• OPEN REPOSITORIES REPORT SERIES

Advancing Open: Views from Scholarly Communications Practitioners

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(on behalf of the CARL Open Repositories Working Group's Task Group on Community Building and Engagement)

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Preamble

Intent of Event

> *Given the bold actions of our European counterparts in advancing open scholarship at consortial, national, and regional levels — including Projekt Deal[1], Plan S[2], and the Foundations for Open Scholarship Strategy Development[3] — the Canadian Association of Research Libraries (CARL) Open Repository Working Group (ORWG) Task Group for Community Building & Engagement (CBE) prioritized creating an opportunity for the Canadian academic library scholarly communication practitioner community to convene, share best practices and expertise, and explore refreshed strategies to foster open scholarship in Canada.*

It is vital that the Canadian open scholarship community keep pace with the global advancement of open and reusable research, and scholarly communication practitioners — who have constant immersion in the open scholarship space — are uniquely positioned to consider current and potential activities, supports, and priorities at local, regional, and national levels that will best advance open scholarship across Canada. In order to provide a forum for practitioners to be heard, the CBE group organized *Advancing Open*, a 1.5-day event held in Vancouver, British Columbia, May 6-7, 2019. This event provided a unique opportunity for scholarly communications practitioners to convene and delve into two key questions:

> *What is holding open scholarship back in Canada?*
>
> *What actions and strategies will mobilize open initiatives and uptake in the academic environment in Canada?*

Focus on Practitioners

Advancing Open welcomed more than 70 participants from across Canada who either work directly in areas of open research such as open repository archiving, research data management planning, and library and press publishing, or who work in other areas of the library (e.g. collections, systems, liaison with academic departments) and whose work increasingly intersects with open scholarship.

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[1] Projekt Deal. (n.d.). *About*. https://www.projekt-deal.de/about-deal/

[2] Science Europe. (2018, September). *cOAlition S for the realisation of full and immediate open access*. https://www.scienceeurope.org/wp-content/uploads/2018/09/cOAlitionS.pdf

[3] Tennant, J., Beamer, J., Bosman, J., Brembs, B., Chung, N. C., Clement, G., Crick, T., Dugan, J., Dunning, A. Eccles, D., Enkhbayar, A., Graziotin, D., Harding, R., Havemann, J., Katz, D., Khanal, K., Kjaer, J. N., Koder, T., Macklin, P., & Turner, A. (2019, January 30). Foundations for open scholarship strategy development. https://doi.org/10.31222/osf.io/b4v8p

The event used an unconference approach through primarily small-group facilitated "breakout sessions" to discuss work done to date in specific areas related to open scholarship and propose actions for moving forward; all discussions were led and facilitated by members of the scholarly communication practitioner community. Participants were welcome to move among the groups, or stay in one group they were particularly interested in.

Discussion focused on five key themes that had been determined following pre-event consultation with the open scholarship community:

- **Open Policy** (institutional, regional, national, and international policies)
- **Open Workflow and Operations** (e.g. day-to-day open scholarship work)
- **Open Technology** (software and/or infrastructure that supports open scholarship)
- **The Human Element — Open People** (diversity and inclusion, workload, and community support)
- **Open Outreach** (open scholarship advocacy)

Notes were taken by members of the CBE group and other planning committee members in each discussion session in order to document the perspectives of participants to the best of our ability, and it is thus the **perspectives of the participants** at *Advancing Open* that form the backbone of this document. This document summarizes, analyzes, and proposes recommendations for future action. Using the notes generated during the plenary sessions and themed sessions on specific aspects of scholarly communication practice, a number of common perspectives and themes were identified that the event participants felt are essential to advancing open scholarship in Canada. This paper presents the perspectives of participants in these five specific themed discussions in no particular order.

The event was a rare opportunity for the Canadian academic library scholarly communication community to convene, critically reflect on the success of its efforts to date in supporting open research practices, and chart a path toward sustainable infrastructures for these practices. *Advancing Open* proved meaningful to the community in several different ways:

- the transfer of knowledge from experienced practitioners to those new to scholarly communications or to the profession;
- the sharing of demonstrated best practices to increase engagement at the local level (but also with a strategic eye to influencing provincial and national policy);

- critical assessments of previous and current efforts to lower the economic barriers to both the creation and dissemination of academic publications, and identification of measures that have been most successful to date;
- and, identifying aspects of open access scholarly communications and publishing that require improvements, and proposing recommendations for implementing those changes.

The *Advancing Open* event helped identify practitioner-led directions and solutions designed to increase the uptake and commitment to open scholarship that will support a future-ready and competitive Canada where citizens have full access to their institutions' world-class scholarly research. In turn, this report has been written for the scholarly communications community in Canada to *a) use as a discussion instrument with academic library leaders and decision makers and b) strengthen both vertical and peer-level strategic alignment for advancing open scholarship in Canada*. The report will also help the scholarly communications community set its own priorities for grassroots action.

The State of Open Scholarship in Canada

The Library and Information Sciences (LIS) sector has been invested in open access (OA) since the very beginning of organized, collective efforts toward OA for all peer-reviewed research.[4] Seventeen years later, the LIS sector continues to work toward and advocate for the now broader concept of open scholarship, which encompasses open access, open data, open educational resources, and open research practices. LIS professionals have consistently taken the position that open scholarship is an essential public good that must be strengthened and supported by all open scholarship stakeholders.[5] Supporting open access initiatives at the local level — via institutional repositories, open journals, and monographs, and by funding open platforms and initiatives such as Érudit, the Federated Research Data Repository (FRDR), and the Public Knowledge Project (PKP) — is central to the future of open scholarship that is conceived of as serving the public good.

