Twenty years of science communication: looking back, looking forward

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Abstract

Our 20th anniversary this year is a special milestone for JCOM. It is a time to reflect on our past performance and future prospects. We pause to consider the activities of this journal, and the broad field of science communication over the past 20 years.

Keywords

History of public communication of science; Professionalism, professional development and training in science communication; Social inclusion

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Two decades ago, JCOM was launched "to observe and interpret the evolution of science communication in all its guises" [Greco, 2002]. This broad aim continues to guide us. Our open-access publication model caters to researchers and practitioners and publishes fully peer-reviewed contributions without charging any authors' fees. This model continues to yield some tensions, mostly related to the increasing focus on journal impact factors.

Based on standard measures of impact, JCOM improved its ranking since the early 2000s from a communication journal ranked in the 4th quartile (or lowest 25% of journals ranked according to impact) to currently being ranked in the 2nd quartile (i.e. between the top 25 to 50% of journals) [Scimago Journal and Country Rank, 2022]. We attribute much of this upward shift in standardised impact factor measurement to the editorial leadership of previous editor Emma Weitkamp, working with a dedicated editorial team and the hundreds of reviewers who have contributed their time and expertise.

However, publishing high-quality and high-impact research to attract more high-quality and high-impact research article submissions is only part of JCOM's mandate. Unlike most academic journals in our field, JCOM also provides space for Practice Insights, Essays, Commentary sets and Reviews of books and conferences. We believe that this helps us to serve our increasingly diverse community of readers who are dedicated to enhancing and expanding the field of science communication through productive and meaningful partnerships and exchanges between researchers and practitioners. Some of these contribution types are rarely

cited in academic literature, which could possibly lower our overall impact factor. But capturing innovative science communication practice around the globe is a priority informing our discussions about the journal's future direction and ambitions.

In line with our ongoing commitment to bridge the worlds of science communication research and practice, we invited researchers, practitioners and educators who have been part of the JCOM family for a considerable period of time to contribute to this set of 20th anniversary commentaries. Jointly, these commentaries represent some of the significant trends in our field since 2002. From these contributions, it is clear that change is a constant. But we are also making meaningful advances towards valuing different sources of knowledge, reviving lost cultural heritage, and advancing culturally relevant and inclusive science communication research and practice.

"What is science communication?" and "Have we ever been satisfied with science communication?" Our set of commentaries start with these provocative questions posed by science communication pioneers Bruce Lewenstein and Massimiano Bucchi.

Lewenstein reflects on the perceived differences and frictions between terms such as 'PCST' and 'scicomm', as well as tensions between what we seek to achieve versus what we seek to study. He highlights how articles in JCOM have helped us to appreciate the complex nature and diverse aims of science communication, and the multitudes of role players that are involved. Lewenstein argues that reliable knowledge about the world requires multi-faceted, and perhaps sometimes contradictory, public engagement efforts, and that a better understanding of these ambiguous efforts could help to uncover deep social conflict, including racism and colonialism.

Bucchi emphasises how ideas about a need for change have been present throughout JCOM's history. But he also points out that there have been elements of continuity across the history of science communication. Based on his reflections about change and continuity, Bucchi concludes, perhaps paradoxically, that "the focus on change is itself an element of continuity in the history of science communication".

An underlying theme running through several commentaries in this set is the need for increased recognition of and support for community partnerships. Mónica Feliú-Mójer describes the many contributions that one organisation can make to build culturally relevant and inclusive science communication with the appropriate infrastructure, skills, resources and vision. Yet, she points out, funding sources for science communication are rarely long-term or consolidated.

In her commentary about citizen science, Susanne Hecker notes that over the last 20 years, citizen science data has become more recognised as reliable data. But she also notes that there is pushback, including a lingering fear that sharing power with community members during the research process might compromise academic freedom and integrity.

Emily Dawson and her colleagues note that there is still much to critique in the science communicator's ability to constructively "speak back" to science. They

argue that science communication models developed in the U.K. do not reflect science communication practice in the Global North beyond the mainstream, let alone other parts of the world.

On the topic of science communication teaching, Nancy Longnecker contends that science communication programs at universities are particularly vulnerable to the political and economic priorities of the day. Her commentary highlights some of the challenges associated with launching and sustaining a new teaching program in our field and calls for greater collaboration with those in disciplines outside of what we understand to be science communication.

There has also been growing recognition over the last 20 years that practice has driven the theory of science communication, and Jenni Metcalfe argues that the practice activities, which inform the theoretical models of science, occur in combination. Perhaps this 'messiness' of academic disciplines and professional endeavours bring a renewed strength, hybrid vigour and excitement to the field, she argues.

Like science, the fact that science communication is part of society and shaped by politics appears to be a lesson that we keep on learning. We end this commentary set with a piece by Luisa Massarani and Thaiane Moreira De Olivera on their experience with science communication practice and research in Latin America. They point to growing concerns about the politicization of science on the continent and the urgent need for collaborations beyond the U.S., U.K. and Europe. The ongoing invisibility of Latin American studies of science communication and similar challenges faced by science communication scholarship in other developing regions remain an ongoing challenge.

This set of commentaries inspires the JCOM editorial team to continue with promoting diverse and inclusive contributions from science communication research and practice, including contents written by authors from under-represented countries, and those originating from the so-called margins or neglected spaces of our science communication. This includes views and voices from people who will challenge our thinking and question the aims of the field in the decades ahead.

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