Building back better: Public Engagement with Research

Networking event report

Thursday 15th October 2020

About this report

This report documents plenary discussions and breakout groups at the Building back better: Public Engagement with Research event held online on the 15th October 2020.

The event was convened by the National Forum for the Public Engagement with STEM to consider:

- Key lessons learned from COVID-19 about effective public engagement in a health emergency
- How we can use this learning to inform how we 'build back better', and respond to future threats (e.g., climate change)

Members also shared updates on the work of the STEM Forum since the last networking event in 2018. The activity covered included diversifying routes in public engagement careers, place-based engagement, public engagement with climate change and developments in audience monitoring and science capital.

Opening Plenary

Public Engagement with Research in a COVID-19 world

With contributions from:

- Clare Matterson, Executive Director, Engagement at Natural History Museum
- Tom Saunders, Head of Public Engagement at UKRI

Clare Matterson, Executive Director, Engagement at Natural History Museum

Over the past nine months, lives have just been turned upside down. So many of us are living with ambiguity, and we're being challenged like never before, whether in our professional or our personal lives. Our raison d'etre as public engagement professionals is that we want to reach out, that we want people to feel empowered to feel about what their future is, and, of course, so much of that has just been upended. Take the Natural History Museum by way of one example. We closed our doors to the public for the first time since World War Two. All across our sector, we've seen organisations looking for their financial survival; the impact has been unprecedented. It seems like we're just at the start of it. We face job losses, shelved plans and frankly the emotional turmoil and loss that comes for those who worked so hard to build things up to where they were pre-pandemic. This is all set against the social inequalities that the pandemic has brought to the forefront of our minds. The stark differences in how the virus is impacting people, alongside other events this year, such as the tragic murder of George Floyd, has had a powerful impact on us all. It's affected not only our organisations, our professional lives but also our personal feelings. It has turned attention on how we can we build back better from this.

NHM, Case Study

After over a year and a half in the making, the Natural History Museum launched their new strategy, in which we declared a planetary emergency, and set out our role in tackling it. It is a strategy that is much more ambitious and bolder than any other in the Museum's history, and despite having to close within six weeks of its launch, the strategy has guided decision making, providing staff with an anchor and a bedrock during this challenging time. One such project that exemplifies this is Nature in Lockdown. This project enabled the NHM to engage people directly, and use datasets to show visually how nature, levels of air pollution, mobility had changed during the first lockdown. We then used these data visualisations to stimulate discussion about these changes and hold interactive sessions with young scientists and interested publics about what mattered to them. This was novel to us. So, in some ways, despite the challenges, the pandemic has accelerated our plans. All of our learning teams are thinking about how we pivot and change our learning programs—the same goes for our digital teams. We have reached out internationally and set up a Global Alliance for People and Planet - working with a group of science-based cultural institutions to share practice and develop joint projects. It is an exciting time to think about how we do things differently. If we hadn't had our strategy, which helped set the direction, and outlines our values of diversity and connectedness, I'm not sure we would have been in such a position to respond effectively.

UKRI, Case Study
At UKRI and we launched a new vision for our work on public engagement last year. We worked with the sector to understand what the challenges are and how we, as UKRI, can best address them. Our strategy has four focal areas, each of which has informed how we have navigated the current crisis.

The areas are:

- Engage under-represented communities and places with research and innovation
- Actively involve a wide range of people in their work
- Nurture a future generation passionate about research and innovation
- Listen to public concerns and aspirations

We thought we would be out and about around the country talking to universities and museums and researchers about our vision and how we can work with them on it. But that hasn't been the case. Throughout this year, we've, continued to support our programs. We've had lots of conversations with our partners about what that means for the program's, and often that's entailed moving things online. So, for example, the Nuffield research placements, have been redesigned giving people access to researchers and institutions using digital technologies.

Tom Saunders, Head of Public Engagement at UKRI
So, I wanted build on Clare's introduction and offer some concluding thoughts on the challenges and opportunities that can take us to the breakout spaces.