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[4] Chan, L., Cuplinskas, D., Eisen, M., Friend, F., Genova, Y., Guédon, J. C., Hagemann, M., Harnad, S., Johnson, R., Kupryte, R., La Manna, M., Rév, I., Segbert, M., de Souza, S., Suber, P., & Velterop, J. (2002). *Budapest open access initiative*. https://www.budapestopenaccessinitiative.org/read

[5] Daniels, J., & Thistlethwaite, P. (2016). *Being a scholar in the digital era: Transforming scholarly practice for the public good*. Policy Press; Roach, A., & Gainer, J. (2013). On open access to research: The green, the gold, and the public good. *Journal of Adolescent & Adult Literacy, 56*(7), 530-534. https://doi.org/10.1002/JAAL.177; Tennant, J. P., Waldner, F., Jacques, D. C., Masuzzo, P., Collister, L. B., & Hartgerink, C. H. (2016). The academic, economic and societal impacts of open access: an evidence-based review. *F1000Research, 5*, 632. https://doi.org/10.12688/f1000research.8460.3

Researchers funded by Canada's three federal research funding agencies are required to comply with an open access policy on publications.[6] Additionally, a research data management policy has been drafted which — in its preamble — is situated within national declarations on openness, including the Action Plan on Open Government and the Agencies' own internal broad policy shift toward openness.[7] Other research-funding agencies have similar policies,[8] and several post-secondary educational institutions have now adopted institutional open access policies or mandates.[9] Despite this progress at developing high-level mandates, recent research into the current state of open scholarship in Canada has shown researcher compliance rates with the Tri-Agency Open Access Policy on Publications (that is, making scholarly articles openly available within 12 months of publication) is below 50%, a compliance rate that is well below other countries' compliance rates in the United States and the United Kingdom.[10] This indicates there is a great deal of work that remains to be done in order to create a strong foundation upon which to base a modern approach to open scholarship.

The Canadian scholarly communications landscape has grown in the nearly two decades since organized efforts toward open access began: a study by Shearer in 2003 on behalf of CARL identified 12 universities in the country which had already implemented an institutional repository (IR).[11] By 2019, there were approximately 67 academic institutional repositories in Canada.[12] The vast majority of the IRs are multi-disciplinary, and the most commonly used software used to support those IRs is DSpace (48% of identified repositories).[13]

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[6] Government of Canada. (2015). *Tri-Agency open access policy on publications*.
http://www.science.gc.ca/eic/site/063.nsf/eng/h_F6765465.html?OpenDocument

[7] Government of Canada. (2018). *Draft Tri-Agency statement of principles on digital data management*.
http://www.science.gc.ca/eic/site/063.nsf/vwapj/dmp_draft.pdf/$file/dmp_draft.pdf

[8] Genome Canada. (2008). *Policy on access to research publications*.
https://www.genomecanada.ca/sites/default/files/pdf/en/AccessResearchPublicationsPolicy.pdf; Heart and Stroke Foundation of Canada. (n.d.). *HSF open access to research outputs policy: Guidelines*.
http://www.hsf.ca/research/en/hsf-open-access-research-outputs-policy-guidelines; Prostate Cancer Canada. (2016). *Policies for research grants and awards: open access*. http://www.prostatecancer.ca/Research/Grants-and-Awards-Guide/Policies-for-Research-Grants-and-Awards#_Open_access

[9] Canadian Social Knowledge Institute (C-SKI). (2017, October 2). *Canadian university open access statements*. Open Scholarship Policy Observatory. https://ospolicyobservatory.uvic.ca/canadian-university-open-access-statements/

[10] Larivière, V., & Sugimoto, C. R. (2018). Do authors comply when funders enforce open access to research? *Nature 562*, 483-486. https://doi.org/10.1038/d41586-018-07101-w

[11] Shearer, K. (2003). Institutional repositories: Towards the identification of critical success factors. *Canadian Journal of Information and Library Science, 27*(3), 89-108. Preprint: http://dx.doi.org/10.11575/PRISM/29084

[12] Retrieved from Canadian Repository Platforms - Plateformes de dépôts canadiens https://docs.google.com/spreadsheets/d/1LYaS1fbnYNEeWTN3ribt4j5whIfOIGIy-KXYgwfpspg/edit April 2020.

[13] Retrieved from Canadian Repository Platforms - Plateformes de dépôts canadiens https://docs.google.com/spreadsheets/d/1LYaS1fbnYNEeWTN3ribt4j5whIfOIGIy-KXYgwfpspg/edit April 2020.

Where once the establishment of an institutional repository was seen as groundbreaking, the boundaries of open scholarship have grown immensely in Canada and elsewhere, with considerations of OA/APC funds[14], institutional open access policies and mandates,[15] open data requirements, open educational resources,[16] embedding open scholarship into tenure and promotion requirements,[17] relationship-building among various stakeholders,[18] and scholar-led community publishing initiatives all equally essential to the current discussion of open scholarship in Canada. This report will address many of the aforementioned issues from the perspective of scholarly communications practitioners, a group which is witness to the minutiae of implementing open scholarship policies and initiatives, and who have a unique perspective on our current capacity — as individuals, practitioners, institutions, regional consortia, and national agencies — to not only support open scholarship, but ensure it grows to meet the needs of future researchers, information professionals, and citizens alike.

Methodology

An unconference approach was chosen for this event as the participants attending were generally anticipated to have a high level of expertise or knowledge in the field. The goal was to have participant-driven discussions on key topics. The data which forms the basis of this report is comprised of extensive notes taken during discussions at every plenary and breakout session held at *Advancing Open*. These notes were taken by members of the *Advancing Open* Planning Committee, and can be viewed [here](). These notes attempted to capture the ideas, arguments, challenges, and opportunities expressed by participants, at times recording direct quotations.

