

FINAL REPORT

Workshop: Presenting your Research Effectively and Attractively

Section 1: The Idea – Inspire creativity and improve presentation skills by teaching fundamental techniques in improvisation and science communication to students and scientists

“Most scientists lack the business know-how and literacy to effectively communicate with funders. I’d very much like to see that every single researcher is able to deliver an “elevator pitch” on how their research impacts society.” Michael J. Bojdys, HU Berlin. [Source](#)



The Problem: In an increasingly information connected world, an understanding of scientific facts and engagement with the scientific community is more and more necessary. The scientist’s ability to effectively communicate their work and engage with the public is equally imperative. Professional academics and students often struggle to see the “big picture” and the impact of their work on society, and lack the tools to effectively communicate their work to policy makers, funders and the general public.

The Solution: The “Presenting Your Research Effectively and Attractively” Workshop is a response to this. This workshop will provide professional academics and students with an in-depth science communication training and give them opportunity to create content and material for public engagement. The objectives are to (a) give scientists practical tools and methodologies for future science communication activities, (b) empower them in future exchanges with non-scientists, and (c) build content as a community and bridge the divide between science and the public.

Who is this module for? The workshop is open to any scientist or student of the Berlin University Alliance interested in improving their science-communication and improvisation skills. The workshop provides participants with tools and insights into how to effectively communicate scientific results, and what kind of outlets (articles, videos, podcasts) are available to them to reach the desired target audience.

The Instructors



Julia Offe obtained her doctorate in biology. Since 2011, she organises Germany’s top science communication event, the “Science Slam”.



Roland Bolz is a PhD student in philosophy at the Humboldt-Universität zu Berlin and a stand-up comedian who performs regularly on the Berlin circuit.



Cora Knoblauch is a radio journalist for “radioeins rbb” and “Deutschlandfunk Kultur”. She is also the voice for the science podcast of the Humboldt-Universität zu Berlin “Unendliche Weiten, faszinierende Welten”.

Section 2 – Participants and Reach:

The event was advertised from Dec 13, 2019 via the following online platforms:

- **“Eventbrite”** <https://www.eventbrite.de/e/presenting-your-research-effectively-and-attractively-workshop-registration-86056720969?utm-medium=discovery&utm-campaign=social&utm-content=attendeeshare&aff=escb&utm-source=cp&utm-term=listing>
- **“Twitter”** <https://twitter.com/mjbojdys/status/1205269725363748866?s=20>
- **“Personal homepage”** <http://bojdyslab.org/events/prea/>
- **“IRIS Institutional homepage”** <http://www.iris-adlershof.de/en/archiv.html>

Cross-institutional advertising at the HU Berlin and/or Berlin University Alliance (BUA) did not materialise, or did not materialise with sufficient (online-traceable) impact. This resulted directly in a limited penetration of various scientific disciplines.

In total **34 unique bookings** have been made via the event registration page (“Eventbrite”) between Jan 6, 2020 and Jan 20, 2020. In addition, **6 guest-list** visitors reached out to the PREA coordinator. From those 40 registrations, **35 active participants** have appeared at the event (87.5%).

Section 3 – Course Content:

Part 1 by Julia Offe:



- Introduction of the “Science Slam” (format, styles and rules) as tool for science communication.
- Exercise in story-telling: present yourself and tell a unique thing about you.
- Exercise in narrative styles: find an analogy between your research and a randomly chosen word.



- Example for conceptualisation of a science presentation: the “W-Star” (What, Who, Where, Where from, Where to).
- Exercise in story-telling: present a research topic (real or imagined) and incorporate personal elements.

Part 2 by Roland Bolz:



- Rehearsal techniques for effective and attractive presentations.
- “How you rehearse is how you perform” – rehearse under conditions that approximate the real event. Rehearse acoustically and train your voice.
- Body language – do not hide behind a lectern.
- Rehearsal: “performing spot” vs. “critic spot”. Carry on rehearsing and re-formulating your sentences in the “performing spot”. Consult your notes and re-work material in the “critic spot”.
- Monitoring – record audio and video of your rehearsal.
- Do not present by reading text from your slides/cards. Do not rehearse mechanically.
- Magic of Repetition – prevents “culmination in one verbalisation” and fosters “maximum variation of verbalisation” (flexibility). (Exception: quotable punch-lines.)
- Q-cards – use as few as possible with as little text as possible (no full sentences); titles, keywords, not more. Colour-code them to trigger memory.
- Power Point slides – use as few as possible with as little text as possible. Do not use the slides as a replacement for q-cards; PP is to emphasise important points, not to help your memory. Consider leaving empty slides, if the attention should be on the presenter. Consider using a dark/black background; white slides draw the attention away from the presenter.
- Study the audience – know your audience prior to the event (conceptualisation; also Part 1); check your audience during the event (are people following/paying attention).
- Q&A “good and bad” practices for rehearsing and presenting.

