Making the case for a national approach for Open Research in Australia: Review of 2020 activities

Summary

2020 was a challenging year globally, and the COVID-19 pandemic and the 2019-2020 bushfires reinforced the need for a strategic, long-term approach to open research in Australia. This paper summarises a program of work undertaken by the Council of Australian University Librarians (CAUL) and the Australasian Open Access Strategy Group (AOASG) during 2020. Through three strands of work: bringing together key national participants at roundtables to discuss possible approaches; learning from other countries that have developed open research strategies; and providing opportunities for public discussions, the program aimed to develop further the case for a national approach for open research in Australia.

The work that is summarised here is in addition to many other activities related to open research in Australia, including by the NHMRC, ARC, Australian Research Data Commons, Universities Australia, Group of Eight Universities, the Office of the Chief Scientist and the Learned Academies.

Introduction

At the beginning of 2020, CAUL and AOASG were preparing to convene roundtables of key groups within Australia to discuss a national approach to open research in Australia. These roundtables were the culmination of a series of discussions and activities throughout 2019. They were given impetus by developments overseas and nationally, which had indicated that there was an emerging interest in developing an overarching national approach in Australia to open research, that combined the various elements of an open research ecosystem. An initial roundtable was planned for March 2020 in Canberra, but like many events was cancelled at short notice as the COVID-19 pandemic accelerated.

Work prior to planned March 2020 roundtable

CAUL reports and policy statements
- [Roadmap to Plan S for Australia](#)
- [Intellectual property rights retention in scholarly works at Australian universities](#)
- [Collection and Reporting of Article Processing Charges](#)
- [Review of Australian Repository Infrastructure](#)
- [Statement on Open Scholarship](#)

Advocacy and other outreach
- [AOASG](#) resources including ongoing [webinar series](#)

Policy submissions
- Developing a strategic approach to open scholarship in Australia: [Joint CAUL-AOASG Election Statement](#)
- [Initial](#) and [follow up](#) submissions to House of Representatives Standing Committee on Employment, Education and training – Inquiry into Funding Australia's Research
- [Support](#) for Federal Government response to the recommendations from the Productivity Commission Inquiry into Intellectual Property Arrangements

FAIR Steering Group
The FAIR Steering Group has been active since 2016. The membership comprises a cross section of organisations with an interest in open research. The current Chair is Catherine Clark, CAUL Director of the Advancing Open Scholarship Program. Its key output was a [statement](#) that supported the principles of FAIR for research outputs. Since the statement was released it has been a valuable sounding board for discussions on FAIR and open research across Australia, including the 2020 activities.

June 2020: first online roundtable
Following further discussions with the FAIR Steering Group, the postponed roundtable was convened online in June 2020.

Appendix - Virtual Sessions on Open and FAIR dissemination of research: background briefing May 2020.

Key discussion points
- Need to ensure that infrastructure is ready to fully support a national approach
- Need to clearly define the scope of the national approach
- Important to communicate the imperatives and benefits of open scholarship widely
- Any approach needs to be national, but should also reference and leverage international initiatives
- **The roundtable participants agreed that an Australian national approach for FAIR and open research is required**

June - November 2020: consultations and public events
From June to November 2020, AOASG and CAUL undertook a series of consultations: with individual roundtable participants; international collaborators from Finland, Malaysia, Ireland, Canada and the EU; and representatives of key governmental organisations.
Following these consultations, three public events were convened in order to provide open discussions on a national approach.

First webinar, 12 November 2020

International Perspectives: Developing a national strategy for open research
Recording
Participants
- Dr Pirjo-Leena Forsström (IT Centre for Science, Finland)
- Dr Patricia Clarke (HRB Open Research, Ireland)
- Professor Noorsaadah Abd. Rahman (University of Malaya)

Second webinar 23 November 2020

National perspectives: Developing an overarching national strategy for open research in Australia
Recording
Participants
- Dr Cathy Foley, Chief Scientist, CSIRO and Australia's next Chief Scientist
- Professor Robyn Owens, Emeritus Professor, and former DVCR, UWA
- Ryan Winn, Chief Executive Officer, Australian Council of Learned Academies

Unconference session 4 December 2020

An Australian National Strategy for Open Research: Let's talk!
Association for Interdisciplinary Meta-research and Open Science (AIMOS) conference
Recording
Facilitators:
- Dr Ginny Barbour (AOASG)
- Dr Eva Méndez (Universidad Carlos III de Madrid) and the EU Open Science Policy Platform

December 2020: second online roundtable
At the beginning of December 2020, CAUL and AOASG co-hosted a second roundtable.

