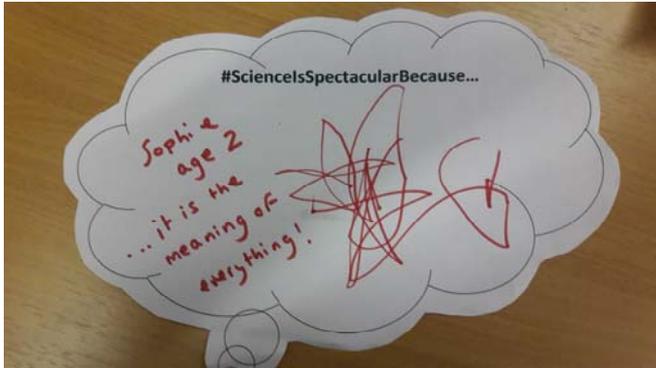
"[What surprised you?] Just the amount of stuff going on. The enthusiasm from the University staff and the sheer range of activities, it was really inspiring to see the effort and commitment to our STEM outreach work."

The researchers thought the organisation of Science Spectacular was very good, particularly leading up to the event. They appreciated the support and help on the day from Museum staff, event organisers and MSF volunteers who dealt with any issues quickly and positively. The ambition of the event and the wide range of activities on show were considered superb. Many were surprised by the number of people who attended and how engaged they were.

When asked what could be improved some stalls felt their location in the Museum was not ideal but appreciate that there are always space restrictions and compromises when putting on such a large event.

The restrictions on signage and poor visitor flow upstairs meant some stalls felt visitors were not aware of where they were located. Likewise, some stalls downstairs were overcrowded and blocking the entrance. It was always going to be a challenge hosting so many stalls in the Museum but this did not seem to detract from the “*fantastic atmosphere*” created in the Museum and that the researchers had “*an insanely enjoyable day*”.

What the tweeters said ...



Most posts related to learning new things about science. That science was about having fun and discovering new things. It was about experimenting and learning about the wonders of what is around us.

What the science buskers said ...

"I had a brilliant time! We definitely warmed up throughout the day and got a lot more confident with practice, allowing us to interact with all sorts of ages."

Science Busker

Following a recruitment call, 22 students attended the science busking training and mentored practice day before acting as science buskers at Science Spectacular on 29 October 2016. For the first time they included Msc Science Communication students. On the day the team of 21 new buskers and 4 returning buskers worked in two teams, one in the morning and one in the afternoon. Some also worked as student volunteers.

One busker commented that she found the training enjoyable and useful and was looking forward to being a busker again in the future.



EVALUATION OF SCIENCE SPECTACULAR: METHODOLOGY AND RESULTS

The evaluation comprised:

1. Asking visitors for their thoughts via a graffiti wall

Visitors were asked what they thought of the day. 120 post-It notes were filled out by visitors of all ages. All comments were positive with 40% expressed as drawings; 25% mentioned a specific activity; 29% said the event was fun, inspiring and amazing; and 4% said it was educational.

2. Asking adults about their visit using selection counters

In response to the question - *What are you taking away from your visit to Science Spectacular?* – adult visitors were asked to use counters to select up to 2 statements they agreed with from:

- I am more aware of the relevance of scientific research in my everyday life
- It encouraged us all to experience science together
- It inspired my children (and me) to learn more about science
- We were able to talk to scientists.

274 counters were used and 33% agreed that Science Spectacular encouraged them all to experience science together; 30% felt the event inspired their children (and themselves) to learn more about science; 19% thought it made them more aware of the relevance of scientific research in their everyday life; and 18% liked that they were able to talk to scientists.

3. Monitoring where visitors came from using postcode data (see Appendix A)

217 groups/individuals gave the first part of their postcode.

44% came from Manchester with half coming from Moss Side, Fallowfield, Chorlton and Didsbury. The numbers coming from Moss Side and Fallowfield showed an eight-fold increase compared to 2015.

