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Australian Academy of Science Submission to the Inquiry into media diversity in Australia

The Australian Academy of Science (the Academy) welcomes the opportunity to provide a submission to the Senate Environment and Communications Reference Committee inquiry into media diversity in Australia.

The spread of misinformation and disinformation on science is of concern to the Academy. The questions of our time - the rollout of a COVID-19 vaccine, debates about the impact of technology on our lives, and the challenges of addressing global warming – are challenging enough without the often destructive role the media, including social media, is having on the reporting and consumption of scientific information. Not all misinformation is intended, and accurate reporting is still common, but there is also a need for greater support of media and social media publishers to report science accurately. We fear that without greater media diversity these problems will grow.

Global “infodemic” and science journalism

The “infodemic” is a widely acknowledged global phenomenon.¹ The dominance of social media, coupled with the erosion of accuracy and science literacy in media newsrooms, has led to a situation where some news outlets are increasingly reporting science without correct context or the complete picture. Without dedicated science reporters, news organisations are increasingly relying on media releases, which can sometimes exaggerate study findings or fail to provide adequate context.

Important debates in the public arena are not well served by the lack of dedicated science journalists in Australia. Democratic deliberation on issues such as the role of artificial intelligence and robotics, genetically modified foods, nuclear power, global warming and even the management of pandemics is being hampered.

According to Pew Research, while Australians support and appreciate the role of scientists and science, 76 per cent of people think that the public doesn’t know enough about science to understand research findings covered in the news.² Fifty-seven per cent believe that the media oversimplifies scientific discoveries and an alarming 39 per cent think the implications of research findings are overstated.

For example, according to the Digital News Report: Australia 2020, Australian news consumers are more than twice as likely (8 per cent) as the global average (3 per cent) to believe that climate change is not severe at all.³ The report also showed that while trust in news fell to 38% in January and February, it rose during the COVID-19 pandemic to 53%.³

Role of social media in amplifying fake news

Large scale efforts are often made to promote the spread of disinformation related to science on social media platforms.⁴ Such efforts have become problematic now that 38 per cent of Australians rely upon

these platforms as their primary source of information.⁵ Troll bots on platforms like Twitter have been used to deliberately promote disinformation related to science including climate change, vaccination and flat earthism.⁴ This creates a barrier to Australians being able to access reliable and accurate news, with implications for their perspectives on issues of national importance.

False balance acts to mislead

Such perspectives are made worse by the practice in some of the media of false balance.⁶⁻⁹ False balance occurs when journalists or media outlets seek to treat two opposing positions as equally valid when they are not. Suppose an abundance of evidence supports one position while another is entirely bereft of it. In that case, it is profoundly misguided to afford equal airtime and coverage to both positions. And yet, in an apparent attempt to maintain impartiality, this is precisely what many outlets end up doing.

False balance is insidious, giving dubious positions an illusion of respectability. All too often, it acts as a Trojan horse that allows fictions to gain a foothold. False balance creates a perception in the public mind that an issue is scientifically contentious when it is not. Thus, even urgent problems can be dismissed as a mere difference of scientific opinion. Such tactics confound the public perception of science and creates an aura of doubt. These tactics are not new. We are familiar with how the tobacco industry deployed doubt as a weapon to obstruct, misinform, delay and confound good public policy that has saved lives and improved general wellbeing.^{10,11} In addition to this, commercial media is driven by ratings rather than the public interest. Their test for public interest is whether the public is interested in a topic rather than applying journalistic rigour to the arguments.

As we begin the biggest public health initiative of our time – the rollout of a COVID-19 vaccine – repeating the past is simply not an option.

The ABC is one example of a news outlet that contains a section in their editorial policy on impartiality not equating to false balance. The ABC determines the editorial approach to its coverage by the weight of evidence, ensuring that the program remains factually accurate and reflecting the community support for any fringe beliefs in a responsible way. The Academy welcomes such an approach.

Science communication is challenging but necessary

Communicating complex scientific advances and sharing the benefits of science with the general public is challenging. The Academy has responded by Expanding the way it communicates science and reaches for larger audiences, to provide an antidote to the growing number of sources of fake news. This includes providing factual, accurate and trustworthy content in an engaging way, distributed through social media. The Academy has invested in its in-house communication and outreach activities and is engaging the public globally in a way that has not been done by any other scientific organisation and by few media outlets. Our video and articles reach mass audiences via social media. Australia's best scientists, our Fellows, are the source for much of our content and enable our rigorous fact checking and peer review process for our science content. As a result of delivering accurate, reliable and scientifically based information to the public, the Academy has amassed 2.4 million followers on Facebook; 21,000 on Instagram and 53,400 on Twitter, illustrating there is appetite for information of this nature.

There are other organisations working to have science accurately represented in the news media. The Australian Science Media Centre aims to enhance the media's coverage of science, connecting journalists with scientists and research organisations. Science and Technology Australia's 'Superstars of STEM'

program equips Australian women who work as scientists and technologists with advanced communications skills and opportunities to use these skills.

Internationally, the International Science Council in partnership with the Australian Academy of Science has recently launched Global Science TV, which aims to mobilise the knowledge and resources of their global science community in order to entertain and inform viewers on different science issues.

Trusted sources of information

While the solutions to the problems of misinformation and disinformation are contested, there is no doubt that the current situation cannot be tolerated. The current state of the media in Australia, and the impact of social media, is being felt in the scientific community. While scientific institutions and universities must, and can, do their part to better inform the public, the media and communications industry, as well as social media companies, have a responsibility to learn and avoid the mistakes of the past.

The Academy is prepared to be part of a solution, with the capability to advise on best practice relating to timely and accurate science information. The Academy is willing to provide training or leadership with media and social media producers based on our experience providing accessible, entertaining and peer reviewed science. We are willing to collaborate with media outlets to review and improve the accuracy of their science communication in a timely manner. As an independent, authoritative and influential organisation, we are ideally placed to be part of creating a solution to the problems we face now and into the future.

If you would like to discuss any aspect of this submission, please contact Mr Christopher Anderson, Director of Policy, Australian Academy of Science (chris.anderson@science.org.au).

Yours sincerely,

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President

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