

The Australian Science Communicators conference 2020

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Abstract

This special issue of JCOM features six commentary articles from the research stream of the Australian Science Communicators conference, held in February 2020. These opportunistic assessments and deliberate analyses explore important themes of trust, engagement, and communication strategy across a diverse range of scientific contexts. Together, they demonstrate the importance of opportunities to come together and share the research that underpins our practice. The conference and these commentaries enable us to engage in professional development during these exceptional times when successful evidence-based science communication is of critical significance.

Keywords

Scholarly communication; Public engagement with science and technology; Science communication: theory and models

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The eleventh national Australian Science Communicators conference (#ASC2020) was held in Melbourne, 16–19 February 2020. The initial call for papers was ambitious, with the theme 'Priorities, Policies and Publics for Human Survival' calling for papers from a wide range of sectors. Priorities, such as identifying the role of science communicators in solving the 'wicked problems' we face or improving our understanding as to how science fits in the current media climate were front of mind for many attendees. The Policies idea explored the impact of science communication as an effective tool for behaviour change. Finally, Publics included use of technologies and strategies to engage diverse audience participation through new communication practices. We had no idea just how important these themes would prove to be in 2020.

The Black Summer bushfire crisis which Australia experienced at the start of 2020 provided real-time context and application for the themes of the conference. The COVID-19 pandemic and its impact on the world demonstrates that the importance of science communication has only grown more salient. As ASC President Lisa Bailey acknowledged in her opening address, "science communicators may question their role in times of crises and challenge like these". Now, more than

ever, we must share and apply what we have learned about the science of science communication.

ASC2020 provided an opportunity for attendees to learn how others have faced challenges such as building trust, engaging with people who think differently and translating engagement into behaviour change. With over 200 diverse attendees from science, education, communities, industry, policy, healthcare systems, environmental groups, academia, new technologies and more, the conference provided a climate ripe for learning.

Each of these challenges was addressed throughout the conference. Lively discussions dominated workshops on trust and case studies on the role of media in changing behaviour lead to a mixture of inspiration and despair. In addition, sessions on the power of science galleries and how to communicate effectively during an emergency highlighted the value of community efforts and passions.

The research stream of the conference also covered these challenges with an eclectic range of case studies, reviews, and reflections. The presentations spanned the role of scientific names in the role of conservation [Gregg et al., 2020] to communicating risk in natural disasters [Doyle et al., 2019].

Trust in a source, person or organisation can take a lifetime to build but only a moment to destroy, and is a crucial component of any successful communication endeavour. Yet a single experience — one episode of television — was the catalyst for a politician to change his mind to trust the science of climate change in the gripping case study of Calyx and Low [2020, this collection]. The positive response to the politician who publicly owned his about-face is an inspiring example for others who may feel they are unable to shift from their standpoints.

Dempster [2020] also explored the role of media in scientific trust in her case study detailing how a scientific article was communicated via the media. In the literature review provided in this special issue, Dempster identifies the role scientific organisations play in exaggerating research claims, rather than pointing the finger at click-hungry journalists. Inaccurate or overblown press releases on science and medical-related news can lead to serious and adverse community effects, eroding community trust in research completely.

The goal of Manyweathers [2020] is a slower building of multi-directional trust through the Agricultural Innovations Framework. By bringing together the experience of producers, veterinarians, local government and industry around the topic of animal disease management, this pilot study makes space for meaningful discussion to occur on an even playing field. While it takes time to build relationships and ensure sustainability of the communication channels, the revolutionary framework provides a positive alternative to the outdated — but still too common — deficit model approach to communication in this space.

Respecting the experience of practitioners rather than forcing a top-down approach to communication takes a practical turn in the overview from Ward [2020]. This is an enlightening examination of the suitability of online communication tools used in the management of a wicked agricultural project. More so than ever in this time of Zoom overload we need to understand how our communication medium affects the success of relationship-building, and Ward's study on how agricultural

scientists in Laos and Australia worked together online seems remarkably prescient. Their interview-based results highlight the importance of cultural, technical, personal and environmental factors in the success of any multinational project. While there is no 'silver bullet', Ward's conversations emphasise that new tech might not always be the best tech for the job when it comes to communicating across communities.

The importance of listening in communication also shines in Lockley's [2020] piece on the disconnect between our love of food and refusal to take up the advice of nutritionists. They cooked the same meal for different focus groups — one described using the luscious language of Nigella Lawson and another using the dry terminology from national dietary guidelines. It's probably not hard to guess which approach was more enjoyable for participants, but as Lockley explores, it's the disconnect between nutrition and gastronomy that doesn't make sense for creating a healthier society.

The commentary pieces in this special issue come from a spread of disciplines, cultures and contexts. Some are deliberate analyses, while others are opportunistic assessments. Yet, the take-away messages are relevant for all science communication activities and good examples of the values of our applied field. Whether it is a catalyst for change, the slow build-up of trust and relationships, the importance of communication tools or the value of listening to those for whom the message is prepared, all of these papers highlight the importance of thoughtful science communication strategies.

The diversity of communication of science within Australia may only be limited by our ambitions, yet opportunities like the Australian Science Communicators conference show us that we have much to share and learn from each other in our application of evidence-based science communication. We would like to thank the contributors, reviewers and the editorial team at the Journal of Science Communication for their support to bring this special issue to life.

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