29% of the groups/individuals came from other Greater Manchester authorities with Stockport being the most popular as in previous years.

The number of visitors from outside Greater Manchester continued to increase with a 7% rise on 2015.

4. Using the Twitter hashtag #SciencelsSpectacularBecause...

The Twitter hashtag #SciencelsSpectacularBecause... was used by researchers, organisers and visitors to post their thoughts during the event. It also formed a record of the preparations and experiences of everyone involved.

The official evaluators for the Manchester Science Festival also attended as part of the Festival's overall evaluation.

The event was videoed and photographed researchers have requested photos from our Flickr photo gallery to be used as evidence of impact

<https://www.flickr.com/photos/128754940@N08/albums/72157676046950345>

Several of these images have been used (with permission) in UoM materials and 2017 MSF materials.

RECOMMENDATIONS

- Provide a post-event follow up session for stallholders to share experience and feedback.
- Review the event signage system in Manchester Museum to improve the visitor flow to all stalls. (One suggestion - writing the "short-name" of the stall on a helium inflated balloon attached to one table leg).
- If possible, allow the science buskers to work in pairs.

APPENDIX A: Postcode Data

POSTCODE	No.	POSTCODE	No.
M1 City Centre	1	WA3 Newton-le-Willows	2
M4 Ancoats	1	WA4 Warrington	1
M5 Salford	1	WA5 Warrington	1
M7 Salford	2	WA13 Lymm	2
M9 Harpurhey	1	WA14 Altrincham	2
M12 Ardwick	2	WA15 Hale	6
M13 Ardwick/Rusholme	1	WA16 Knutsford	2
M14 Moss Side/Fallowfield	17		
M15 Hulme	6		
M16 Whalley Range/Old Trafford	7	BB3 Darwen	1
M18 Gorton	5	BB4 Rawtenstall	4
M19 Burnage	4	BB5 Accrington	1
M20 Didsbury	20	BB7 Clitheroe	1
M21 Chorlton	13	BB10 Burnley	1
M22 Wythenshawe	1	BD17 Baildon	1
M25 Prestwich	2	BD20 Keighley	1
M26 Radcliffe	1	BS3 Bristol	1
M28 Worsley	1	CH44 Wallasey	1
M30 Eccles	2	EX2 Exeter	1
M32 Stretford	1	FY8 Lytham St Annes	1
M33 Sale	6	HX3 Halifax	1
M41 Urmston	1	HX4 Halifax	1
		L9 Liverpool	1
		L12 Liverpool	1
		NE28 Wallsend	1
		NG9 Beeston, Notts	1
		NP23 Ebbw Vale	1
		PE15 March	1
		PE34 King's Lynn	2
		PR2 Preston	1
		PR3 Preston	1
		PR6 Chorley	1
		PR7 Chorley	1
		PR8 Southport	1
		RG20 East Grinstead	1
		RH19 Newbury	1
		S5 Sheffield	1
		S17 Sheffield	1
		S35 Rotherham	1
		SG1 Stevenage	1
		ST5 Newcastle-Under-Lyme	1
		SY11 Oswestry	1
		SY23 Aberystwyth	1
		WF1 Wakefield	1
		London	4
		Outside UK	2
	TOTAL (as %) 44%		TOTAL (as %) 27%
SK2 Stockport	21		
SK5 Reddish	1		
SK8 Cheadle Hulme	24		
SK16 Dukinfield	1		
BL1 Bolton	2		
BL3 Bolton	1		
BL7 Bolton	1		
BL8 Bury	1		
OL2 Oldham	1		
OL3 Oldham	1		
OL6 Ashton-under-Lyne	2		
OL11 Rochdale	1		
OL14 Todmorden	2		
OL15 Littleborough	1		
WN1 Wigan	1		
WN8 Skelmersdale	1		
	TOTAL (as %) 29%		