After the *Advancing Open* event, Holly Pickering and Daniel Cockroft (MLIS/Humanities Computing research assistants at the University of Alberta) performed text analysis to analyze the vast amount of text produced, synthesize the notes into broader concepts, concerns, and proposals, and note divergent

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[14] Hampson, C. (2014). The adoption of open access funds among Canadian academic research libraries, 2008-2012. *Partnership: The Canadian Journal of Library and Information Practice and Research, 9*(2). https://journal.lib.uoguelph.ca/index.php/perj/article/download/3115/3394/0

[15] Landry, C. (2017). *OA policies in Canada: A quick and dirty environmental scan*. Open Shelf. https://open-shelf.ca/160201-ocula-oa-policy-in-canada-a-quick-and-dirty-environmental-scan/

[16] Canadian Alliance of Student Associations. (2017). *Building access, building canada: A strategy for the federal government's role in post-secondary education*. https://www.casa-acae.com/building_access_building_canada

[17] Alperin, D., Pablo, J., & Yano, B. (2017). Advancing open at Simon Fraser University: The faculty and student experience. Conference presentation at Digital Initiatives Symposium. https://digital.sandiego.edu/symposium/2017/2017/16/

[18] Greyson, D., Vezina, K., Morrison, H., Taylor, D., & Black, C. (2009). University supports for open access: A Canadian national survey. *Canadian Journal of Higher Education, 39*(3), 1-32. http://journals.sfu.ca/cjhe/index.php/cjhe/article/view/472/499

opinions and comments. The CBE task group then analyzed these documents and used them to create this report as a reflection of the scholarly communications practitioner community in Canada: its concerns, priorities, and goals for the future of open scholarship.

We now present our findings representing the gathered perspectives of the 70 members of Canada's open scholarship community in attendance at *Advancing Open*.

Open Scholarship Policy

Three discussion points were posed to each small-group facilitated session. In the Open Policy sessions, the questions were:

> *How should Canada prepare for upcoming changes in publishing brought on by Plan S and other international OA policies?*
>
> *The stick vs. the carrot — should we be focusing our efforts on pushing for OA policies or on ways to incentivize open (e.g. recognition of open publishing in advancement and promotion guidelines)? How does this play out locally? Can both strategies effectively work together?*
>
> *CARL and CRKN have stated recently that they are committed to working with other stakeholders to develop a "made-in-Canada" approach to sustainable open scholarship. What do you think such an approach should look like, and how can you contribute?*

International Initiatives

The launch of international initiatives like Plan S[19] shows that the information landscape is shifting along with the culture of scholarly publishing, but participants at *Advancing Open* expressed the view that Canada, unlike Europe which has been working toward OA2020[20] for some years, is not currently prepared to make a major step toward a transformative open scholarship model of this kind. The necessary foundation of funders and networks has not yet been established in Canada, and participants cautioned that a simple duplication of existing international initiatives is not sufficient, as many do not address the underlying

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[19] Plan S. https://www.coalition-s.org/

[20] OA2020. https://oa2020.org/

inequities and commercial interests at the heart of many "transformative" plans and agreements.

Reactions of participants to the draft Plan S implementation guidelines specifically indicated that this initiative would be hard to enforce and the technical requirements for repositories and journals were excessive and difficult to implement (e.g. a mandatory requirement for JATS/XML). After the *Advancing Open* event, cOAlition S did release a revised implementation guide that lessened some of the technical requirements, but the now "strongly recommended" criteria is still currently out of reach for many Canadian post-secondary libraries.[21] Other concerns included the heavy emphasis on Gold OA over other models; no mandate for open source (OS) infrastructure, which will hinder progress in this area and may call into question security of community investment in open[22]; and a lack of clarity regarding how read and publish agreements will work in practice.

This initiative in its current iteration is not right for Canada, but it opens up dialogue as demonstrated by the number of responses it has elicited, including from the Canadian Association of Learned Journals (CALJ)[23] and the CARL Response to Plan S[24]. While Plan S is not something that Canada can or should adopt at this time, it does open the conversation to consider different models for creating a "made in Canada" approach. We need to evaluate international initiatives (e.g. Norway, Germany, California) and learn from successful national Canadian initiatives (e.g. Portage[25]).

Relationships with Stakeholders

Discussion of Plan S highlights the need for academic libraries to engage broadly with academic associations and researchers. While national organizations like CARL and the Canadian Research Knowledge Network (CRKN) have indicated they wish to take a leadership role in open scholarship, there are multiple stakeholders and to be effective, they cannot do this alone. Firstly, open scholarship must work for researchers or it will not be successful — working with this group is key. Secondly, it is necessary to build a more transparent, reciprocal relationship between scholarly

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[21] cOAlition S. (2019, May 31). *Accelerating the transition to full and immediate Open Access to scientific publications: Rationale for the revisions made to the Plan S Principles and Implementation Guidance*. https://www.coalition-s.org/wp-content/uploads/PlanS_Rationale_310519.pdf.

[22] For more information on this point, see: Joseph, H. (2018). Securing community-controlled infrastructure SPARC's plan of action. *College & Research Libraries News, 79*(8). https://crln.acrl.org/index.php/crlnews/article/view/17246/18986

[23] Canadian Association of Learned Journals. (n.d.) *Plan S: A Perspective from Canadian journals*. https://www.calj-acrs.ca/sites/default/files/calj_response_to_plans.pdf

[24] Canadian Association of Research Libraries. (2018). *Response from CARL to the Plan S Implementation Guidance*. http://www.carl-abrc.ca/wp-content/uploads/2019/02/CARL_Response_to_PlanS_2019.02.08.pdf

[25] Portage Network. https://portagenetwork.ca/

communications practitioners and national organizations that represent and/or provide insight to the perspectives and interests of researchers, including Canada's federal granting agencies and learned societies.

We need to strengthen leadership/practitioner communications through deliberate, planned information-sharing strategies and events. Clarification of open scholarship roles and goals of leadership organizations like CRKN, CARL, Library and Archives Canada (LAC), and Canada's federal granting agencies are key to this discussion. It is clear that the current means of working toward adoption of open scholarship are not adequate, and "encouragement" to practise open scholarship is not sufficient.[26]

Participants posed questions on how to define the roles among national stakeholders, and what their relationships to practitioners should encompass. Clarification from national stakeholders on their capacity to lead open scholarship initiatives and areas of support they can offer is an important part of these discussions in order to better identify and define opportunities for collaboration and meaningful progress.

