Institutionalization of Science Engagement

Ana Faustino

Fostering Action on Science Engagement Challenges Webinar

03.11.21

Scientists and Science Engagement

- Scientists participate in Science Engagement initiatives and more than half want to spend more time doing it.
- However, in general, most Science Engagement initiatives are conducted by only a small number of scientists, many of whom consider Science Engagement to be a moral and scientific imperative.

Poliakoff, E., & Webb, T. L. (2007); Watermeyer, R., & Lewis, J. (2017)

Scientists and Science Engagement

In fact, a study conducted in the United Kingdom shows that scientists:

- Consider science to be at the core of many great world challenges.
- Think Science Engagement may change the public's perception of scientists.
- Think Science Engagement can make the public more supportive of scientific research.
- Think Science Engagement activities can be enjoyable for those involved and may enrich people's lives.

Poliakoff, E., & Webb, T. L. (2007)

Scientists and Science Engagement

So...it is clear that:

- Scientists see the relevance of doing Science Engagement, but only a selected group of them are involved in Science Engagement.
- This seems to be happening because scientists see Science Engagement as an enjoyable moral obligation as a researcher, but that is not an intrinsic part of their career as a scientist.

<u>But why is this the case?</u>

Poliakoff, E., & Webb, T. L. (2007)

Low Institutionalization of Science Engagement

For several reasons:

- Anti-engagement atmosphere within scientific institutions:
  - Lack of encouragement on the institutional level – no incentives (e.g. money, awards) are given as reward, by the scientific institutions, in return for the Science Engagement initiatives developed by scientists.
  - Negative impression – those that do Science Engagement are considered sub-par scientists.

Ecklund, E. H., James S. A., Lincoln A. E. (2012)

Low Institutionalization of Science Engagement

- Lack of time – scientists dedicate all their time to research-related tasks (e.g. experiments, data analysis, writing manuscripts and grants), leaving no time for other occupations like Science Engagement initiatives.

Ecklund, E. H., James S. A., Lincoln A. E. (2012)

Low Institutionalization of Science Engagement

- Lack of money:
  - Funding schemes that fund research do not have strong Science Engagement criteria.
  - Funding schemes that fund Science Engagement are scarce.
- Losing money – time dedicated to doing Science Engagement is time not dedicated to research.

Ecklund, E. H., James S. A., Lincoln A. E. (2012)

Low Institutionalization of Science Engagement

- Lack of Science Engagement skills – some scientists think they do not have the necessary skills for doing Science Engagement.
- Lack of knowledge regarding available Science Engagement opportunities, which forces scientists to spend a considerable amount of time creating their own initiatives or locating available ones.

Ecklund, E. H., James S. A., Lincoln A. E. (2012)

Low Institutionalization of Science Engagement

- Science Engagement is not viewed as an intrinsic part of a scientist's career.
- Almost nonexistent assessment of the career development in Science Engagement – there are few programs that evaluate the Science Engagement efforts of scientists (e.g. no awards, no metric system for evaluation).

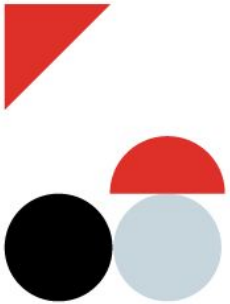
Ecklund, E. H., James S. A., Lincoln A. E. (2012)

Low Institutionalization of Science Engagement

- Conclusion:
  - Despite the growth and development of the past decades, the Science Engagement field is still dealing with an obvious challenge: **its low institutionalization.**

Low Institutionalization of Science Engagement

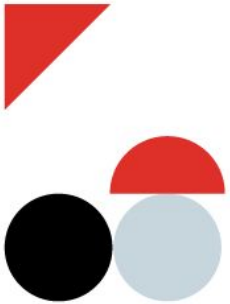
In order for more scientists to be involved in Science Engagement initiatives, **several institutional changes and measures need to be considered**, in order to embed Science Engagement in the daily life of scientists, scientific institutes and universities, in **an incentivised and sustainable manner**.



How to tackle the challenge?

In order to **scale up the dialogue** regarding the challenge of the low institutionalization of Science Engagement, and to **have an international discussion about potential actions** on how to solve it, two approaches were taken:

- Workshop.
- Literature consultation.



