

SCIENCE SPECTACULAR REPORT 2015

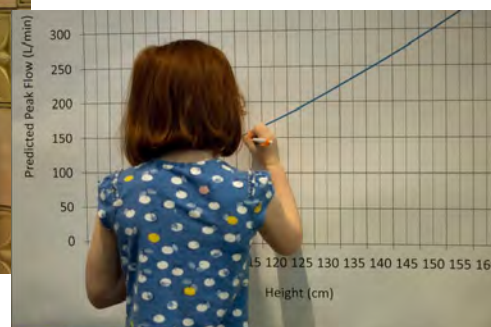
“Brilliant for getting kids interested and involved from an early age”

The Manchester Science Festival is a nine day programme of events held throughout the City and Greater Manchester. It aims to “inspire young people and nurture the scientists of the future” by being “an opportunity to bring science to life and encourage young people to be excited by and question the world around them”. It also provides a chance for people of all ages to engage with science.

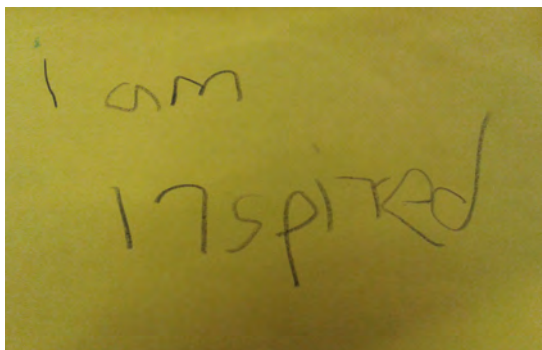
Staff and students from The University of Manchester continue to contribute to the Festival and, as in previous years, a small co-ordinating group organised a key event, **Science Spectacular**, from 11am-4pm on 31 October 2015 in the Whitworth Hall and Manchester Museum where families could explore interactive exhibits and take part in science challenges. And this year there was a Halloween theme https://www.youtube.com/watch?v=5liogFq_x94



“I want to be a scientist!”
Young Science Spectacular Visitor



Despite it being Halloween with additional events being held across the City, Science Spectacular 2015 was successful in engaging a large number of visitors, mainly families, from across Greater Manchester and beyond. All those who took part enjoyed the experience.



Facts and Figures

- 1,492 people attended the event
- 39% visitors came from Manchester
- 41% visitors came from Greater Manchester
- 181 researchers took part
- 39 stands (11 were new to Science Spectacular 2015)
 - 15 stands from Faculty of Engineering & Physical Sciences
 - 11 stands from Faculty of Medical & Human Sciences
 - 6 stands from the Faculty of Life Sciences
 - 3 stands were cross-faculty
 - 4 stands from other organisations
- 2 MSF Volunteers (one returning from 2014)
- 7 science buskers plus 5 from Institute of Physics
- 12 student ambassadors
- IBCarb “Sweet Existence” exhibition

What the visitors said ...

"I liked it because you get to learn things that your parents haven't even heard about!!!"
Young Science Spectacular Visitor

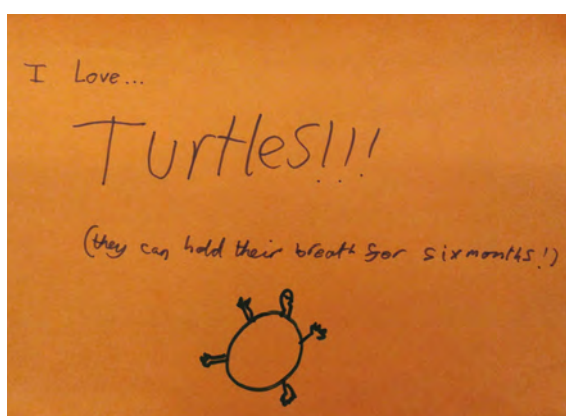
"Fun for me and for my children" Science Spectacular Visitor

Visitors were asked to post what they thought of the day on a graffiti wall. Most comments related to the fun, interactive and enjoyable challenges and experiments which inspired young people in science and were educational. Others said they were inspired to become a scientist.

The most mentioned activity was the turtles closely followed by the cell balloons, zombie germs and DNA.



"Great way to teach the kids" Science Spectacular Visitor



What the researchers said ...

"The general organisation of the event is fantastic. It has been every year. It is easy to turn up, set up and get going." Science Spectacular Researcher

The researchers thought the organisation and layout of the event was excellent. They appreciated how easy it was to just turn up, set up and then deliver their activity. They thought the instructions provided by the organisers were clear and they welcomed the additional extras such as water and support from the student ambassadors.

