

FALLING
WALLS
ENGAGE

WORKSHOP
SUMMARY

**EFFECTIVE
ECOSYSTEMS
FOR
SCIENCE
COMMUNICATION**

Networks

On 8 November 2023, the German Federal Ministry of Education and Research and Falling Walls Engage co-hosted an interactive workshop on 'Effective Ecosystems for Science Communication' with selected guests attending the Falling Walls Science Summit in Berlin. During the workshop, participants exchanged experiences and discussed international best practices for vibrant and effective ecosystems for science communication and engagement to inspire each other. The following report summarises the presentations and group discussions.

Thank you to all participants of the workshop for sharing their thoughts and perspectives.

List of workshop participants:

- Brett Hooten, Concordia University, Canada
- Maria Hagardt, Vetenskap & Allmänhet, Sweden
- Oscar Contreras-Villaruel, Fundación Ciencia Joven, Argentina
- Silvia Mwendia, Mawazo Institute, Kenya
- Theo Anagnostopolous, SciCo, Greece
- Alina Loth, Berlin School of Public Engagement and Open Science, Germany
- Cordula Kleidt, Federal Ministry of Education and Research, Germany
- Johanna Seifert, Federal Ministry of Education and Research, Germany
- Harald Franzen, Federal Ministry of Education and Research, Germany
- Barbara Olfe-Kräutlein, DLR Projektträger, Germany
- Anja Schoch, Falling Walls Foundation, Germany
- Niklas Marzinek, Falling Walls Foundation, Germany
- Abraham Mamela, Alliance for African Partnership, Botswana
- Anna Berti-Suman, SensJus, Italy
- Anna Voelker, SciAccess, Inc., United States
- Anneke Siedke, Stifterverband, Germany
- Beverley Damonse, University of Witwatersrand, South Africa
- Charles Philipp, MICRO, United States
- Christina Camier, Research Institute for Sustainability, Germany
- Cissi Billgren Askwall, Swedish Research Council, Sweden
- Darryl Williams, The Franklin Institute, USA
- Dorte Riemenschneider, European Citizen Science Association, Germany
- Elodie Chabrol, Pint of Science, France/UK
- Faye Watson, ScotPEN, Scotland
- Franziska Sörgel, Karlsruher Institut für Technologie, Germany
- Haidee Bell, Wellcome Trust, UK
- Harald Wilkoszewski, Wissenschaftszentrum Berlin für Sozialforschung, Germany
- Hepeng Jia, Soochow University, China
- Henry Alt-Haaker, Robert Bosch Stiftung, Germany
- Ilka Bickmann, science2public, Germany
- Irem Couchouron, Silbersalz, Germany
- Isayvani Naicker, Centre for Science and Policy, Netherlands
- Josef Zens, Helmholtz-Zentrum Potsdam, Germany
- Julián Amorín, Ciencia Sin Fronteras, Guatemala
- Kelechi Ezeudensi, Ganop Community Outreach Foundation, Nigeria/UK
- Kelly Achenbach, Max Weber Stiftung, France
- Lilian Fischer, Wissenschaft im Dialog, Germany
- Mario A. De Leo Winkler, Universidad Autónoma Metropolitana, Mexico
- Marita Müller, Brandenburgische Technische Universität Cottbus-Senftenberg, Germany
- Marte Sybil Kessler, Stifterverband, Germany
- Melanie Smallman, University College London, UK
- Mhairi Stewart, Berlin School of Public Engagement and Open Science, Germany
- Mikael Jonsson, Swedish Research Council, Sweden
- Patrick Runte, Forschungszentrum Jülich GmbH, Germany
- Ricarda Ziegler, Nationales Institut für Wissenschaftskommunikation, Germany
- Sharon Unsworth, Radboud University, Nijmegen, Netherlands
- Sonja Hammann, Museum für Naturkunde, Germany
- Stephanie Okeyo, Under the Microscope, Kenya
- Susanne Hecker, Museum für Naturkunde, Germany
- Thabiso Mashaba, These Hands GSSE, Botswana/New Zealand
- Wiebke Rössig, Germany
- Zeinab Khalil, Soils for Science, Australia