Workshop - Aim

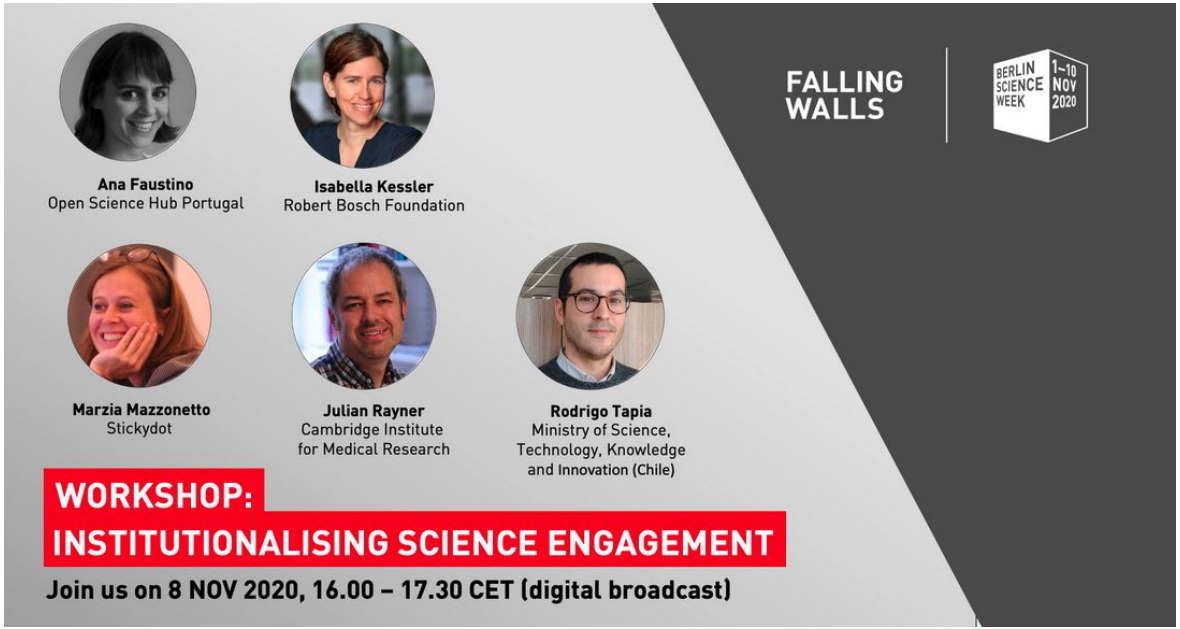
Discussing the topic of the institutionalization of Science Engagement, focusing on:

- The relevance of Science Engagement.
- The causes behind the low institutionalization of the field.
- Potential actions on how to solve the challenge.

Workshop - Approach

- Integrated in the Berlin Science Week 2020.
- 61 international participants, including four relevant speakers for the institutionalization of Science Engagement topic:

Workshop - Approach

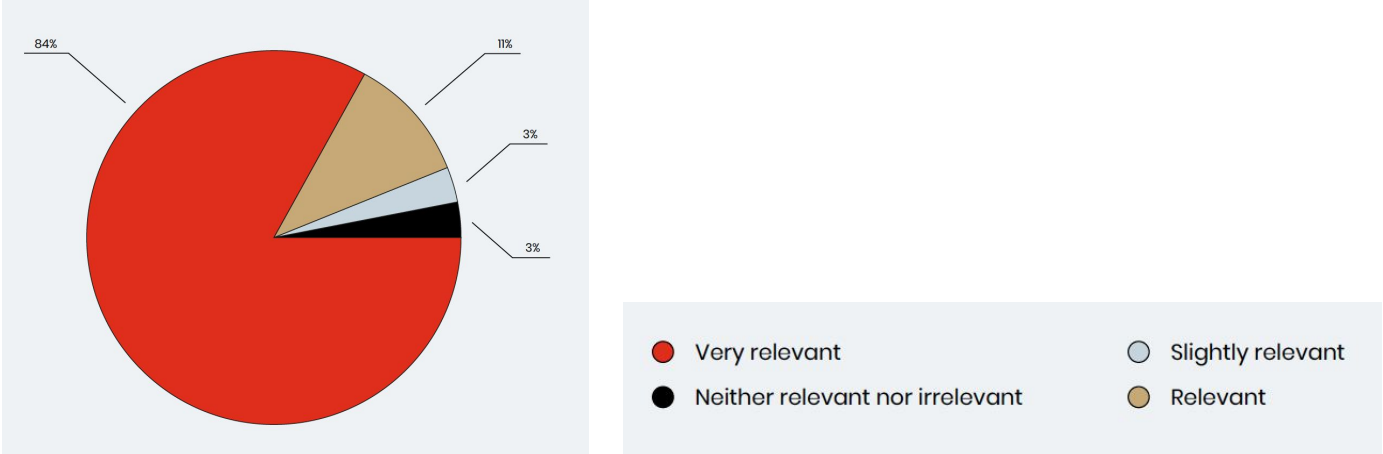


Workshop - Approach

- **During the workshop:**
  - Speakers presented their views on reasons behind the low institutionalization of the field and potential solutions to solve the challenge.
  - Workshop participants also discussed potential solutions to solve the challenge in breakout rooms.