Part 3 by Cora Knoblauch:

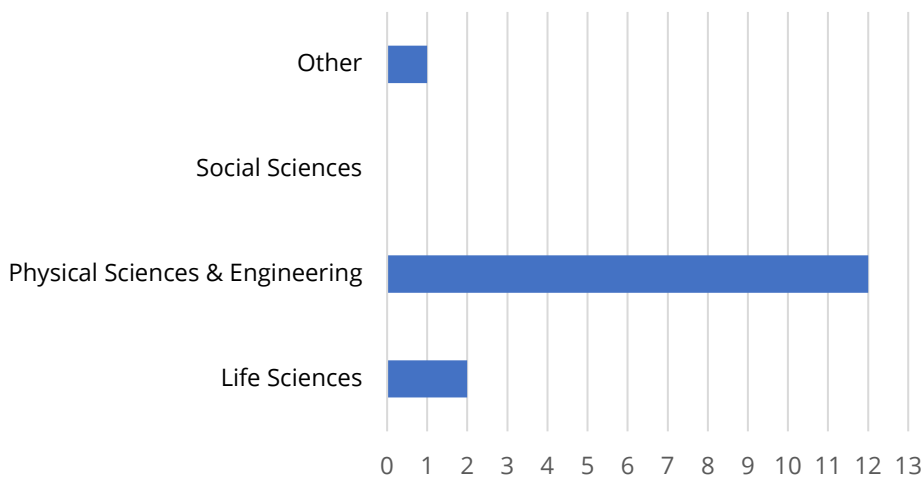


- Radio and podcasts as the “power app” for science communication.
- “How to appear in science interviews?” – be visible (social media, internet) and be available.
- Importance of media presence for you and your institution.
- What to expect in an interview: you are asked for a personal and professional opinion (not read-out facts). Questions are not prepared in advance (aim to be natural). Journalists usually do not prepare extensively for the background on the topic or on your CV.
- Example for “good and bad” practices in an interview: Radio Eins interview with Prof. J. Goldammer on Australian bushfires (in German).

Section 4: Feedback and Evaluation.

Feedback forms (see Appendix) have been handed out to participants at the end of the event. A total of **15 evaluation forms** have been completed and returned for evaluation by the Oversight Committee (see **Section 4**).

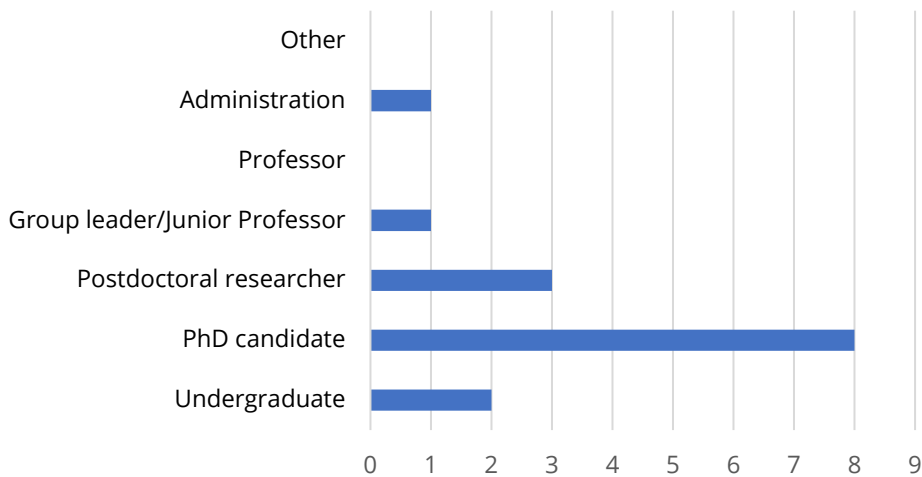
(1) What area of research/interest fits you best?



The workshop appealed predominantly to participants from natural scientists (Physical Sciences & Engineering), and it failed to penetrate the academic community in general.

The Oversight Committee thinks that this is presumably due to two factors: (1) Adlershof is the site of most of the Humboldt-Universität zu Berlin’s departments of natural science, and hence, events in Adlershof are more attractive to participants from these disciplines, and (2) the reach of the campaign was too limited due to a lack of institutional advertising and did not penetrate potential BUA audiences.