Key discussion points
- A national strategy needs a sponsor coming from government or a government-related portfolio.
- Any strategy would need to be developed by all the stakeholder groups (and more) that were represented at the roundtables so as to ensure it is relevant, well understood, and gains commitment and participation across the sector.

Conclusions from 2020 activities

General

- It is not necessary for Australia to wholly reinvent the process of developing an open research strategy: there is much to learn from other countries
- There is no one prescribed route or starting point, though the process often starts with a coalition of the willing
- Careful consideration is needed to ensure both the process and the stakeholders are appropriate for the Australian environment.

Some components are essential

- A high level champion or sponsor, with good links to government, maximises the chance of success
- Wide consultation and buy in across the sector are needed, and hence time frames need to reflect that
- Specific case studies that demonstrate need are likely to be necessary
- Dedicated logistical and/or financial support is essential for the coordination of the development of a strategy

Next steps

The importance of open research, and hence a coordinated strategy, will only continue to increase in 2021 and beyond. AOASG and CAUL will continue to meet with relevant stakeholders, including Dr Foley, the new Chief Scientist, in the early part of 2021 to determine in the first instance who the sponsor for a national approach might be.

January 2021
Virginia Barbour, Director, AOASG
Catherine Clark, CAUL Director, Advancing Open Scholarship (FAIR) Program, University Librarian, Curtin University
Mark Sutherland, Executive Director, CAUL

Virtual Sessions on Open and FAIR dissemination of research: background briefing, May 2020.

Why is full and immediate open access to Australia's research important for research, development, innovation and education in Australia?

Recent national and global events, especially the 2019/20 bushfires in Australia and the pandemic of the coronavirus disease (COVID-19), have brought into sharp focus the need for rapid, coordinated sharing of research and data. In response to the pandemic particularly there has been an outpouring of research, virtually all of which is now openly available, at least in the short term. The pandemic has established that there is the will and the technical capability to make research open[1], but whether this leads to long term change will depend on decisions taken now.[2]

Now, more than ever, a strategic Australian national approach to the Open and FAIR dissemination of research is needed. Such an approach would ensure that opportunities provided by new open publishing models are realised in order for global challenges to be efficiently addressed, that costs are constrained and national and international collaboration in advancing OA and FAIR dissemination is maximised.

Making research publications immediately open access and FAIR (Findable, Accessible, Interoperable and Reusable) for dissemination will:

- Maximise the worldwide reach, utility and impact of research produced by Australian researchers
- Advance the UN's Sustainable Development Goals (SDGs) by supporting equitable access and equitable contribution to research
- Enable engagement between universities, government and industry
- Help counter the spread of misinformation and fake news
- Boost public confidence in research by improving transparency of the research process

---

[1] Kupferschmidt, K. ''A completely new culture of doing research.' Coronavirus outbreak changes how scientists communicate' *Science*, 26/02/2020, Available at: https://www.sciencemag.org/news/2020/02/completely-new-culture-doing-research-coronavirus-outbreak-changes-how-scientists

[2] https://www.science.org.au/curious/policy-features/open-science-after-covid-19-pandemic-there-can-be-no-return-closed-working

- Ensure that Australia's publicly-funded research is used to address the huge economic and societal challenges being faced by Australia and the rest of the world

At the beginning of 2020 the international research community had reached a pivotal moment in the progression of full and immediate Open Access (OA) to research. While OA has continued to grow year on year[3,4] it is still far from full OA many hoped to achieve by 2020.[5]

In 2018 Australian universities self-reported that an average of 32% of research publications submitted to the 2018 ERA were OA,[6] the CWTS Leiden Ranking 2019 for OA showed that by 2017 only an average of 40.3% of Australia's research was OA.[7] The difference between these two measures is also cause for concern and with the emergence of Plan S and its impending commencement at the beginning of 2021, action in 2020 has become even more important.

