Hindsight, Insight, Foresight: Australian Science Communicators (ASC) Conference 2023

Reviewed Conference

AUSTRALIAN SCIENCE COMMUNICATORS (ASC) CONFERENCE 2023
CANBERRA, AUSTRALIA, 15–17 FEBRUARY 2023

Reviewed by

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Abstract

The recent conference of the Australian Science Communicators (ASC) association (15–17 February 2023) held in Canberra was an opportunity for the 140 delegates to reflect on a decade of the national strategy for public engagement with the sciences, *Inspiring Australia*, and consider the future role for science communicators in the Australian science and research landscape. The conference was the first in-person conference since the COVID-19 pandemic, and other discussions focused on the role of AI in science communication and the importance of networks.

Keywords

Public engagement with science and technology; Science and media; Science and policy-making

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Almost thirteen years to the day since Australia's national strategy for public engagement with the sciences, *Inspiring Australia*,[1] was announced at the 2010 ASC Conference, 140 members of the Australian sci-comm community gathered in the 'Martian Embassy'[2] at the Australian Academy of Science in Canberra for the first national in-person conference since the COVID-19 pandemic began.

The theme for the conference — 'Hindsight, Insight, Foresight' — allowed us to reflect on the past decade of Australia's national science communication strategy, provided opportunities to share our current successes and challenges, and to consider how we might shape the future for the science communication sector. Here we focus on three of the key themes that were raised several times over the course of the three-day event.

[1] https://www.industry.gov.au/science-technology-and-innovation/science-engagement.
[2] The Shine Dome is affectionately known as the "Martian Embassy" in Canberra; see https://www.canberratimes.com.au/story/6095568/strange-but-true-facts-about-canberras-martian-embassy/.

Science engagement strategy for Australia: can we have a 'vegemite' approach with a 'nutella' outcome?

Government approaches to supporting science engagement featured in two plenary sessions. Australia's Chief Scientist, Dr. Cathy Foley, in discussion with Prof. Joan Leach from Australian National University (ANU) in the opening plenary, revealed that the current government will shortly be reviewing the National Science and Research Priorities.[3] This will involve a protracted period of engagement and consultation, but one of the big challenges for Australia's science and innovation system, observed Dr. Foley, is that it is fractured and spread thinly "like vegemite[4] [on toast]" rather than in a thick satisfying layer like nutella. With our limited resources, how can we get a nutella outcome with a vegemite approach? When pressed further on how science communication features within this consultation process, Dr. Foley responded that we have an important role in identifying audiences and understanding how to engage them. However, there seemed to be an underlying assumption that our *key* role is in communicating the 'wonderment of science' to young people so they see the importance of science and STEM skills, and then their appreciation of and support for science will translate into economic prosperity. Although emotions like wonder are known to play a role in instilling a lifelong interest in STEM [Valdesolo, Shtulman & Baron, 2017] and as such will always be a part of what we do as science communicators, this was disappointing to many in the room who feel that our field has moved away — at least somewhat — from this 'one-way' or 'first order' [Irwin, 2021] picture of science communication. Inspiring curiosity in young people is important but is a small part of our collective repertoire of skills that extends into the complex engagement required as part of Responsible Research and Innovation [Long & Blok, 2017].

This theme was continued when Prof. the Hon. Kim Carr addressed the audience on day two [Carruthers, 2023]. Prof. Carr was instrumental in developing the *Inspiring Australia* strategy which initially included recommendations to develop the evidence-base for science communication. Although that research agenda was not supported for very long, other key pillars of the strategy, such as celebrating science achievement through the Prime Minister's Science Prizes, and the National Science Week program remain prominent events on the Australian science engagement calendar. There are rumours that the current government will revisit this strategy, and throughout the conference our current ASC presidents, Jirana Boontanjai and Dr. Tom Carruthers, reminded us that we need to show how science communication in Australia is about more than 'wonderment' and demonstrate our key role in the science engagement landscape in Australia if we want a broader role in 'Inspiring Australia 2.0'.

Welcome to our robot overlords

Of course, it didn't take long for the conference to turn to the rise of the chatbots, with the Chief Scientist citing the rise of 'AI expertise' as one of the challenges for science communication. No matter what the impacts will be, AI is something that science communicators will need to know how to work with. Discussions explored the impacts on assessment within education, authorship and AI-generated works, and practitioners embracing AI as tool for ideation or even content generation. Jasmine Fellows, business manager and former editor of *Double Helix* magazine, gave an example of a recent *Double Helix* edition featuring AI-generated images

[3] https://www.industry.gov.au/news/australias-science-and-research-priorities-conversation-starter-have-your-say.

[4] Australians learns at an early age that vegemite should be spread thinly on toast.

and text. The discussions raised more questions than answers: how do we acknowledge the use of these tools? What happens with issues of attribution and compensation for images generated using algorithms trained on huge repositories of artwork without the artists' permission? What role should science communicators have in developing ethical frameworks for use of AI? Will the innovations of AI exacerbate social inequalities?

You can't do it alone

A third recurrent theme throughout the conference was the importance of a network like Australian Science Communicators and the opportunity that a national conference brings to reconnect. The last time we gathered was in February 2020 just before the COVID-19 pandemic shut down our inter-state borders. As such the additional social activities like the pre-conference science demonstration extravaganza, the gala dinner at the National Gallery of Australia and the post-conference networking opportunities, presented welcome opportunities for forging new connections and catching up with old friends.

Oftentimes a science communicator finds themselves working alone, and it can be lonely. We need networks of support for improving practice, building businesses, and for our own wellbeing. In the session on embedding science communicators in research teams, Rachel Vorwerk, science communicator with the Integrated Photonics and Applications Centre at RMIT University, gave an outstanding example of the value of a dedicated science comms practitioner in a research team in building the Centre's profile to the point of a successful Centre of Excellence bid. Her take-home message, the importance of being proactive to build a network of science communicators, was also reflected by Kate Bongiovanni, science communicator with the Bureau of Meteorology, whilst speaking on emerging science professionals. The importance of networks was also highlighted by Abigail Goff from the ARC Centre of Excellence in Future Low-Energy Electronic Technologies reflecting on the benefits of institutional support for sci-comm development of postgraduate students, and also in the Friday panel on communicating research infrastructure in Australia, where an informal community of practise network has sprung up between nodes of Australia's key research facilities.

Those in the freelance space also spoke about the importance of interconnected networks in the 'Business, Brilliance and Battle Scars' session, with business owner and former ASC president Claire Harris convening a panel of business experts from a range of communications and technology industries to share strategies for issues like isolation, the role of mentors, and ethical practise.

Celebrating achievement

Conferences provide a rare opportunity to celebrate the achievements of science communicators in Australia. Lyndal Byford, Director of News and Partnerships at the Australian Science Media Centre received the Unsung Hero of Science Communication award for 2023 for her incredible work improving both the quality and quantity of science media coverage in Australia. Her address to the conference drew attention to a worrying and increasing trend of personal attacks directed at scientists engaging with the media, especially on topics like COVID-19 [Nogrady, 2021].

Overall, the 2023 conference provided a wonderful opportunity to reconnect and reflect on the impact of *Inspiring Australia*, the legacy of COVID-19, and the rapid pace of change within our sector. In the lead up to our next conference, the ASC will continue to support and advocate for the work of our 400-plus members who make science accessible. It is more important than ever to demonstrate to our communities that we are about more than inspiring wonder for economic prosperity; we are process-specialists who understand how and with whom to communicate with in times of complexity and change, and as such we have an important place in Australia's science ecosystem.

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