Institutional Policy and Advocacy

Institutional OA policies at Canadian universities[27] are not, in themselves, the solution. However, an OA policy is an indicator that open scholarship is officially endorsed by the institution, that there has been a stronger degree of open scholarship socialization among administrators and faculty at those institutions, and it couples with the Tri-Agency requirements for open access. Institutional OA policies vary widely from statements of "encouragement" to establishment of mandatory practice, but wherever they are on the spectrum, they have the potential to influence and motivate researchers to consider open scholarship options. While it has yet to be determined if an institutional OA policy alone can translate to action, it does open up an opportunity for discussion and education.[28]

An OA policy is a tool that must be partnered with additional resources in order to increase impact. One essential resource is extensive training of staff in libraries and research offices who are on the frontlines of offering ongoing open scholarship outreach and advocacy. The United Kingdom is an example of established training

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[26] Larivière, V., & Sugimoto, C. R. (2018). Do authors comply when funders enforce open access to research? *Nature 562*, 483-486. https://doi.org/10.1038/d41586-018-07101-w

[27] Open Scholarship Policy Observatory. https://ospolicyobservatory.uvic.ca/category/policy/

[28] Landry, C. (2017). *OA policies in Canada: A quick and dirty environmental scan*. https://open-shelf.ca/160201-ocula-oa-policy-in-canada-a-quick-and-dirty-environmental-scan/

and support models (e.g. UKRG, Jisc, RLUK, SCONUL) that correlate with an uptake of open scholarship that is much greater than in Canada.[29]

Participants of *Advancing Open* viewed integrating open scholarship into tenure and promotion regulations and in collective agreements as an essential component to furthering open scholarship and changing the culture of academic publishing. Questions posed by participants included how such conversations get started within institutions, and how advocacy from the academic library could play a role in those conversations. Some institutions in North America have already undertaken this work, and their experience can provide guidance on how the library can advocate through OA policy and influence promotion and tenure guidelines to promote a more equitable and accurate evaluation of scholarship.[30]

Impediments exist in the form of academic values of individualism and competitiveness in publishing and research, combined with a complicated approach to academic freedom and publishing. Faculty are also constrained by institutional and/or departmental evaluation criteria, which often rely on ideas of prestige and related metrics like the Journal Impact Factor, and often do not fight as hard for their copyright as they do for their academic freedom.[31] In addition, some disciplinary practices prescribe specific journals in which faculty should publish, which effectively blocks participation in open scholarship publishing.[32]

Despite these challenges, the aforementioned examples of combined top-down (policy) and bottom-up (advocacy) approach can shift institutional inertia.

Resources

Article Processing Charges (APCs) were seen by many participants as an unsustainable and inequitable model, but it is documented that several Canadian institutions have OA funds in place that help pay for APCs.[33] Open scholarship

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[29] Larivière, V., & Sugimoto, C. R. (2018). Do authors comply when funders enforce open access to research? *Nature 562*, 483-486. https://doi.org/10.1038/d41586-018-07101-w

[30] Hilstob, K. (2018). Rewarding open access: The power of promotion and tenure. *University of British Colombia Library (Vancouver),* https://doi.org/doi:10.14288/1.0367401; Odell, J. D., Coates, H. L., & Palmer, K. L. (2016). Rewarding open access scholarship in promotion and tenure: Driving institutional change. *College & Research Libraries News* July/August 2016. https://scholarworks.iupui.edu/bitstream/handle/1805/10343/322.full.pdf

[31] Niles, M. T., Schimanski, L. A., McKiernan, E. C., & Alperin, J. P. (2019). Why we publish where we do: Faculty publishing values and their relationship to review, promotion and tenure expectations. *BioRxiv*, 706622. https://www.biorxiv.org/content/biorxiv/early/2019/07/21/706622.full.pdf; Wical, S. H., & Kocken, G. J. (2017). Open access and promotion and tenure evaluation plans at the University of Wisconsin-Eau Claire. *Serials Review*, *43*(2), 111-119. https://doi.org/10.1080/00987913.2017.1313024

[32] Australian Business Deans Council. (2019). *2019 journal quality list review final report*. https://abdc.edu.au/wp-content/uploads/2019/12/abdc-2019-journal-quality-list-review-report-6-dec-2019.pdf

[33] Yates, E., Hampson, C., Hatherill, J., Lavigne, J., Nariani, R., Paterson, J., Shires, M., &.Tiessen, R. (2016). *Library open access funds in Canada: Review and recommendations.* Canadian Association of Research Libraries. http://www.carl-abrc.ca/doc/CARLOAWGLibraryOAFundsFinalReport-Jan 2016.pdf; Fernandez, L., & Nariani, R. (2011). Open Access

needs consistent infusions of funding, but many event participants felt funding should be directed not at APC funds but to alternative and more sustainable models, open scholarship initiatives, education, and outreach. If universities redirected their APC funds to open scholarship initiatives, those cumulative funds could support staff to develop more intuitive processes and systems to integrate open scholarship into faculty workflows, and shift energy to advocating, discovering and collecting content that complies with green OA.

