

Parallel Session 23 - What are we talking about when saying “public dialogue”?

AN EXPERIMENT IN TWO-WAY, DIRECT COMMUNICATION BETWEEN SCIENTISTS AND THE PUBLIC IN PORTUGAL

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Abstract

We have assessed whether science communication in Portugal can evolve from being one-way and indirect, to becoming two-way and direct. We organized a pioneering weekend conference between scientists of a Portuguese research institute and the public of the local town, based on the Danish model of the consensus conference. The lay panel set the agenda for the conference, guided the proceedings and prepared a consensus report that was assessed by the scientists' panel. The evaluation and outcomes of the weekend conference suggest that two-way, direct communication between scientists and the public is possible. Its findings shall be used to introduce public dialogue in science in Portugal.

Key words: two-way communication; conference

Context

A movement to increase the scientific culture in Europe has developed and expanded, over the last two decades (Miller et al., 2002). In Portugal, too, since the late 1990s, a concerted effort has been made to raise the public's awareness of science through science sections in daily newspapers, science programmes on television, science museums, popular science books, institutional open days, science weeks and public lectures (Miller et al, 2002).

Yet science communication in Portugal is, almost invariably, one-way – from the scientist to the public - and indirect – mediated by journalists, museum curators, etc. In fact, scientists in Portugal rarely discuss scientific issues directly with the public, and hardly ever get feedback as to their communication

efforts. Even in recent controversial scientific matters all communication between the public, the scientists and the decision makers occurred via the mass media, thus withdrawing any possibility of dialogue between the players (Gonçalves, 2002).

Objective

The aim of this study was to evaluate whether science communication approaches in Portugal can evolve from being one-way, and reliant on mediators, to becoming two-way, with direct interaction between scientists and the public.

A weekend conference with scientists of the Instituto Gulbenkian de Ciência (IGC) and the public of the local town was organised and evaluated.

The weekend conference was designed very much based on the Danish model of the consensus conference - a model medium for two-way science communication. (Farmelo, 1997; Joss and Durant, 1995).

The results of the weekend conference may be used to promote greater engagement of the Portuguese public in science and technology, through two-way communication strategies.

Methods

Lay panel members were recruited via advertisements in the local press and posters placed in town.

The lay panel members received information on the IGC, before the conference.

Each lay panel member suggested two topics for discussion at the weekend conference. Based on these topics, seven IGC researchers were invited to be on the scientists' panel.

The conference was held over the weekend of 6,7th September 2003, at the IGC. Its structure was very much based on the structure of a consensus conference: on Saturday, the invited scientists presented and discussed their field of expertise; on Sunday morning, there was an open debate with both panels and the audience, to address more general issues; on Sunday afternoon, the lay panel prepared and presented their final consensus report.

Short questionnaires were used to evaluate the weekend conference.

Results

The lay panel was made up of five women and three men, aged between 18 and 65, from different professional backgrounds. The reasons for taking part in the conference included: to get to know the institute, to discuss specific topics, to meet scientists and better understand their lives, to make contacts and to learn about the structure of science in Portugal.

The scientists' panel was made up of seven group leaders and post-doctoral researchers. The scientists agreed to take part in the conference to promote the IGC, because they had been invited, to promote science in society, to gauge the impact of their work on the public and to gain experience in communicating with the public, amongst other reasons.

Several life science research topics were discussed, as well as more wide-ranging topics: the scientists' driving force, basic versus applied science,

science policies in Portugal and elsewhere, funding of science and science education.

The lay panel members felt that they had gained more from the conference than from a book, newspaper or documentary; that their attitude towards science had improved and that they would be more alert to science news.

Both panels felt that such conferences should be used as a form of public assessment of science and technology and as a contribution to defining science policies.

Conclusions

This pilot experiment suggests that such two-way communication is feasible and appealing to both scientists and the public.

The conference could easily be extended to other fields of science, beyond the life sciences, such as physics and mathematics, to discuss specific science-based topics which have perceived social and ethical implications.

At present, the participation of Portuguese citizens in science-based debates is usually very poor (Serrão, 2003), due, largely to the unstructured form of these debates. We propose that fora for dialogue, should come to replace this current mode of public debate in Portugal so that the consensus opinions of the citizens involved could serve as a reference for the institutional debate.

Such conferences are also an ideal form of dialogue between the public and scientists, and an excellent fora for raising awareness and engaging the Portuguese public in scientific matters.

References

- Miller SC, Caro P, Koulaidis V, De Semir V, Staveloz W, Vargas R. Report from the Expert group Benchmarking the Promotion of RTD Culture and Public Understanding of Science. 2002 July, European Commission
- Gonçalves ME. Imagens Públicas da Ciência e Confiança nas Instituições: Os Casos de Foz Côa e da Co-incineração. In Gonçalves ME, editor. Os portugueses e a ciência. Lisbon: Dom Quixote, 2002. pp. 157-197
- Farmelo G. (1997) From Big Bang to Damp Squib? In Levinson R, Thomas J, editors. Science Today, Problem or Crisis? London: Routledge, 1997. pp. 175-191
- Joss S, Durant J. (1995) Public participation in science: the role of consensus conferences in Europe. London: Science Museum
- Serrão D. Uso de embriões humanos em investigação científica. 2003 Feb. Ministério da Ciência e do Ensino Superior