PART 1

Science Engagement: An attempt at a definition

At Falling Walls Engage, we define Science Engagement as activities, events, or interactions bridging the gap between science and society to generate mutual learning and mutual benefits across the spectrum of public engagement in science and science communication. Engagement is by definition a two-way process with the goal of shaping and co-create scientific processes together, to promote active involvement of the public and researchers in scientific knowledge production. (*source: <https://falling-walls.com/engage/about>*)

1. Sharing international perspectives on Science Engagement ecosystems from Falling Walls Engage Hub Managers in Argentina, Sweden, and Canada

Presentation 1: Argentina (*presented by Oscar Contreras-Villarroel, Fundación Ciencia Joven*)

In South America, best practices in Science Engagement include national support in particular countries, integrating funding into research budgets for science centres and universities, professionalising the field, and establishing regional and national networks for institutional and independent science communicators. These practices enhance engagement and collaboration within the scientific community.

However, challenges persist, such as language barriers for accessing international networks, a scarcity of resources in Spanish and Portuguese, low national investment in science and research, the absence of national strategies for Science Engagement, and the need for increased coordination among countries to formulate a unified strategy for the Latin American region.

Overcoming these challenges requires a comprehensive approach that addresses linguistic, financial, and strategic gaps to foster effective Science Engagement across South America and beyond.

Presentation 2: Sweden *(presented by Maria Hagardt, Vetenskap & Allmänhet VA)*

Navigating Science Engagement in the Nordic-Baltic countries presents unique challenges due to the vast region, small populations, dependence on specific individuals, varying ecosystems and funding schemes, limited dedicated funding, and a lack of national strategies, policies, and university courses in Science Engagement and science communication.

Despite these challenges, notable projects highlight effective Science Engagement practices. Examples include European Researchers' Night, Borrow a Researcher in Sweden, Researchers' Grand Prix in Sweden, Norway, and Estonia, and National Science Communication Recommendations in Finland. Upcoming opportunities in the region are the annual Nordic-Baltic SciComm Forum, a new research and innovation bill in Sweden, the National Open Science Recommendations in Sweden and Norway, the ethics code for science communication in Finland, a platform on science communication in Sweden, a national science diplomacy strategy in Estonia, and a memorandum of understanding on science collaboration in the Faroe Islands, Iceland, and Greenland.

Presentation 3: Canada *(presented by Brett Hooton, Concordia University)*

Effectively communicating science in Canada poses unique challenges, given its expansive geography, relatively small population, and a complex history marked by a linguistic divide, colonialist harm to indigenous communities, and the interplay between federal and provincial jurisdictions. Additionally, there is a notable undervaluing of communication and knowledge transfer as integral components of the scientific process.

Despite these challenges, opportunities exist to create an effective ecosystem. These include identifying hidden funding sources, establishing forums for an exchange of ideas, providing resources for partnership building, connecting scientists and communicators, and fostering international networks with a specific focus on equity, equality, diversity, and inclusion.

To turn these opportunities into best practices, the Falling Walls Engage Hub Canada plans to transition to a non-profit organization, build a comprehensive database of Science Engagement projects in Canada, conduct online funding workshops, and facilitate Science Engagement and communication training and capacity-building sessions for major research projects in the country.



PART 2

2. Presentations of working groups

Group 1: Stakeholders *(hosted by Brett Hooton, Concordia University)*

Questions: *Which actors are involved in effective science communication in your country? What roles do they play? What are some of the new or unexpected places you see science communication happening in your region?*

The participants in the 'Stakeholders' group agreed that the major stakeholders and producers of science communication were largely the same, regardless of geography or cultural differences. Those include Festivals, museums, science centres, NGOs, funding partners, community centres and churches (= places people trust), news editors, journalists and media, science journalism, businesses, and schools as well as organizations targeting underserved communities such as people in rural areas or from refugee camps. The idea of "trust" as the foundation of strong and compelling science communication was a central theme of the group's discussions. It was an idea that helped the group identify some unexpected stakeholders, such as businesses, internet influencers, and community or religious organisations. The group noted the complicated societal dynamics that surround science communication right now. Many traditional media outlets (e.g. newspapers, nightly newscasts) are disappearing. At the same time, social media and other informal voices are replacing these formerly trusted sources. As a result, professional science communication is growing increasingly important at a time when it has less and less influence. There is a need to expand our thinking beyond "Science Communication," which tends to be the one-way sharing of information, to "Science Engagement" which is based on a two-way, mutually beneficial exchange between the people who make knowledge and those who use it.