Open Technological Infrastructure

Two discussion points were posed to each small-group facilitated session. In the Open Technological Infrastructure groups the questions were:

> *How should academic libraries approach investments in the technical and computing services that underlie open scholarship to ensure a sustainable, lean yet versatile, ecosystem?*
>
> *How can the open community move away from institutions operating their open services in isolation and instead help foster communal expertise and guidance on essential open software functionalities?*

Leadership in Advancing Open Source Infrastructure

Many *Advancing Open* participants expressed a desire to reduce duplication of effort and focus on collaborative initiatives, but current open technological infrastructure requires significantly increased support from the federal level in Canada. While the infrastructure discussions occasionally focused on specific software, the real concern was the lack of coordination within the country for technology-based initiatives when it comes to people and time resources. Canada has the tools to do this work, but no coordinated plan to do it together. An oft-heard question was the following:

> *"Canada is small, why do we each need*
> *to run our own repository?"*

Support and leadership specifically pertaining to digital preservation is unclear at a national level; institutions are trying to do this work on their own, and yet gaps still

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remain in the funding landscape for which no one has taken responsibility.[34] Digital preservation is a core functionality of the library; it differentiates the library from a publisher as logical content steward of institutional knowledge production. Potential national leaders already invested in knowledge dissemination in this landscape include Portage, Library and Archives Canada, and Canada's federal granting agencies — with the latter organization close to having mandates for both open access and open research data, the life-cycle of research outputs in its entirety must be considered and supported at each step in that cycle. At the moment, a Canada-wide preservation infrastructure does not currently have a final "home" with any national body.

A common vision leads to the type of impactful leadership found in other countries by creating a long-term sustainable approach to infrastructure. An example of this leadership is demonstrated by CRKN and CARL joining the Global Sustainability Coalition for Open Science Services (SCOSS) and supporting global initiatives like DOAJ and SHERPA-RoMEO.[35] Further collaboration and partnerships like this are essential to growing Canadian capacity to support open scholarship domestically and internationally. Increased connections with Library and Archives Canada and Canada's federal granting agencies are seen as important developments in fostering a national approach to open source infrastructure that supports open scholarship.

Sustainability

There is debate among the community regarding the best approach to sustainable discoverability and interoperability infrastructure for open content: some practitioners propose a universal national infrastructure,[36] while others are in favour of a distributed, coordinated system. An example of shared infrastructure is Arca[37] from BC, which is a shared repository run by BC Electronic Network serving 14 institutions. Some public libraries are also participating. In addition, Arca has a Memorandum of Understanding with the Council of Prairie and Pacific University Libraries (COPPUL) which allows those member libraries to have access to the Arca services.[38] Arca addresses concerns of institutions wanting to brand themselves by allowing for customized sites; a similar project using Islandora is the Council of

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[34] Neugebauer, T., Lasou, P., Kosavic, A., and Walsh, T. (2019). *Digital preservation functionality in Canadian repositories.* Canadian Association of Research Libraries. http://www.carl-abrc.ca/wp-content/uploads/2019/12/orwg_report2_preservation_repos_en.pdf

[35] Canadian Research Knowledge Network. (2019, March 19). *CRKN and CARL join SCOSS, the Global Sustainability Coalition for Open Science Services*. https://www.crkn-rcdr.ca/en/crkn-and-carl-join-scoss-global-sustainability-coalition-open-science-services

[36] OpenAIRE. https://www.openaire.eu/

[37] Arca. https://arcabc.ca/

[38] Arca. (n.d.) COPPUL website. https://coppul.ca/resources/1431

Atlantic University Libraries (CAUL) CAIRN initiative.[39] DSpace may also be used to house more than one repository in a shared instance, as seen by the VIURRSpace example on Vancouver Island.[40] Shared services are also a possibility for digital preservation: COPPUL has an MOU in place to provide access to digital preservation services for Arca (via Archivematica-as-a-service, a hosted service). While these examples are encouraging, they demonstrate effective provincial or regional collaboration and highlight a lack of opportunity for making intentional connections that could be the foundation for a coordinated national approach.

Regardless of the approach, collaboration and shared resources have been identified as essential at all levels — regional, consortial, and national. Existing models in Canada have proven successful, including the Public Knowledge Project and the Federated Research Data Repository. Immediate first steps offered by practitioners include shared services based on function rather than each institution having local teams do all the work of scholarly communications. In this scenario, expertise of those practitioners in metadata, for instance, can be harnessed in a collaborative manner across regions and nationally rather than our current system which often silos practitioners within their own institution.[41] Other common functional areas identified include development of open source infrastructure, improved indexing of institutional repositories, and a "one place to look" discoverability layer for repositories.[42]

In order to expand the scope of work that's currently being done, removing inequality between regional consortia is needed in order to build a federated system. For example, COPPUL and OCUL currently work together on select initiatives,[43] and the scholarly communications community should prioritize expanding that collaboration to CAUL and the Bureau de coopération interuniversitaire (BCI). This again speaks to issues of underinvestment by provincial and federal bodies, as the resources available to each region to build those regional infrastructures are quite different — national funding is needed to bring each region up to a common standard, and then sustained funding is required to ensure regions can build their infrastructure together so that no region is left behind.

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[39] CAUL-CBUA Atlantic Islandora Repository Network. https://www.cairnrepo.org/

[40] VIURRSpace. https://viurrspace.ca/

[41] Garnett, A., Leahey, A., Savard, D., Towell, B., & Wilson, L. (2017). Open metadata for research data discovery in Canada. *Journal of Library Metadata, 17*(3-4), 201-217. https://doi.org/10.1080/19386389.2018.1443698

[42] Sifton, D. and Barry, M. (2017). Towards a cross-Canadian digital library platform. Conference poster presented at the *Joint Conference on Digital Libraries in Toronto*, ON, June 19-23, 2017. http://dx.doi.org/10.25316/IR-5.

