

Parallel Session 11: PCST network: an added value for science communication training?

TRAINING SCIENTISTS TO COMMUNICATE WITH LAY AUDIENCES: SUCCESSES AND LIMITATIONS OF A SCIENCE COMMUNICATION WORKSHOP

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Abstract

In recent years it has become widely accepted that scientists should discuss their work with different communities. Yet, in most countries science communication is not part of the formal education of researchers. We organized a pioneering workshop in Portugal to train scientists to communicate with lay audiences. Evaluation shows that participants feel more confident and are more pro-active in communicating, suggesting that a low budget activity can improve the participation of scientists. However, as we will discuss there is scope for improvement, raising the challenge to the PCST network to play an important role in setting goals and promoting exchange of practices.

Key words: scientists; workshop; communication-skills

Text

Context

It is becoming increasingly more accepted that the scientific community has a duty to discuss the implications of their work with society and to play a role in making knowledge and technologies meaningful to different communities. Yet, science communication (SC) is still not part of the formal education of researchers. Scientists are trained to do research and discuss it with their peers and students and only those expertises play a part in career advancement. Many researchers feel they need training in communicating with lay

audiences. In recent years several strategies have been developed, such as media training workshops, brochures with communication guidelines and media fellowships.

Many countries lagging behind in public awareness of S&T have made little effort in training scientists to communicate. That is the case of Portugal, characterized as a country with low knowledge and interest levels in EU surveys (Eurobarometer 55.2). In those countries, because there is less institutional participation and smaller budgets for science communication, it becomes more important to learn from the experience of other countries and adapt it to their own reality. While some strategies followed in other countries may be very expensive or may take a long time to produce results, skills training workshops are very attractive as they are generally not time-consuming; they can cover a variety of different topics and skills, and they do not need to be very costly. A short workshop can have some of the best trainers and strongly motivated participants from different parts of the country.

Objectives

Our long-term aims were to train scientists to communicate effectively with the media and the public, and to motivate researchers to participate and organise science communication activities. With those aims in mind we organised a workshop to: develop skills, discuss SC contents with a view to changing attitudes, and finally to promote collaborations between people interested in SC.

Methods

We organised a 3-day workshop, *Comunicar Ciência* (“Communicating Science”), at the Gulbenkian Institute of Science in Portugal. 17 scientists, from different parts of the country and 10 journalists and SC experts from Portugal and the UK participated in this workshop. The workshop comprised a mixture of “hands-on” exercises and discussions aimed at the development of skills (e.g. writing a press release; being interviewed; popularising science via websites; being proactive with the media; organising an event for the public and dealing with questions from the public) and a discussion of topics with the view to providing tools and changing attitudes (e.g. science vs. media; different models of SC). Interaction between participants and trainers was promoted in many sessions and many trainers suggested forms of getting SC information. Three components were evaluated through questionnaires during and after the workshop: the workshop as an activity, whether the aims set for the workshop had been achieved, and the impact of the workshop on its participants. Different questionnaires were used because of the need to measure changes in attitude, acquisition of skills and impact of the workshop: questionnaires were given at the beginning and end of the workshop and after three months (follow-up evaluation).

Results

The workshop and its outcomes

Through evaluation of the workshop we have found that a key to its success are the “hands-on” sessions and discussions and the encouragement of contacts. Improving communication skills was the major motivation for participants to attend the workshop. At the end of the workshop both

participants and trainers felt there had been an improvement in skills. The majority changed their attitude towards the media, such as being “more understanding” or having “more respect for the work of journalists”. Additionally, participants may have genuinely shifted from a scholastic perception of communicating science to a more “engaging with science” mood. During the workshop they proposed four projects all of which tried to promote engagement with science. At the beginning of the workshop the major motivation to communicate was to improve lay audiences’ knowledge on scientific contents and processes of science; the evaluation of the workshop gives us no indication as to a change in this unidirectional form of communication.

The impact of the workshop

Summative and follow-up evaluation shows that scientists feel more confident in their communication skills and are more proactive towards the media and towards the organisation of activities. In fact, participants are now trying to organise three out of four projects that were born from one activity in the workshop. Continued contact with the participants will tell us more about its future impact. We think that more workshops similar to this one should be an important part of a strategy to improve the participation of researchers in SC and to improve the relationship between scientists and journalists.

Conclusions, challenges and the role of the PCST network in science communication training

This work shows that, in line with the trend in the rest of Europe, there is a favourable environment to promote SC in Portugal. Candidates from several different institutes, different fields of research and different stages in their career applied for the workshop. With some reservations regarding our sampling, this work has shown that researchers in Portugal need training in skills for communicating with lay audiences, and workshops like the one described here are a good strategy to address that problem. Additionally these workshops may promote the start of new initiatives and recruitment of other researchers to these activities. A workshop like this one only costs around €6000.

There are challenges for broad scope workshops like this one: how to better promote dialogue between scientists and the public? How to cover other “lay” audiences, such as policy makers and funding bodies? How to cover other topics, such as risk assessment? How to better measure the impact of these workshops, for example how to assess changes in attitude? How can the tools developed in these workshops be re-used through different media to reach scientists that do not attend these workshops? As different people in different countries try different science communication training experiments it will be important to promote the discussion and exchange of experiences, maybe through the PCST network activities.

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