The remainder of this document summarises recent international developments and progress being made towards OA in Australia in order to frame current and emerging challenges.

Recent global progress in OA

Plan S

The key international driver of OA currently is Plan S, triggered in 2016 when Jean-Claude Juncker, then President of the European Commission, became aware that despite the set of commitments that European Member States had made to move to OA by 2020 there was little actual change. Robert-Jan Smits, Director-General Research and Innovation at the European Commission, was appointed to pull together a coalition (cOAlition S) and to develop a plan to address this, which became known as Plan S.[8] Plan S is currently supported by more than 20 funders and other organisations including UK Research and Innovation and the World Health Organisation. Its primary principle is that "*from 2021, scientific publications that result from research funded by public grants must be published in compliant Open Access journals or platforms.*"[9] There are a series of supporting principles, including the need to address incentives in publishing. Importantly, there is no intention to require researchers to publish in a prescribed set of journals: the only requirement is that they have to make a version of the work fully OA by either journal-based or repository-based OA.

OA in the USA

Currently there are unconfirmed reports that the White House may be about to deliver an Executive Order on OA in the US and the White House Office of Science and Technology Policy

---

[3] https://peerj.com/articles/4375/

[4] https://poeticeconomics.blogspot.com/2020/

[5] https://oa2020.org/

[6] https://dataportal.arc.gov.au/ERA/NationalReport/2018/pages/section1/open-access/

[7] https://www.leidenranking.com/

[8] https://www.sciencemag.org/news/2016/05/dramatic-statement-european-leaders-call-immediate-open-access-all-scientific-papers

[9] https://www.coalition-s.org/

is conducting a consultation.[10] The Scholarly Publishing and Academic Resources Coalition (SPARC) is one of a number of organisations responding to this possible action.[11]

Other national plans for OA

A number of countries have developed strategic plans for OA. A feature of the most successful ones is high level support by a key individual or group. Examples include the Netherlands (support from Sander Dekker, then Minister for Science[12]), Sweden (Advisory Group for Open Access chaired by the Chair of the Board of The Swedish Rectors' Conference[13]), and, just last month, Canada (support from Canada's Chief Science Advisor[14]).

Institutional responses to OA

Institutions are at the frontline of changes in the scholarly communications landscape, including responding to OA. Currently the burden of journal subscriptions (in excess of $310 million annually for Australian Universities[15]) falls squarely upon them, as, increasingly, does the need to support article processing charges (APCs) in the journals that require them. Increasingly, institutions are challenging the costs of subscriptions and are negotiating with publishers not only to contain price increases for subscriptions but for agreements with publishers to include payment for publishing openly in relevant journals (publish and read agreements). Where deals cannot be made, institutions, or, on occasion, whole of country consortia, are cancelling subscriptions. Notable examples include the University of California which has had no agreement with Elsevier for over a year,[16] and Sweden, which agreed a deal in 2019 after a cancellation in 2018 and an extended period of negotiation.[17] A list of cancelled deals is maintained by SPARC.[18] A list of negotiated deals is kept by Efficiency and Standards for Article Charges (ESAC)[19], initially an initiative of the German Research Foundation (DFG) and which is now the preferred international site for sharing of these deals. It includes two deals negotiated by the Council of Australian University Librarians (CAUL) on behalf of Australian universities. These published lists are important in increasing transparency in the system—one key principle of Plan S.