Suggestions to improve the event included a "down area" for those delivering the activities so they can escape for some quiet time. What surprised researchers were the number of people who attend the event and how quickly they grasped the activities. Some researchers recognised families who had visited before.

What the organisers said ...

The organisers were very pleased with the event and thought the following worked particularly well:

- having a small cross-faculty coordinating committee that organises the event with support from Widening Participation and Outreach.
- having 2 Manchester Science Festival Volunteers at the event to support the organisers and have an opportunity to be on a stand.

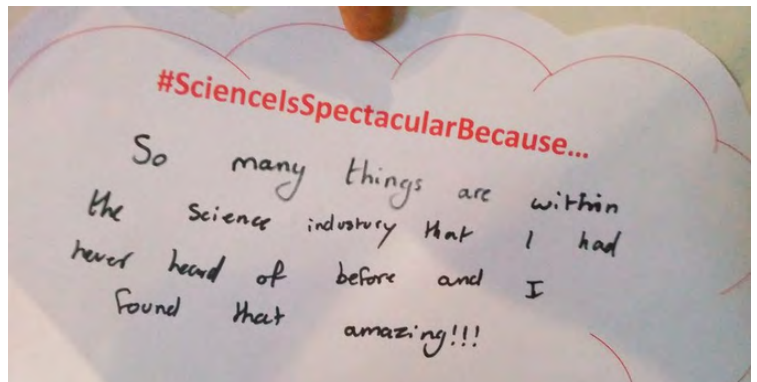
- the excellent support from the porters and building attendants in the Whitworth Hall which is key to a successful event.
- having the IBCarb “Sweet Existence” (<http://ibcarb.com/sweet-existence/>) exhibition in the corridor between Whitworth Hall and the Museum provided an opportunity for us to add another dimension of engaging the public through sci-art.

The event provided a great mix of researchers who had previously participated and those who were new to Science Spectacular. Many of those who were returning to the event had refreshed their interactive activities, so for visitors there were opportunities to explore different aspects of the research areas.

The science busking team was smaller than in previous years (owing to last minute illnesses), but they were very engaged and enthusiastic right up until the end of the day. Our returning buskers were excellent mentors for the newbies.

What the tweeters said ...

Most posts related to learning new things about science. Some people posted that they were having an amazing and inspiring day.



What the science buskers said ...

Following a recruitment call, 15 undergraduates and postgraduates from all faculties, attended the science busking training held on 5 October 2015. This was followed by a practice day at Manchester Museum before 7 acted as science buskers at Science Spectacular on 31 October 2015.

Following Science Spectacular we have received numerous invitations for science buskers to take part in other events being organised by University staff, such Teachers Conferences, British Science Week, the Body Experience, and European City of Science events.



EVALUATION OF SCIENCE SPECTACULAR: METHODOLOGY AND RESULTS

The evaluation comprised:

1. Asking questions of stand leads via email (see Appendix A).
10 responded to the email survey.
They were asked three questions:
 1. What worked well?
 2. What could be improved?
 3. Did anything surprise you?
2. Asking visitors for their thoughts via a graffiti wall
Visitors were asked what they thought of the day. 91 post-It notes were filled out by everyone from 2 year olds to adults. All comments were positive with 13% expressed as drawings. Most comments related to having fun and being amazed by the challenges and experiments which inspired young people in science and were educational. Some referred to the event as being as good as last year showing that the event is attracting returning visitors. 11% also mentioned that it was fun for both adults and children.
3. Monitoring where visitors came from using postcode data (see Appendix B)
114 groups/individuals gave the first part of their postcode.
66% came from Manchester and Stockport. 39% were from Manchester postcode districts, the most popular being Sale, Burnage, Whalley Range and Hulme. This is 8% less than last year but visitors did come from new postcode districts including Ancoats, Beswick and Gorton.
27% were from Stockport, a drop of 2% compared to 2014. 6% came from Warrington postcode areas and 8% from Oldham, Bolton and Bury. There was an increase in visitors from outside Greater Manchester from 10% in 2014 to 20% in 2015.
4. Using the Twitter hashtag #SciencelsSpectacularBecause...
The Twitter hashtag #SciencelsSpectacularBecause... was used by researchers, organisers and visitors to post their thoughts both prior to and during the event. It also formed a record of the preparations and experiences of everyone involved.
5. Debriefing of the organising team

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/sets/>

RECOMMENDATIONS

- If possible consider creating a chill out/downtime space for staff to eat lunch and have some quiet time.
- Provide more rubbish bags or be more proactive after lunch in removing and replacing rubbish bags.
- Find out how many visitors are returners by asking on arrival if they have visited Science Spectacular before.
- In light of a growing demand, the University should consider how to manage and sustain a team of science buskers who can be called up to take part in activities throughout the academic year.