Group 2: Synergies (*hosted by Silvia Mwendia, Mawazo Institute*)

Question: *Which synergies exist in your science communication ecosystem? Which ones are (still) needed? How can we connect ecosystems?*

Discussing synergies, the group highlighted distinct challenges in each of the participants' countries. In China, the absence of non-profit organisations dedicated to science communication, limited financial resources in research institutions, and the lack of integration of non-profits into the national science communication organisation pose hurdles. In Germany, participants noted the lack of a strategic science communication organisation, issues of project sustainability, and the loss of expertise due to loss of funding. France faces the challenge of 'siloed' or separate activities rather than one cohesive national strategy, and a dependency on institutions. Botswana's struggle lies in the absence of synergies, with scientists primarily interacting among themselves and disseminating information only at a high level. Myanmar grapples with scientists not engaging with the public, employing a top-down approach, and a lack of professionalisation in science communication.

Then, what is needed? The group agreed that researchers need to work with science communicators and talk to each other. They do not have to be science communicators themselves, but science needs to be applied. For example, they could use independent science communicators to do the work. The communicators understand both complexities and communities and can pack information into accessible packages for both sides, scientists and communities.



Group 3: Networks (hosted by Maria Hagar dt, Vetenskap & Allmänhet VA)

Question: How can national and/or international networks make science communication / your work / for your organisation more impactful? How can we connect research and practice?

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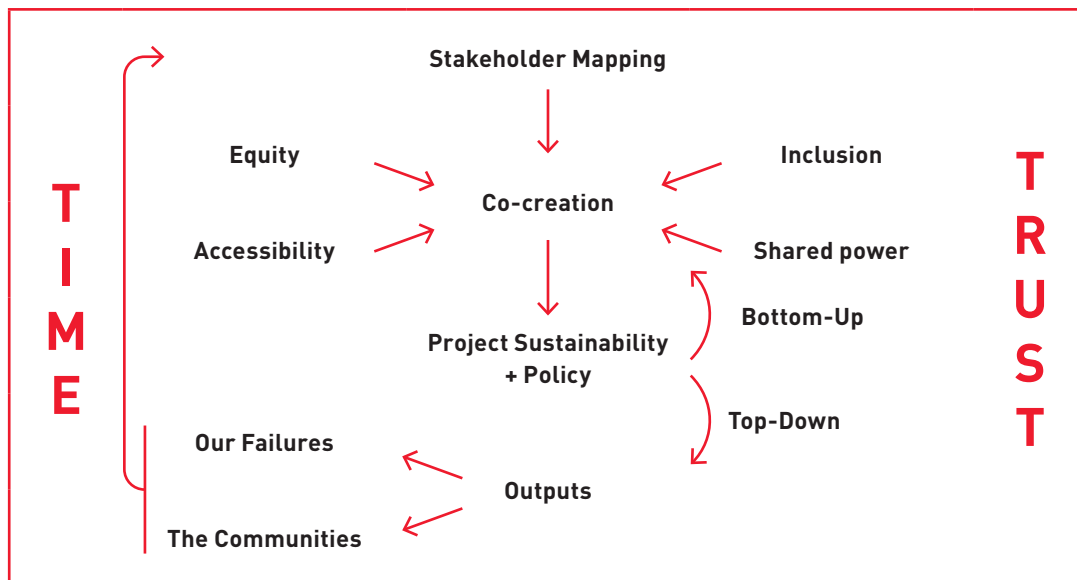
The participants of the 'Networks' group emphasized the importance of aligning networks with science communication ecosystems to maximise relevance and impact. They underscored the need to view communities as integral components of these networks while cautioning against the pitfalls of fostering homogeneity in thinking, practices, and standards. Such balance between homogeneity and individuality poses questions about the necessity of standards or guidelines and how policies might inadvertently contribute to homogeneity. The participants also questioned the mandate of networks and explored the critical aspect of their sustainability, pondering how networks can create new opportunities and what defines their long-term viability. Recognising the inherent diversity of cultures and communities, participants highlighted the necessity for Science Engagement to adapt to place-specific cultures and communities, emphasising that full homogeneity is neither feasible nor desirable.