---

[10] https://www.federalregister.gov/documents/2020/02/19/2020-03189/request-for-information-public-access-to-peer-reviewed-scholarly-publications-data-and-code

[11] https://sparcopen.org/our-work/rumored-2020-white-house-open-access-policy/

[12] https://vsnu.nl/files/documenten/Domeinen/Onderzoek/Open%20access/Ezine-OpenAccess-ENG-mrch2016.pdf

[13] http://www.kb.se/dokument/open%20access/OpenAccess_National_Library_Sweden_2017_2019.pdf

[14] http://science.gc.ca/eic/site/063.nsf/eng/h_97992.html

[15] Data from CAUL

[16] https://osc.universityofcalifornia.edu/uc-publisher-relationships/uc-and-elsevier/

[17] https://www.kb.se/samverkan-och-utveckling/nytt-fran-kb/nyheter-samverkan-och-utveckling/2019-11-22-%E2%80%8Bnew-transformative-agreement-with-elsevier-enables-unlimited-open-access-to-swedish-research.html

[18] https://sparcopen.org/our-work/big-deal-cancellation-tracking/

[19] https://esac-initiative.org/about/transformative-agreements/

The situation in Australia

Despite a number of groups advocating for OA nationally, including CAUL[20] and the Australasian Open Access Strategy Group (AOASG),[21] Australia lacks a coordinated approach to open scholarship. However, Australia has a strong history of support for OA within a number of individual institutions including:

- In 2000 ANU established the first institutional repository in Australia.
- In 2003 QUT developed the world's first policy on OA to research outputs in a repository.
- From 2006-8 the Australian Government invested money in open access infrastructure by providing funding for development of university repositories through the National Collaborative Research Infrastructure Strategy for the Australian Research Repositories Online to the World (ARROW) and Rural Universities Building Research Infrastructure Collaboratively (RUBRIC) projects, and the Australian Scheme for Higher Education Repositories (ASHER) project. There is no ongoing central support for these repositories and no national coordination of them.
- Since 2012-13, the two major Australian government research funders, the ARC[22] and the NHMRC[23], have had open access policies (though they currently specify open access after 12 months).
- From 2016 OA was specified in the CSIRO Statement of Expectations.[24]
- In 2016 the F.A.I.R. (Findable, Accessible, Interoperable, Reusable) Policy Statement[25] for access to Australia's research outputs was developed by a Working Group that was convened by the Universities Australia DVCR Committee.
- In 2016 the Productivity Commission recommended the need for a National Open Access policy[26] and in 2017 the Government accepted that recommendation but has not yet acted on it.
- In 2018 The House of Representatives Standing Committee on Employment, Education and Training in 2018 in its inquiry into the Australian Government Funding Arrangements for non-NHMRC Research supported an AOASG proposal and recommended that "*the Australian Government develop a more strategic approach to Australia's open scholarship environment.*"[27]
- In 2019 CAUL and AOASG advocated for a strategic approach ahead of the federal election.[28] The Australian Government is yet to respond to this recommendation.
- Most of Australia's universities have an OA policy or statement but they vary in scope and detail.

---

[20] https://www.caul.edu.au/programs-projects/advancing-open-scholarship-fair

[21] https://aoasg.org.au/

[22] https://www.arc.gov.au/policies-strategies/policy/arc-open-access-policy

[23] https://www.nhmrc.gov.au/about-us/resources/open-access-policy

[24] https://www.csiro.au/en/About/Leadership-governance/Minister-and-Board/Statement-of-Expectations

[25] https://www.fair-access.net.au/

[26] https://www.pc.gov.au/inquiries/completed/intellectual-property/report

[27] https://www.aph.gov.au/Parliamentary_Business/Committees/House/Employment_Education_and_Training/FundingResearch/Report/section?id=committees%2freportrep%2f024212%2f26656

[28] https://www.caul.edu.au/news/joint-caul-aoasg-election-statement

Questions for participants to consider ahead of the virtual sessions:
(Please feel free to consult as appropriate ahead of the meeting)

- In the context of open scholarship what do you think are the key principles that need to be established for access to Australia's research?
- What do you see as the major challenges in achieving a national approach to open scholarship?

May 2020

Virginia Barbour, Director, AOASG
Catherine Clark, CAUL Director, Advancing Open Scholarship (FAIR) Program, University Librarian, Curtin University
Mark Sutherland, Executive Director, CAUL