



Network for Information and Digital Access

The impact of Science Literacy delivery methods - what works?

Bibliography

Festivals | Group 1. Events, meetings, performances

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Introduction

This thematic bibliography is the result of research to survey existing literature available on Science Literacy delivery methods.

The search was carried out by retrieving documents and articles from a wide range of sources, including research databases, Google Scholar, ResearchGate, subject databases, open access repositories etc. using keyword combinations.

The results of the resource discovery are divided into two groups: one containing impact assessments using qualitative, quantitative or mixed method (both qualitative and quantitative) approaches to data collection and a second including descriptive resources, which encompass, for example, reviews, guides, handbooks, reports and project reports.

This bibliography is work in progress and is not designed to be fully exhaustive or complete. We will be pleased to receive suggestions and recommendations for additions that can contribute to the understanding of science, its applications and, to the promotion of science literacy.

Groups and methods list

During the first part of the Desk Research phase of this project (i.e. Task 1), the team identified 42 single-mechanism approaches, 2 composite approaches and 1 related approach that were relevant to the delivery and dissemination of scientific information. The list of single mechanisms was further organised into 7 thematic groups, as presented in the following Table.

Single mechanism approach	Group
Exhibitions, Expo, Festivals, Movies, Picnics, Science fairs, Seminars, Talks, TED Talks, Theatre, Workshops	1. Events, meetings, performances
Colloquia, Courses, Curricula, E-learning, Webinars	2. Education and training – including online
Animations, Books, Brochures, Cartoons, Comics, Games, Graphics, Posters, Publications, Radio, Reports, TV, Videos	3. Traditional publishing and journalism – print and broadcast
Competitions, Experiments, Makerspaces, Mobile classrooms, Mobile laboratories	4. Activities and services
Blogs, E-books, E-zines, Mobile Apps, Podcasts, Social media, Websites, Wikis	5. Online interactions
Composite approaches	
Multiliteracies	
Multimodalities	
Related approach	
Citizen Science	

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Impact Assessment

- Fogg-Rogers, L., and UK Science Festival Network. "UK Science Festival Network Pilot Evaluation 2017." Project Report. Bristol, UK: Science Communication Unit, 2017. <http://eprints.uwe.ac.uk/33602>.
- Fogg-Rogers, Laura, Jacquie L. Bay, Hannah Burgess, and Suzanne C. Purdy. "'Knowledge Is Power': A Mixed-Methods Study Exploring Adult Audience Preferences for Engagement and Learning Formats Over 3 Years of a Health Science Festival." *Science Communication* 37, no. 4 (2015): 419–51. <https://doi.org/10.1177/1075547015585006>.
- Herbolzheimer, Maya, and Helen Featherstone. "Popularising Nature: An Evaluation of the Effectiveness of the 2009 Bristol Festival of Nature in Engaging with a Wide Range of Attendees in Nature Conservation." *UWE Science Communication Postgraduate Papers 2* (2014): 63–74. <http://eprints.uwe.ac.uk/22753/>.
- Jensen, Eric, and Nicola Buckley. "Why People Attend Science Festivals: Interests, Motivations and Self-Reported Benefits of Public Engagement with Research." *Public Understanding of Science* 23, no. 5 (2014): 557–73. <https://doi.org/10.1177/0963662512458624>.
- Keçeci, Gonca. "The Aims and Learning Attainments of Secondary and High School Students Attending Science Festivals: A Case Study." *Educational Research and Reviews* 12, no. 23 (December 10, 2017): 1146–53. <https://doi.org/10.5897/ERR2017.3378>.
- Quagliata, Andrew. "University Festival Promotes STEM Education." *Journal of STEM Education* 16, no. 3 (September 15, 2015). <https://www.learntechlib.org/p/151967/>.
- Roche, Joseph, Jessica Stanley, and Nicola Davis. "Engagement with Physics across Diverse Festival Audiences." *Physics Education* 51, no. 4 (2016): 045007. <https://doi.org/10.1088/0031-9120/51/4/045007>.
- Rose, Kathleen M., Kaine Korzekwa, Dominique Brossard, Dietram A. Scheufele, and Laura Heisler. "Engaging the Public at a Science Festival: Findings from a Panel on Human Gene Editing." *Science Communication* 39, no. 2 (2017): 250–77. <https://doi.org/10.1177/1075547017697981>.
- Sardo, Ana Margarida, and Ann Grand. "Science in Culture: Audiences' Perspective on Engaging with Science at a Summer Festival." *Science Communication* 38, no. 2 (2016): 251–60. <https://doi.org/10.1177/1075547016632537>.
- Sardo, M. "Evaluation of the Bristol Bright Night 2015 (BBN15)." Project Report. Bristol, UK: University of the West of England, 2016. <http://eprints.uwe.ac.uk/28806>.
- Sardo, M., A. Grand, M. Sardo, and A. Grand. "Evaluation of the Wellcome Trust Strand at the Latitude Festival 2015." Report or Working Paper, September 30, 2015. <http://eprints.uwe.ac.uk/27685/>.
- Venugopal, Sarah, and Helen Featherstone. "Einstein's Garden: An Exploration of Visitors' Cultural Associations of a Science Event at an Arts Festival." *UWE Science Communication Postgraduate Papers 2* (2014): 75–83. <http://eprints.uwe.ac.uk/22753/>.