- First, what does engagement look like in a world where groups can't meet? What does it mean to be a museum, a gallery or a festival and be engaged digitally?
- Who engages digitally? How can we address issues around equity and access?
- How do we access demand and the capacity for engagement? We've seen lots of proposals for interesting engagement activities, but less evidence for activities that match people's need and appetite during the current time.

The UKRI is scoping out several different funding calls this time. Look out for the Digital Innovation and Engagement Fund which will be aiming to support museums and galleries during this unprecedented time of change and to help them to creatively explore and innovate for the audiences of the future.

Breakout groups

The National Forum for Public Engagement: Recent activity

Group1: Diversifying routes into public engagement, Clio Heslop (BSA)

Over the past two years, the National Forum for Public Engagement in STEM has been looking at equality, diversity and inclusion (EDI) in public engagement workplaces. A 2018 survey showed EDI is a high priority for many organisations, and highlighted areas where the sector is east representative of the diversity of the UK.

In the past twelve months, a working group of National Forum members chaired by the BSA have commissioned a scoping study on how other sectors have taken positive action to diversify their early career workforce, and how this could be applied to public engagement.

Background work:

- Scoping the Professionalisation of Public Engagement with STEM, finding that career paths in public engagement and showed a lack of clear entry routes into and through the sector.
- PE Staff and volunteers survey, finding that people from BAME backgrounds, people educated below undergraduate level and people with a disability are underrepresented in the workforce.
- Report into schemes designed to diversify entry routes into sector workforces identified that entry schemes could form one part of the solution to attracting talent from a diverse pool of people.

At the Networking Event, Clio Heslop presented a short progress report and invited participants to reflect and give feedback.

This session covered:

- What we have learned about different approaches to diversifying public engagement with STEM
- Why we chose to focus on early career
- The benefits of a collective approach
- Next steps and ideas for future initiatives

Following the presentation, discussions mostly centred on the existing routes into PE careers, and the current reward and incentive structure for staying in a PE role. Attendees suggested complementary pieces of work about reliance on volunteers; and how to benchmark salaries for PE roles. The discussion indicated that there is value in reviewing recruitment practices and career routes alongside efforts to improve diversity in the public engagement community.

Next steps:

A proposal has been developed for a scheme to support 10 participants with no graduate qualification who are from a minority ethnic background. Participants would not be expected to have experience in public engagement with research and would be entering the

sector entry-level. The pilot would run for 18 months, including coordination, recruitment, and placements. The proposal has been shared with potential funders.

Group2: Audience monitoring and science capital, David Owen (NCCPE) and Shaaron Leverment (ASDC)

In the past thirty years, we have seen a shift in audience insight and monitoring. Whereas thirty years ago, the main driver was 'bums on seats' today, we see more interest in understanding target groups, potential audiences and measuring learning. Nevertheless, there remain real challenges around deriving meaning from audience insights and using these to drive change in practices - does 89% satisfaction represent success, for example?

Background work:

- BP and BEIS have been leading on the development of an adult science capital index in partnership with Professor Louise Archer.
- The STEM Forum has been looking at the feasibility and utility of a national Science Capital heat map

UKRI funded an investigation into how we improve the data capabilities within the sector and Science Capitals potential contribution to this. The report found that organisations are increasingly seeking alignment in the audience measures and outcome measures they adopt. Still, challenges remain knowing what data was meaningful and most useful to collect. There was potential for proxies for a person's Science Capital such as 'feeling at home' playing a role in helping broaden audiences.

Next steps:

The report identified strong support for a long-term pilot programme to develop shared, meaningful audience measures to support greater diversity, inclusion, equity and access (including links with Science Capital), including looking at the challenges in developing these.

In addition, the STEM Forum should:

1. Work with other funders for social good to achieve greater alignment around audience measures/outcomes.
2. Within this, explore the potential of 'feeling at home' and other shared measures that explore a participant's inclusive experience.
3. Develop a common research agenda that values depth of impact and longitudinal studies.