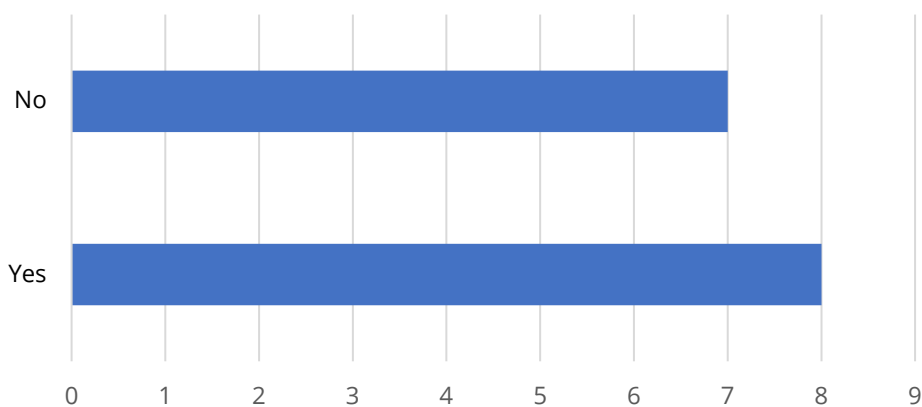
(2) What stage of your career are you at?



The workshop audience is comprised predominantly from PhD candidates and Postdoctoral researchers, whose presence at the event was presumably seconded by their day-to-day supervisors. There is no evident penetration at higher career tiers (Professorial level).

It is the Oversight Committee’s opinion that without institutional support at high level, neither the top (Professors, Junior Professors) nor the bottom (Undergraduates) of potential audiences will be reached by this workshop due to a lack of incentives. Proper incentives could be (1) an institutional agenda to promote science communication to motivate top-tiers of audiences, (2) quantifiable incentives in form of credit points to motivate undergraduates.

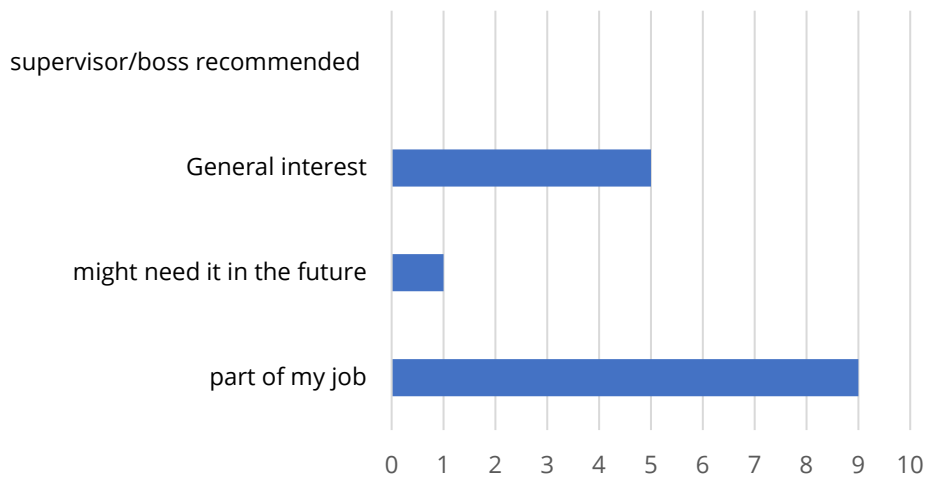
(3) In the course of your professional career, have you ever communicated with the public/media about your work?



Approximately half of the participants have had experiences with science communication prior to attending the workshop, and the other half had no prior experiences.

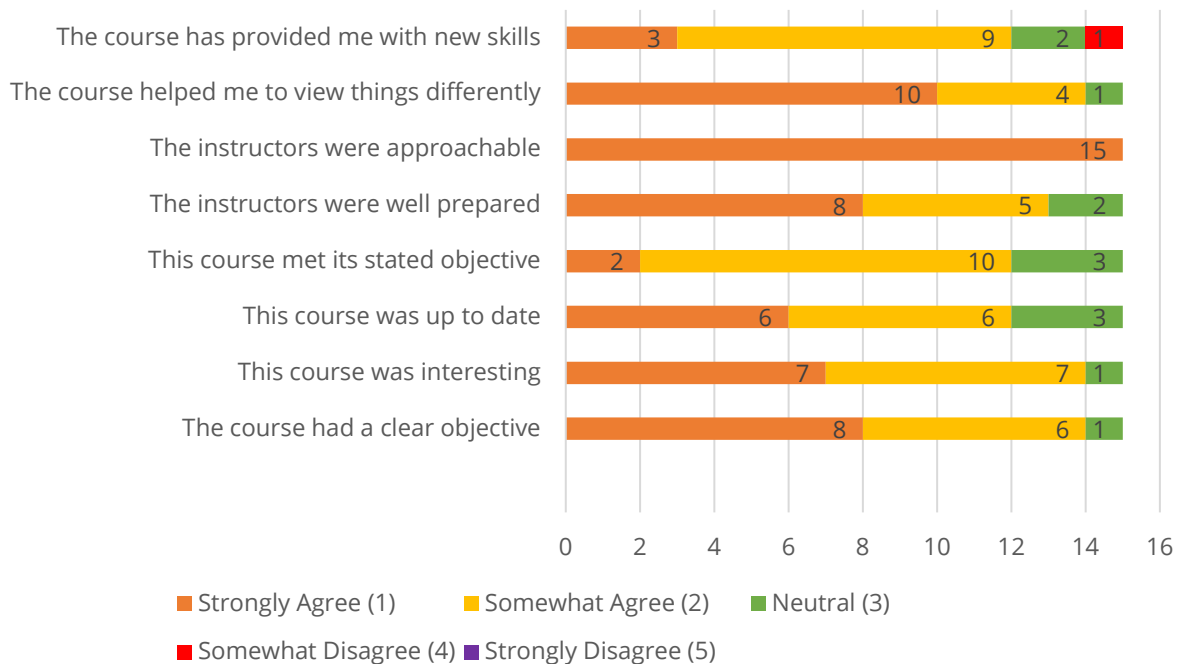
This confirms a broad appeal of the workshop to audiences who would like to (1) polish existing skills and (2) learn which skills are important for effective science communication.