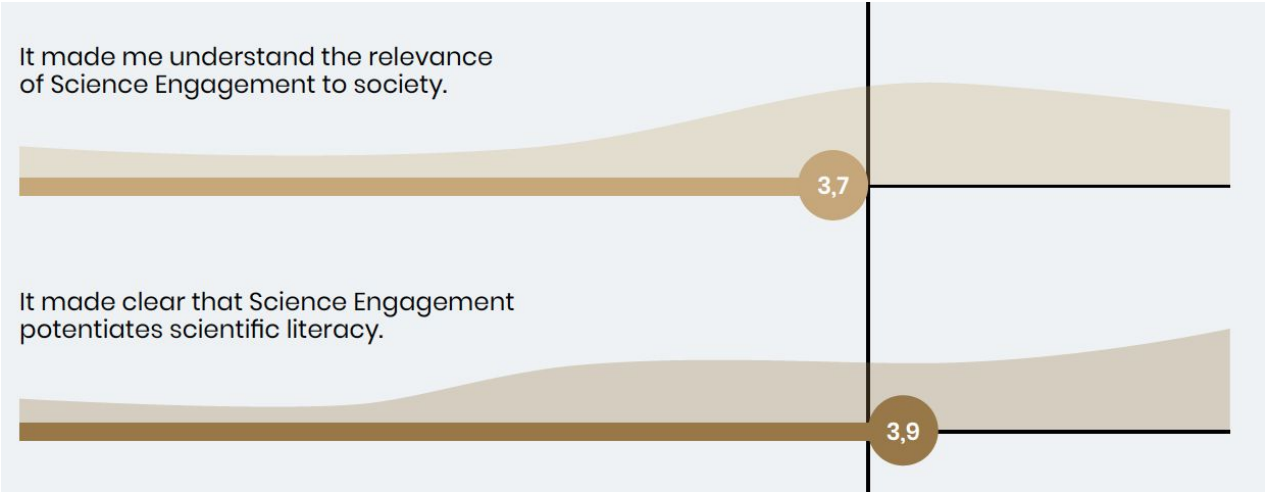
Workshop - Participants feedback

95% rated the relevance of discussing the institutionalization of Science Engagement as **“relevant”** or **“very relevant”**



Workshop - Participants feedback

Scale 1-5: 1: Strongly disagree; 5: Strongly agree



Workshop - Participants feedback

An average of **3,9** of the participants considered that the workshop made them **learn about solutions and actions** that they can use to promote the **institutionalization of Science Engagement**.

Literature consultation

Literature consultation with the goal of having a better grasp on:

- Causes behind the low institutionalization of the Science Engagement field.
- Actions that can be implemented/have been implemented to solve the challenge.

Actions to solve the challenge

- Will present potential actions that can be developed in order to promote the institutionalization of Science Engagement.
- All actions presented result either from the discussion during the workshop or the literature consultation undertaken.

Borrow, J., & Russo, P. (2015).

Actions for scientific institutions

Create or expand Science Engagement departments and create more Science Engagement officer positions.	Show scientists that several skills which come with Science Engagement training (e.g. communication skills) are also beneficial for grant writing and communication with funders.	Create an institutional one-pager and workshops for scientists, about the societal impact of research.	Create a portfolio of local, national and international Science Engagement initiatives in which scientists can get involved.
Create workshops, for scientists and the heads of the scientific institutions, about the benefits of Science Engagement.	Give grant writing workshops, focused on the impact section of grant proposals, specifically highlighting the portfolio of existing local, national and international Science Engagement initiatives.	Promote Science Engagement leadership and advocacy programs.	Create ambassador programs that pair Science Engagement practitioners and scientists, as a way to pass on Science Engagement expertise, as well as provide support and inspiration.
Support and develop institutional Science Engagement initiatives.	Reward scientists that develop Science Engagement initiatives, with a favourable evaluation in their performance review process or their tenure evaluation.	Provide Science Engagement training to scientists.	When discussing performance review process, tenure evaluation, etc., have present an experienced scientist that is also an experienced Science Engagement practitioner.

Actions for funding institutions

- Provide more monetary funds for Science Engagement initiatives.
- Fund collaborative and co-creative research projects, with a strong Science Engagement component, that foster the involvement of the public in the scientific process and scientific-knowledge production.
- Provide monetary funds for training scientists in Science Engagement initiatives.
- Provide monetary funds for Science Engagement initiatives that are embedded within research projects.

Actions for governmental institutions

Create more Science Engagement bachelor and master degrees.

Make Science Engagement a mandatory discipline in all bachelor science programmes, with a theoretical and practical component.

Make Science Engagement a project component of all master and doctoral thesis.

Make sure there is a good distribution of Science Engagement bachelor and master degrees, countrywise.

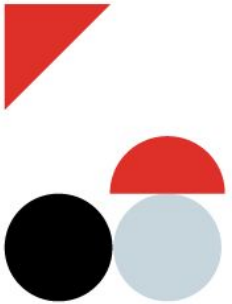
Outputs

All the work associated with this CtA has three outputs:

- Workshop.
- Final presentation.
- Report >> also includes a section on examples of implemented actions (case studies).

Thank you

- Falling Walls Engage, Commitments to Action colleagues and workshop speakers and participants:
  - **Support, contributions and feedback** during the process of developing the Commitment to Action project and the final content of the report.



Comments? Questions?