Group3: Place-based engagement, Jane Furze (University of Warwick) and Paul Manners (NCCPE)

With place and inequality rapidly rising up the political agenda, this session will share work in progress between the National Forum and partners in Coventry and Warwickshire. The ambition is to develop a long term 'joined-up approach' to STEM and broader cultural and civic agendas, building on the 2019 BSA Science Festival in the region and Coventry's successful 2021 City of Culture bid.

Background work:

- The NCCPE delivered a review of place-based research, innovation and public engagement.
- The BSA has been proactive in scoping partnerships with organisations in Coventry. The project team have created a theory of change for the programme.
- Wellcome has supported two additional place-based partnerships.

Next steps:

Place and inequality are going to be key to building back better and are now an absolute focal point for policymakers. The UK Government is pushing hard around the levelling up agenda, and this creates exciting opportunities for science and innovation and public engagement and thinking about how we can position our work in that in that space. The impact of COVID-19 has been felt on the STEM Forum's work with Coventry around the City of Culture.

Group 4: Public engagement with climate change, Penny Fidler (ASDC)

For the first time, the UK will host the 26th UN Climate Change Conference of the Parties (COP26) at the Scottish Event Campus (SEC) in Glasgow on 1 – 12 November 2021. COP26 represents a significant opportunity to coordinate and maximise the impact of our collective work. The ASDC has received funding from the Scottish government to create a web portal for public engagement professionals to share resources and events; it will be called www.climatehub.uk

Penny Fidler (ASDC) led a discussion around COP26 and how we can better coordinate our activities in the run-up to the event. She proposed four focal points:

1. Sharing resources and better coordinating activity in the run-up to ad follow o from Cop26.
2. Our collective environmental footprint.
3. Working with schools and supporting teachers.
4. Exploring broader partnerships.

Next steps:

Participants at the session shared what they were planning in the run-up to CoP26. These activities included a wide range of activity pre, during and post CoP. Such as:

- Hosting the green zone
- Highlighting the UK's role in Climate Science
- Inspiring action
- Training and development in effective engagement both in the UK and abroad
- Convening experts
- National programmes
- Youth events

ASDC will continue to coordinate the Climate Hub and seek additional funding to run other networking events.

Group 5: SHAPE, Naomi Joyner and Hannah Sierp (British Academy)
SHAPE is a new collective name for the social sciences, humanities and the arts. It stands for Social Sciences, Humanities and The Arts for People and the Economy. It was launched earlier this year to the academic community. As the initiative develops, the British Academy wants to hear from public engagement experts about how STEM and SHAPE subjects can work together to improve public understanding. By October 2020, 270 people have come forward to take part, and 1000s have been engaging with the campaign on social media.

This session explored the perceptions of SHAPE and STEM, the benefits and limitations of acronyms and the importance of having powerful and inclusive messaging behind them. You can find out more about the campaign via the website: https://thisisshape.org.uk

Next steps:
The British Academy will continue to build a coalition of organisations and individuals with an interest in speaking up for SHAPE. They will be working to deliver several moments throughout 2021 where there is the potential to have an impact on target audiences: the academic and Higher Education community, parliamentary and decision-makers, business and the general public - particularly prospective students and their influencers

Closing remarks

How science and research can contribute to the 'levelling up' agenda

With contributions from:

- Richard Jones, Chair in Materials Physics and Innovation Policy at University of Manchester

Richard Jones, Chair in Materials Physics and Innovation Policy at University of Manchester

Thank you. So, it's, it's a pleasure to be here. It's a very daunting task to be given the job of summing up and setting out a vision for the future of public engagement. I guess I want to start by acknowledging the obvious. It's a very tough environment for many of us working in science, but that public engagement with research is more critical than ever. Scientists need to understand better the range of challenges and opportunities across the entire country and the lives being led by a diverse range of people. We need to deepen the interaction between science and society, to inspire people about science and to engage them, and building mutual trust between those doing research and those affected by it. Many of the debates around the civic purpose of Universities have moved a long way. In the past, global institutions seemed by some accident to be based in a particular city. Today we see a new view, one where universities are anchors of their local communities. In many ways, this is just a return to their founding principles. Universities, such as those in Sheffield and Manchester, emerged from that great wave of civic pride in the late 19th century. At this time there was a sense that, that industrial cities needed a university, both for practical reasons, but also for more learned reasons, such as having a place of learning in the cities.