Descriptive Resources

- Audience London. "Researching Audiences at Outdoor Events and Festivals." Audiences London, 2011. http://culturehive.co.uk/wp-content/uploads/2013/06/BL_Researching-audiences-at-outdoor-events-and-festivals.pdf.
- Bochynek, B. "The Role and Impact of Adult Learners Weeks and Lifelong Learning Festivals in Europe. An Assessment of European Learning Festivals as Tools for the Democratization of Lifelong Learning." UNESCO Institute for Education (UIE), 2002. <http://ec.europa.eu/programmes/proxy/alfresco-webscripts/api/node/content/workspace/SpacesStore/970a4f11-28ad-4fc1-8546-934f7f1aa8c9/109775-Publication-EN.pdf>.
- Buckley, N., J. McPhee, and E. Jensen. "University Engagement in Festivals: Top Tips and Case Studies." Bristol: National Co-ordinating Centre for Public Engagement., 2011. https://www.publicengagement.ac.uk/sites/default/files/Festivals%20Top%20Tips%20and%20Case%20Studies_0.pdf.
- Bultitude, Karen, Dominic McDonald, and Savita Custead. "The Rise and Rise of Science Festivals: An International Review of Organised Events to Celebrate Science." *International Journal of Science Education, Part B* 1, no. 2 (2011): 165–88. <https://doi.org/10.1080/21548455.2011.588851>.
- Grand, Ann, and Ana Margarida Sardo. "What Works in the Field? Evaluating Informal Science Events." *Frontiers in Communication* 2 (2017). <https://doi.org/10.3389/fcomm.2017.00022>.
- Jensen, E., and N. Buckley. "The Role of University Student Volunteers in Festival-Based Public Engagement." Bristol: National Co-ordinating Centre for Public Engagement., 2011. https://www.publicengagement.ac.uk/sites/default/files/Student%20Volunteers%20in%20Festivals_0_0.pdf.
- Jensen, Eric. "Festival-Based Public Engagement." PowerPoint, University of Warwick, n.d. https://warwick.ac.uk/fac/soc/sociology/staff/jensen/ericjensen/festival-based_public_engagement_e_jensen_nui_galway_small_file_size.pdf.
- Riise, Jan, and Leordardo Alfonsi. "From Liquid Nitrogen to Public Engagement and City Planning: The Changing Role of Science Events." *JCOM:Journal of Science Communication* 13, no. 4 (2014). https://jcom.sissa.it/archive/13/04/JCOM_1304_2014_C01/JCOM_1304_2014_C03.
- Robinson, Matthew T., Nattapat Jatupornpimol, Sandy Sachaphimukh, Maria Lönnkvist, Andrea Ruecker, and Phaik Yeong Cheah. "The First Pint of Science Festival in Asia." *Science Communication* 39, no. 6 (2017): 810–20. <https://doi.org/10.1177/1075547017739907>.
- Roten, Fabienne Crettaz von, and Olivier Moeschler. "Is Art a 'Good' Mediator in a Science Festival?" *JCOM:Journal of Science Communication* 6, no. 3 (2007). <https://jcom.sissa.it/archive/06/03/Jcom0603%282007%29A02>.
- Schmidt, Markus, Angela Meyer, and Amelie Cserer. "The Bio:Fiction Film Festival: Sensing How a Debate about Synthetic Biology Might Evolve." *Public Understanding of Science* 24, no. 5 (2015): 619–35. <https://doi.org/10.1177/0963662513503772>.
- Wiehe, Ben. "When Science Makes Us Who We Are: Known and Speculative Impacts of Science Festivals." *JCOM:Journal of Science Communication* 13, no. 4 (2014). https://jcom.sissa.it/archive/13/04/JCOM_1304_2014_C01/JCOM_1304_2014_C02