APPENDIX A: Stand Leader Email Survey Results

1. What worked well?

- The general organisation of the event is fantastic. It has been every year. It is easy to turn up, set up and get going.
- The timings and organisation was great as always. It was busy, but people came in waves, so manageable. The chocolate treats delivered by the demonstrators now and again were a pleasant surprise.
- Layout and organisation
- Well organised. Lots of interesting stalls with diverse activities.
- We had good traffic in Whitworth Hall, even in the corner
- Organisation was great, instructions were very clear for contributors and all of the staff were very helpful. It was a really slick operation!
- Buskers and variety of stands
- The star system for younger visitors was good and the layout worked well so no one area was overcrowded
- A great range of activities, coordinated excellently. Plenty of support on the day.
- Room and table allocation were good for our needs The multiple assistants associated with Manchester Science Spectacular were helpful

2. What could be improved?

- It would be good to have a break area for researchers scientists. It would be even better if refreshments could be provided in this area (Tea/coffee/paper bag lunches). It can be a problem having to queue up with the crowds when you are only having a 30 minute break. A real space to chill out for a while would be great as it is quite a full on day for those who are there the whole time.
- All good
- Increased advertising to increase footfall, particularly in morning.
- More 'roamers' who are connected by radio to lead visitors from busier areas to quieter ones. They would carry an item to engage the visitors, and then lead them to the stand.
- Accessibility to some stands. Sometimes it is a bit cramped with lots of people.
- As well as water for stall holders some snacks would be helpful
- Consistency of stall 'quality' - some stalls looked a bit drab in comparison to others. It's a delicate question, as this is volunteering after all, so we should be grateful, but I think it would improve the whole event.
- Rubbish collection needs to be improved (or more bins are needed).

3. Did anything surprise you?

- The number of people always surprises me and is a great thing.
- na
- The number of volunteers from within our centre who wanted to come and help. We had 14 people for our stall over the course of the day!
- I let a child hit me with a shinai when I was in a bulletproof vest. The vest did its job!
- How quickly some of the visitors got to grips with the activities
- That we recognised the same families from previous years!

APPENDIX B: Postcode Data

POSTCODE	No.	POSTCODE	No.
M4 Ancoats	1	BL3 Bolton	2
M9 Harpurhey	1	BL9 Bury	1
M11 Beswick	1	OL2 Rochdale	1
M12 Ardwick	1	OL3 Oldham	2
M13 Ardwick/Rusholme	1	OL4 Oldham	2
M14 Moss Side/Fallowfield	2	OL7 Ashton-under-Lyme	1
M15 Hulme	3	OL15 Rochdale	1
M16 Whalley Range/Old Trafford	5	WA3 Newton-le-Willows	2
M17 Old Trafford	1	WA14 Altrincham	2
M18 Gorton	1	WA15 Hale	4
M19 Burnage	5	TOTAL (as %)	14%
M23 Wythenshawe	1		
M24 Middleton	2		
M25 Prestwich	2		
M27 Swinton/Pendlebury	2	BB1 Blackburn	1
M28 Worsley	1	BR3 Beckenham	1
M32 Stretford	1	BT34 Newry, NI	1
M33 Sale	7	CV2 Coventry	1
M40 Newton Heath	2	CH3 Chester	1
M41 Urmston	1	CH5 Deeside	1
M43 Droylsdon	1	CW9 Northwich	1
M61 Ancoats	1	CW11 Sandbach	1
TOTAL (as %)	39%	CW12 Congleton	1
		GL1 Gloucester	1
		HA4 Ruislip	1
		LA5 Carnforth	1
SK1 Stockport	1	OX44 Oxford	1
SK3 Cheadle Heath/Bramhall	4	PE21 Boston, Lincs	1
SK4 Four Heaton	6	PL17 Plymouth	1
SK5 Reddish	1	PR7 Chorley	1
SK6 Marple/Bredbury	3	PR25 Leyland	1
SK8 Cheadle Hulme	3	PR26 Leyland	1
SK9 Wilmslow	1	ST5 Newcastle under Lyme	1
SK10 Prestbury/Bollington	1	ST6 Stoke-on-Trent	1
SK13 Glossop	3	ST7 Kidsgrove	1
SK15 Stalybridge	3	ST8 Biddulph	1
SK17 Buxton	1	TOTAL (as %)	20%
TOTAL (as %)	27%		