2023 PCST Venice Symposium

Science communication education and training: challenges and strategies for research and academic institutions

Concluding Statement

November 10, 2023

We are a group of science communication scholars, educators and practitioners who work in various roles within research and academic institutions. Based on our discussions at a recent symposium of the Public Communication of Science (PCST) Network, held during September 2023 at Venice International University, we prepared this statement to draw attention to the need for research and academic institutions to consider the strategic value of public communication of science, and to mobilise support for these activities.

Statement to leaders of academic and research institutions worldwide

Science is part of society and depends on public support. As such, effective public communication of science – including dialogue with society – is now a key activity for research institutions.

Investment in science communication yields a multitude of benefits to society and institutions, as well as to research and researchers. **Benefits to society** include combating misinformation, making science accessible to diverse communities, and equipping citizens with the skills to participate effectively in science-based debates. **Benefits to institutions** include building reputation and profile, increasing the employability of students, and becoming known as engaged and responsive civic institutions. **Benefits to research and researchers** include offering researchers new perspectives on their work, improved visibility among funders, policy, and other audiences, effective communication across disciplinary boundaries, and helping to recruit new collaborators.

The support needed from research and academic institutions

Effective institutional science communication requires commitment and support from leadership, as well as investment and policies that incentivise public science communication. The most important forms of institutional support are:

1. Recognition and incentives for researchers to communicate and engage.
2. Recruitment and development of science communication professionals.
3. Assessment and improvement of quality in science communication.
4. Application of science communication research to support best practice.
5. Support for science communication education and training (including, but not limited to, media training).

The support activities listed above can be operationalised as follows:

(1) Recognition and incentives for researchers to communicate and engage

- Highlight the value of science communication and engagement in institutional policies, including in criteria for career advancement and promotion.
- Encourage, support and fund researchers to participate and reward exceptional public engagement efforts.
- Support networks and collaborations that facilitate the sharing of resources, training, opportunities and best practice in public science communication and engagement.

(2) Recruitment and development of science communication professionals

- Invest in professional science communication capacity in central roles in research institutions and at the level of faculties, departments and specialised research groups.
- Recognise that science communication is a distinct profession, requiring a multi-faceted skill set specific to the context of each research institution.
- Support science communication staff to help them keep up with fast-changing societal expectations and communication ecosystems.

(3) Assessment and improvement of quality in science communication

- Recognise that quality in science communication has multiple dimensions and depends on local contexts and cultures, audiences, and objectives.
- Support and provide funding for evaluation across all science communication strategies and activities as a form of quality assurance that can help science communicators respond to stakeholders' demands and improve their practice.
- Make evaluation tools and templates more readily available and support the sharing of evaluation outcomes.
- Recognise the limits of evaluation, since it remains challenging to measure and track some of the short- and long-term societal impacts of science communication and public engagement initiatives.

(4) Application of science communication research to support best practice

- Support science communication staff to apply insights from research to make their efforts more strategic and effective, as well as to engage with researchers to inform future research topics based on the needs of professionals in the field.
- Encourage science communication practitioners to participate in ongoing research to advance the collective knowledge base on topics such as:
    - science communication comparisons across cultures and contexts;
    - roles of science communication professionals;
    - attitudes, barriers and incentives experienced by researchers doing public communication;
    - institutional structures and policies supporting or inhibiting science communication;

- science communication outcomes, including unintended, unpredictable and negative consequences;

(5) Support for science communication education and training

- Support the development and provision of credit-bearing academic modules at undergraduate and postgraduate levels that introduce students across social and natural sciences, engineering and humanities to the principles and practice of science communication and public engagement.
- Make capacity development in science communication and public engagement an integral part of all staff development programmes, especially for post-doctoral fellows and early-career researchers.
- Invest in the development of postgraduate degree programmes (certificates, masters and doctoral programmes) dedicated to science communication and public engagement.

Signed on behalf of participants in the September 2023 PCST Symposium in Venice:

2023 PCST Venice Symposium Steering Committee

- Alessandra Fornetti, Venice International University, Italy
- Ilda Mannino, Venice International University, Italy
- Sarah Davies, University of Vienna, Austria
- Marina Joubert, Stellenbosch University, South Africa
- Brian Trench, Dublin City University, Ireland
- Massimiano Bucchi, University of Trento, Italy