[43] OCUL. (2019). *OCUL/COPPUL digital preservation management workshop*. https://ocul.on.ca/OCUL-COPPUL-Preservation-Workshop-Registration-2019

In a related fashion, the open scholarship community can leverage the expertise and connections we already have. For example, CARL institutions could commit to providing one day a week from their technical and scholarly communications experts' time to work on national development issues. This type of collaboration would benefit the community as a whole and connect scholarly communications and information technology in a meaningful and sustainable method, as well ensuring that labour is working in a coordinated way. Another suggestion from participants was for all institutions to fund a national service, similar to the Dataverse model.[44]

Practitioners also identified the importance of consulting with disciplinary communities and associations to understand their needs. While Open Science has a strong foundation,[45] the publication process within humanities is quite different with an emphasis on monographs. Open monographs are a growing field, with digital publishers such as Open Book Publishers, OA university presses like Athabasca University Press, and software like Pressbooks offering new options for open publishing of books, but there still exist challenges in terms of funding and human resources to grow these possibilities.[46] This growth should be done with researchers' voices centred in our planning and implementation. The scholarly publishing ecosystem is changing; preprint servers are an indication from specific disciplines that their needs are not well served by traditional publishing. All stakeholders in scholarly communications need to be at the forefront of discussions that are trying to build an ecosystem that does serve disciplinary needs while ensuring open content is discoverable.[47]

One key factor to ensuring sustainability is understanding that access is not equality, and open is not the same as visible. Barriers exist, and are built into, current open scholarship infrastructure.[48] Barriers encompass a wide spectrum of issues, one example being specific content format and language: many publishing and content platforms do not currently support Indigenous languages. We must ensure barriers to equity in OS infrastructure are removed in new and existing

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[44] Dataverse. (2019). *Dataverse institutions*. https://dataverse.org/institutions

[45] Centre for Open Science. (2019). https://osf.io/

[46] Kwan, A. (2010). *Open access and Canadian university presses: A white paper.* http://blogs.ubc.ca/universitypublishing/files/2010/03/ACUP-White-Paper-Open-Access_Kwan.pdf; Horava, T. (2016). Making OA monographs happen: Library-press collaboration at the University of Ottawa, Canada. *Insights, 29*(1), 57-63. https://doi.org/10.1629/uksg.278; Adema, J. (2019). *Towards a roadmap for open access monographs*. Knowledge Exchange. https://doi.org/10.5281/zenodo.2644997

[47] McCollough, A. (2017). Does it make a sound: Are open access monographs discoverable in library catalogs? *portal: Libraries and the Academy, 17*(1), 179-194. https://muse.jhu.edu/article/645358

[48] Okune, A., Hillyer, R., Albornoz, D., Posada, A., & Chan, L. (2018, June). Whose infrastructure? Towards inclusive and collaborative knowledge infrastructures in Open Science. ELPUB 2018, Jun 2018, Toronto, Canada. https://dx.doi.org/10.4000/proceedings.elpub.2018.31

systems by recognizing the asymmetrical power dynamics and inequality inherent in the open scholarship community as extensions of deep structural inequalities found within academia.[49] Canada is a diverse nation so building and updating national infrastructure to centre a flexible, nuanced, diverse community of practitioners and researchers is an important goal to meet.

Investment

Training and expertise in OS software is essential, but university hiring practices and structure often do not accommodate the technical skills required to effectively maintain OS software, the workflow and work schedule commonly used by skilled developers, nor the fundamental costs inherent to running the software. Training for OS software technical and management staff is crucial and part of any funding should go to that ongoing training.

Practitioners also felt that university investment in infrastructure needs improvement; the lack of funds for dedicated digital preservation storage is a prime example of underinvestment[50]. Practitioners discussed the issue of universities underinvesting in the technical infrastructure required to adequately support open scholarship, as well as an overall underinvestment by national bodies. Institutional cost for setting up individual preservation structures, and the fundamental costs of running software, are often hidden. Individual institutional IT departments may be able to provide additional and/or more robust support with these issues, though not all institutions have access to that service.

Institutional users of open source software should support those foundations (e.g. Islandora Foundation, Lyrasis, etc.) to ensure sustainable development. Community-based approaches to software development is time-intensive and requires contributions from many stakeholders to ensure it happens in a timely manner. However, it's also essential to recognize that support from OS users will look different depending on the resources available to users; one *Advancing Open* participant remarked, "The Big Fix often comes with a big price," and noted that consideration should be given to what constitutes sustainable contributions from small and/or under-resourced institutions, as they are typically less able to contribute at the same scale as larger institutions to open source initiatives.

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[49] Ratan, K., Chan, L., Farley, A., & Joseph, H. (2019). ACRL-SPARC Forum: What we learned about community alignment and equity for emerging scholarly infrastructure. *College & Research Libraries News*, *80*(6), 329. https://crln.acrl.org/index.php/crlnews/article/download/17782/19605.

[50] This finding was echoed in: Hurley, G., & Shearer, K. (2019). *Final report of the survey on digital preservation capacity and needs at Canadian memory institutions, 2017-18* (2019) Canadian Association of Research Libraries. http://www.carl-abrc.ca/wp-content/uploads/2019/11/Digital_preservation_capacity_finalreport_EN-1.pdf

Open People: The Human Element

Two discussion points were posed to each small-group facilitated session. In the Open People groups the questions were:

> *Can open scholarship address structural inequities in academia? Whose voices are missing in the scholarly communications conversation and what can be done to include these? How can respect for Indigenous ways of knowing be ensured within the open scholarship landscape?*
>
> *What supports are needed to ensure open practitioners can achieve a balanced workload? What are reasonable expectations when dealing with minimal resources?*

Centering Indigeneity

The community is seeking strategies to decolonize open scholarship and ensure that respect for, and inclusion of, Indigenous Peoples and Traditional Knowledge is prioritized in our work.

The systems and institutions we work with now are built on colonialist ideals, and we should not expect Indigenous and other minority peoples to be served well by those systems. We must build relationships with marginalized communities and centre their needs in our work if they are to participate fully. Our systems do not currently have sufficient capability to serve Traditional Knowledge, and metadata standards are not inclusive of historically marginalized groups. Even basic multilingualism within our software systems is not well supported.