I'm going to talk about three significant trends in science policy, that I think will have a substantial bearing on our work in public engagement.

1. Regional inequality

The UK is a very divided country. Parts of the UK are incredibly productive, other regions less so. These imbalances affect economic performance, economic productivity, living standards and spending on research and development (R&D). It's a fact that around half of public expenditure on R&D takes place in London and two small sub-regions that happen to contain the cities of Oxford and Cambridge. We have to ask ourselves, how inclusive can Science and Innovation be when there is this huge regional disparity in spending? What are the chanced of meeting someone who works in R&D in West London compared to elsewhere in the UK? In West London, for example, 5.4% of all employment is in research. So, you know, research is absolutely part of everyday life. In the in East Anglia in Buckinghamshire and Oxfordshire, the two regions that contain Oxford and Cambridge, that figures is around 2%, and it falls even further by the time we get to the big industrial cities. But there are parts of the country where there are virtually no researchers at all: Southern Scotland, Cornwall, Lincolnshire and Shropshire. These are places where; research is just not part of everyday life. So, the question that emerges here is how we can convince people in these places that science has any relevance to their lives if so, few people are involved in it?

2. Inequality and health

We've learned a hard lesson through this pandemic. The UK has world-class Life Sciences capabilities. We will undoubtedly contribute to the development of a vaccine, and this would be a massive achievement for the world. However, the tragic reality is that the UK is doing poorly in terms of health outcomes and deaths in people with the lingering effects of COVID, but also in the economic impacts. So, I think a question is, why didn't our world-class Sciences sector protect us? We have this paradox, not only is the research concentrated in the parts of the country that are the most prosperous, but they are also the healthiest parts. If we look at health care inequalities across the country, and indeed, within cities, we have considerable differences in life expectancy that go along those economic inequalities. I think we recognise that the UK life sciences sector is genuinely world-leading, we've seen important developments in the treatment of COVID that have come from this country, but there are other vital areas such as public health and diagnostic care that have been savagely exposed. One could argue that the benefits of our R&D efforts are exported for world markets and aside from that, the benefits to the wider population are secondary. There is a huge role for public engagement in reshaping the research that that supports health care, the way that health care is done. What should our priorities be for health care research? What should we focus on? What are the health problems that worried people, most of all that worried communities? And here again, we do come back to levelling up.

3. Climate change and net-zero

Climate change is the challenge of this generation. It's excellent to see that the UK government signed up to the net-zero target and that there's a broad political consensus around it. But we need to go further. The implications of net zero are not widely understood, not just amongst the wider public, perhaps also amongst policymakers. To get to this target, will require a mix of new technologies, and changes in the way we behave and in how society is organised. We're going to have to decarbonise transport, domestic heating, the electricity sector. If you look at where I live, there are different difficult issues about land use in upland farmer farming areas. Here we have people who've been livestock farming for generations. Should those upland pastures be turned back into woodland? Rewilding is an enormously politically charged word, and visitors themselves have expectations about the landscape. So, these are broad questions, often very much broader than questions about STEM. So how do we, as a society, come together to deal with all these issues? How do we set these priorities?

The pandemic is causing all kinds of social and economic disruption, that impact us as a public engagement community in the way that other communities are affected. And I know many of you will be personally affected by this in very direct ways. But in all these areas, we need more research and engagement. And I think the direction of our research is to be steered even more by the engagement of the public. So, the work that the public engagement community is doing, it's never been more vital, even though the times are difficult. Thanks very much.