Group 4: Best Practices (hosted by Theo Anagnostopolous, SciCo)

Question: What are the best practices, tools and methods for the successful implementation of science communication projects or initiatives?

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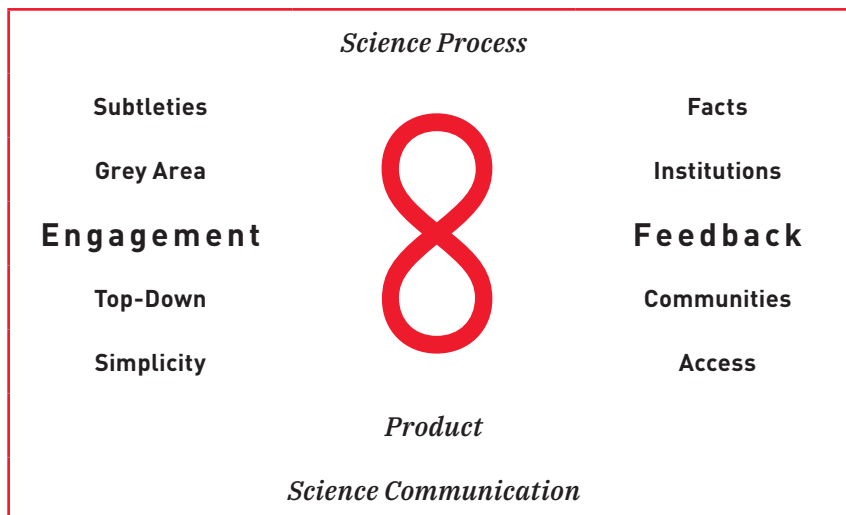
The participants of the 'Best Practices' group emphasised the significance of stakeholder mapping as the initial step, involving the process of identifying those receiving information and understanding their sources. They agreed that trust, time, and financial resources are crucial factors for success. Co-creation on an equal footing, addressing power dynamics, inclusion, and accessibility emerged as the key approaches. They also acknowledged that with trust comes the ability to share failures. This openness contributes to a continuous feedback loop, with shared experiences influencing subsequent stakeholder mapping exercises in the future.



Group 5: Challenges (hosted by Oscar Contreras-Villarroel, Fundación Ciencia Joven)

Question: What and where are the challenges to effective science communication in your country and internationally?

Science Communication
POSTER



The group developed the visualisation above showing how the scientific process is a starting point and science communication is a product with Science Engagement potentially serving as a way to incorporate feedback and avoid simple top-down communication. How do you turn this process into a feedback loop? The participants of the 'Challenges' group agreed that funding structures do not sustainably support the Science Engagement and communication practitioners. In addition, research on how scientists and communicators can work in the field and better practices is needed.



PART 3

Outlook

The collaborative workshop on 'Effective Ecosystems for Science Communication' has been one step of a steady path towards more participatory and inclusive Science Engagement in Germany and beyond. As we move forward, the rich outcomes of the workshop will be further distilled, presented and used while continuously inviting feedback from past and future participants. One occasion will be an upcoming online meeting hosted by Falling Walls Engage where we delve into the results, fostering an ongoing exchange of ideas and (international) perspectives. The next milestone of this endeavor will be the presentation of the above results at the #FactoryWisskomm mid-term conference on 18 March 2024 in Berlin.

If you would like to be further involved, please reach out to the Falling Walls Engage team at engage@falling-walls.com.

IMPRINT

Falling Walls Foundation gGmbH

Kochstraße 6-7
Berlin 10969, Germany

<https://falling-walls.com/>

PLEASE CONTACT US

Anja Schoch

Head of Falling Walls Engage
anja.schoch@falling-walls.com
+49 30 60 988 39-75

Niklas Marzinek

Project Manager Falling Walls Engage
niklas.marzinek@falling-walls.com
49 30 60 988 39-758

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