It must be acknowledged that open practices may not always be appropriate for all forms of knowledge and we must recognize the needs of Traditional Knowledge and advocate alongside communities for appropriate cultural nuance in open scholarship policies. Standards developed by OCAP®[51] establish how First Nations data should be collected, protected, used, or shared and these should be applied in all open initiatives at our institutions, as well as those being developed by the Canadian Federation of Library Associations' Indigenous Matters group.[52] Making this transition requires considerable resources, including sustained funding, human resources, and extensive training.

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[51] First Nations Information Governance Centre. (n.d.) *OCAP®*. https://fnigc.ca/ocap

[52] Canadian Federation of Library Assocations. (n.d.) *CFLA Committee on Indigenous Matters*. http://cfla-fcab.ca/en/about/committees/indigenous_matters_committee/

Indigenous publishers need to be included in our community of practitioners and methods to help with discoverability of this content should be configured to ensure they can be found in the same venues as traditional publications. *Advancing Open* participants expressed concern that open scholarship doesn't line up with different forms of knowledge production and that we may need parallel structures — open scholarship as it's broadly conceived of now might not work with how knowledge is created and shared in different cultural communities.

The academy needs to embrace and seek out Indigenous community engagement with academic research, ideally reflecting this in promotion and tenure guidelines by bringing the Western European academic way of thinking together with other ways of thinking.[53]

It is the duty of those with privilege to hold others with privilege accountable and to decolonize the systems we already have in place. It is also the duty of those with privilege to actively include those without that same privilege to ensure their needs are met and given priority. Transparent work is of utmost importance.[54] Of particular concern is appropriate dissemination of research based upon Indigenous Peoples, and reconsidering the library's role in ensuring access for groups for whom published material exists. As one participant stated:

> *"Accountability to the communities who were studied/were the source of the research requires making that research available to those communities."*

Incorporating small and thoughtful steps can be a foundation upon which scholarly communications practitioners can build a decolonized approach to our work, like the APA LibGuide from NorQuest College Library which has a section on how to cite Indigenous Elders and Knowledge Keepers[55] or incorporating advice from resources like *Elements of Indigenous Style: A Guide for Writing By and About Indigenous Peoples* by Gregory Younging.[56]

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[53] Canadian Research Knowledge Network. (2017). *Institution mobilization toolkit — sustainability challenges.* https://www.crkn-rcdr.ca/sites/crkn/files/2017-11/5-IMTG-V2-Sustainability%20Challenges_EN.pdf

[54] Maron, N., Kennison, R., Bracke, P., Hall, N., Gilman, I., Malenfant, K., ... & Shorish, Y. (2019). *Open and equitable scholarly communications: Creating a more inclusive future*. ACRL. https://doi.org/10.5860/acrl.1

[55] Norquest College Library. (n.d.) *Indigenous elders and knowledge keepers*. APA 6th ed. LibGuide. https://libguides.norquest.ca/apa6/miscellaneous

[56] Younging, G. (2018). *Elements of Indigenous style: A guide for writing by and about Indigenous Peoples*. Brush Education.

Relationship Building

Advancing Open participants expressed a desire to build relationships with Indigenous librarians and community members but were unsure about how to make those contacts. The Library Indigenous community is small, "and yes, we all know each other," but they are also stretched thin. Participants echoed similar questions:

> *"How can we build connections with communities who have been marginalized and excluded?"*
>
> *"How can we [...] create environments that respect their protocols?"*

There is work to be done by non-Indigenous people in engaging with Indigenous Peoples and we must be accountable for changing the scholarly communications ecosystem to ensure it is a welcoming place. The challenges are numerous when striving to involve communities while also not forcing them to participate in structures that don't suit their ways of being/knowing; we are currently asking people to work within a system that does not represent them and that is unacceptable. Participants discussed what meaningful invitations to collaborate entail, if there are ways to work within our current structures, and being prepared to reconsider commonly held ideals about open access. Ultimately we recognize that settlers can never 'own' the open domain for Indigenous Peoples, communities, and Traditional Knowledge.

Funding

Open scholarship needs to be funded adequately to accomplish the necessary work toward decolonization and equity. One proposal suggested at *Advancing Open* was to look at opportunities available through initiatives like SCOSS[57] and funding based on anti-racist and inclusive guidelines.

Funding and investment in open scholarship must include decolonization of the academic publishing ecosystem and equity-focused disbursement of resources.

> *"What kind of system would we build if we started over anew, with respect for indigeneity at the centre of our work?"*

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[57] Global Sustainability Coalition for Open Science Services (SCOSS). https://scoss.org/

Workload and Scholarly Communications

The open scholarship community in Canada continues to raise questions of labour practices and expectations of their work. A number of participants expressed concerns about the lack of sustainability of scholarly communications activities in many institutions, due to overwhelming workloads, insufficient cash resources, and a lack of goal clarity to support the endeavour. A reported perception was that open scholarship work was often undertaken "from the side of the desk", and more responsibilities are continuously added as the scope of scholarly communications work expands. The prominence of open scholarship issues has risen to the Provost and Vice-President Research level, is integrated into Tri-Agency policy, and indeed the federal government has funded large digital research initiatives with a focus on making that research publicly available, but most organizations have not significantly changed their staffing/funding models for open work.

While it seems like more people have responsibilities in scholarly communications at multiple points of the library,[58] the workload is still high. Coupled with this is a lack of clarity about job roles and high expectations for scholarly communications staff to enact institutional change, but a lack of meaningful institutional support to achieve this. Perhaps unsurprisingly given these circumstances, many participants observed and reported experiencing feelings of burnout.[59]

Participants related that being designated as the "open" person means everything even vaguely "open" comes to you, which is an overwhelming labour circumstance. Working more closely with colleagues has advantages but can create more strain, particularly around communication roles, responsibilities, and accountability. There is also a cross-functional component to scholarly communications that requires workers be informed of actions initiated from different departments, but organizational structures do not foster the necessary cross-structural communication to ease the formation and promotion of a cohesive organizational program, as opposed to current structures which position a "point person" as the one individual to handle everything relation to open scholarship.

