Engaging through disaster

Reaching new audiences with SMASHfestUK

The multi-award-winning SMASHfestUK is a STEM/Arts festival founded in 2015 with the specific remit of widening participation and increasing diversity in STEM and the Arts. The project engages visitors with STEM through entertainment, comedy, music, interactive workshops, performances, games and experiments.

Each year, SMASHfestUK focuses on a different storyline based on a hyper-realistic natural disaster, exploring how to understand the phenomena, survive the event and rebuild society afterwards. The storyline helps illuminate the STEM foundation of all that we take for granted in everyday life, and the power of STEM to confront and resolve challenges through creativity.

STFC has supported SMASHfestUK with a series of awards, enabling some of the programme's most complex and ambitious large-scale physical installations, such as the DIY planetarium and the world's largest working liquid nitrogen volcano. STFC has also supported SMASHfestUK to develop innovative training programmes as a core objective of the project: SMASHfestUK's 'Young Innovator' programme arose from the team's discussions with teenage audiences, which concluded that the best way to engage that age group was through active participation in the development and delivery of the festival, with mentoring from participating engineers, artists and scientists, rather than simply relying on their attendance as an audience member.

SMASHfestUK is a multi-layered entity. Its outer layer – the public face – is a rambunctious community entertainment festival, full of activities, music, theatre,

> " This team took a concept that lots of people talk about and turned it on its head. They challenged the concepts of 'hard to reach', and worked with young people to create a festival everyone wanted to be part of.

Engage Award Judges 2016

STFC Public Engagement
stfcpublicengagement@stfc.ac.uk

Science & Technology Facilities Council

comedy and games. This layer, however, is the mechanism for the serious mission of increasing equality and diversity in STEM and the Arts education and careers, increasing intergenerational sharing and learning to build science capital in society, and better engagement with the public by researchers and industry.

In 2016, SMASHfestUK reached a direct audience of 4000 young people and families, and in 2017 it has reached over 13000 from across the UK. The project's 'hyperlocal' approach allows it to access communities in postcodes with multiple indicators of poverty, with demographics which show that they are underserved and underrepresented in STEM study and careers.

KEY LEARNING POINTS

■ Make your events in the community, for the community: based in an area of need, in visible and accessible spaces. Content is co-created with various community stakeholders, and delivery is by local community groups, performers, researchers and local young people as facilitators. Dialogic interaction between researchers and community is vital.

■ Strong storylines drive engagement: evaluations tell us that exciting headlines to get people through the door, then the storyline can pose questions that help visitors build science capital by exploring questions about the world they take for granted, and how science and engineering underpin everything.

■ Lead off with entertainment to break down barriers: branding your events as a 'science' or 'engineering festival' may very well drive an audience away. Encourage people to engage by entertaining them, then involve them in rich experiences that exemplify the relevance of your subject once you've got the audience's attention.

Project leaders Lindsay Keith and Wyn Griffiths reflected, "When we first began our SMASHfestUK journey, it was because so many sources talked about 'hard to reach' audiences not engaging with STEM. Through our work, we now have an attendance that's representative of BME young people in the event area, and up to 62% female, with most visitors from demographics in which 60%+ people live in poverty. No other STEM festival has approached these figures in terms of diversity – ethnic, gender or socio-economic. This reach, and participation from communities, academia, industry and schools makes our approach uniquely inclusive and effective."

Science & Technology Facilities Council