(4) Why did you sign up for this workshop?



A majority of participants considers science communication as an *“integral part of their job, and they want to learn more about it”*. Roughly a third of participants express a *“general interest”* in the topic.

A detailed analysis of the survey reveals that participants who are further ahead in their careers (question 2) and/or have had prior experiences in science communication (question 3) are more likely to understand science communication as an *“integral part of their job”*. Less experienced participants and participants at the top of their career understand the workshop more as a form of *“self-improvement”*. It is the Oversight Committee’s opinion that the understanding of science communication as an integral part of a science occupation can be promoted via workshops like this one and via an incentivised institutional narrative.



Feedback for course content and instructor performance was predominantly positive to very positive (>88% agreed *“strongly”* or *“somewhat”* with a positive statement about the course content and/or instructor performance).

Participants were asked to comment on the STRENGTHS of this course in free-text format. The following statements came up (with the frequency of a statement greater than one given in brackets):

- The course offered new, unexpected insights from a variety of perspectives. (8)
- Interactive components (exercises) are considered interesting/valuable. (3)
- The skills discussed in the course are considered of great relevance/value. (2)

Participants were asked to comment on the WEAKNESSES of this course in free-text format. The following statements came up (with the frequency of a statement greater than one given in brackets):

- Segments of frontal teaching are considered too long. (4)
- Interactive components suffer from a lack of proper preparation time and a lack of clarity of explanation. (2)
- Instructors provide an insufficient number of examples for “good and bad” practices. (2)
- The course is too short. (2)

Participants were asked to suggest IMPROVEMENTS for this course in free-text format. The following statements came up (with the frequency of a statement given in brackets):

- “Good and bad” practices should be exemplified with more (multimedia) content. (7)
- More interactive parts should be incorporated. (2)
- Objectives/topics should be introduced better. (1)
- Possibilities for follow-up courses should be highlighted. (1)

The Oversight Committee concludes that the **general format of this course should be retained**, and that the **objectives of this course were fully met**. The workshop imparted **new/unexpected/valuable insights** into science communication, and the participation of a **variety of instructors offers interesting perspectives** on the subject matter. However, the delivery of course content should be reviewed to encompass **more extensive interactive exercises, more real-life examples** of “good and bad” practices, and **fewer segments of frontal teaching**.

As the course is intended as an introduction of science communication techniques, the **length of the course is commensurate to its contents** and should not be expanded. However, the workshop should offer an **outlook on more intensive courses** offered via Humboldt-Innovation, the Graduate School and elsewhere.

Resources: The budget for this pilot workshop encompassed the honorarium for three instructors (3 x EUR 450) and consumables for participants (EUR 100). TOTAL BUDGETED: EUR 1450. Overall spending exceeded this budget, due to (1) addition of 19% corporate tax for the honorarium of one of the instructors (excess of EUR 85.50), and excess cost for catering (excess of EUR 133). TOTAL SPENT: EUR 1668.50 (EUR 218.50 over budget)

The Oversight Committee concludes that this workshop can continue only with an expanded budget of approx. EUR 2700 per event. This would encompass commensurate honoraria for instructors (EUR 800 p.p.) and a catering budget of 30 x EUR 10 p.p. Possible funding mechanisms for this could include any/all of the following: (1) institutional support, (2) third-party sponsoring, (3) participation fees (recommended 10-30 EUR p.p.).