The CARL Scholarly Communications Roadmap[60] outlines many possible new directions and initiatives but makes no mention of the fiscal resources and the labour force that must be brought to bear to make new initiatives sustainable in

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[58] Hurrell, C., & Murphy, J. E. (2019). An evidence based approach to supporting library staff scholarly communication competencies. *Evidence Based Library and Information Practice, 14*(2), 100-105. https://doi.org/10.18438/eblip29570

[59] Agate, N., Clement, G., Kingsley, D., Searle, S., Vanderjagt, L., Waller, J. (2017). From the ground up: A group editorial on the most pressing issues in scholarly communication. *Journal of Librarianship and Scholarly Communication, 5*(General Issue), eP2196. https://doi.org/10.7710/2162-3309.2196

[60] Canadian Association of Research Libraries. (2017). *CARL scholarly communication roadmap.* http://www.carl-abrc.ca/wp-content/uploads/2017/03/CARL_ScholComm_Roadmap_EN.pdf

Canada. Investment in financial and human resources, as well as consistent professional development, is needed to build and maintain a sustainable ecosystem.

Collaboration and Support

Enhanced, meaningful collaboration with library colleagues in collections, acquisitions, e-resources and liaison work should be developed to achieve the goal of integration of open scholarship issues into all library functions.[61] This would foster initiatives like working with collections librarians to advocate for investment in open scholarship publishing resources, or working with e-resources librarians to build awareness of APC procedures, or liaising with partners (writing centres, research offices, Centres for Teaching & Learning, etc.) to try to collaborate and share workload.

It is important to recognize that much of scholarly communications practitioners' work involves performing emotional labour, which is often not recognized by formal tenure and promotion processes or job descriptions.[62] Developing and maintaining effective relationships with colleagues, faculty, administration, and students is essential to scholarly communications, a field which is centred around advocacy and outreach. Greater support for and recognition of this type of labour is important to scholarly communications practitioners.

Professional Development

Participants expressed difficulty keeping up to date in an area that is constantly evolving. Keeping abreast of a changing scholarly communications landscape is often "invisible work" but takes up a great deal of time to sustain a professional level of awareness. Reliance on organizations like the Scholarly Publishing and Academic Resources Coalition (SPARC) to communicate changes and updates within the open scholarship realm could help with the feeling of not being able to keep up to date and alleviate some of the burden of professional development.

A sense of isolation was also expressed by a number of participants. While some aspects of scholarly communications come up at almost every academic library event, practitioners often feel like they are working in a silo, and find it difficult to connect with other practitioners. There are listservs available to the scholarly communications community, including REPOS-L and SCHOLCOMM-CARL-L, as well as the Scholarly Communications in Canada Slack Channel (which is helpful but is

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[61] Krier, L., Premo, R., & Wegmann, M. (2019). The future is wide open: Sustainable scholarly communications and affordable learning in libraries. *Collection Management, 44:2-4,* 164-175. https://doi.org/10.1080/01462679.2019.1582392

[62] Matteson, M. L., & Miller, S. S. (2013). A study of emotional labor in librarianship. *Library & Information Science Research*, *35*(1), 54-62. https://doi.org/10.1016/j.lisr.2012.07.005

not formalized or funded).[63] However, these environments are not well promoted and practitioners are sometimes slow to find spaces designed for scholarly communications library workers to communicate within Canada.

Roles

There is a lack of clarity around scholarly communications job roles and expectations of staff. Participants proposed a repository of job ads for scholarly communications to help define the work of practitioners. This would allow for a more informed discussion about workload, required skills, and expectations.[64] Increased support for scholarly communications workers at all levels is essential if we are going to continue to increase services and initiatives at our institutions. There were a variety of opinions discussed as to whether scholarly communications is a role for specialists, separate from other librarian work, or if it should be a core part of librarianship — this is a debate that requires greater exploration and engagement with diverse perspectives.

The issues of workload, burnout and uncertainty of roles by those who are tasked with scholarly communications work are serious and they undermine local and collaborative open scholarship efforts. These issues must be addressed across all levels of stakeholders in open scholarship, as scholarly communications practitioners are at the centre of enacting open scholarship.

Open Outreach

Three discussion points were posed to each small-group facilitated session. In the Open Outreach groups the questions were:

How can we generate support for principle-based negotiations across campus?

Do we need to rethink our approach to discussions with library colleagues (collections, liaisons, administration) around serials cancellations and defining institutional strategies?

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[63] Swanepoel, M., Kehoe, I., Hohner, M., Shepstone, C., Vanderjagt, L., Wakaruk, A., Waller, A., & Winter, C. (2015). *Developing a community of practice: Report on a survey to determine the scholarly communication landscape in Western Canada*. https://hdl.handle.net/10133/4784

[64] Calarco, P., Shearer, K., Schmidt, B., & Tate, D. (2016). Librarians' competencies profile for scholarly communication and open access. *Joint Task Force on Librarian's Competencies in Support of E-research and Scholarly Communication*. https://www.coar-repositories.org/files/Competencies-for-ScholComm-and-OA_June-2016.pdf

Culture Change

Open scholarship has not yet become embedded into the culture of academia; it is frequently an afterthought within institutions and greater integration of open scholarship into the Canadian academy still needs to be done. There is still a lack of understanding and a perceived lack of interest among researchers of the benefits of open scholarship and the process of participating.[65]

A cultural shift is necessary to centre open scholarship within academia, and this shift will only come about with a multi-pronged approach. This will include increased resources allocated to open scholarship (including staff, time, and money); open policies at the institutional level to socialize and normalize open scholarship across the institution and acknowledge the value of open scholarship; and embedding open scholarship in the tenure and promotion process to build open scholarship into academic reward systems.

Education and outreach around open scholarship would be strengthened by organizational leadership, wide participation and engagement in promoting open models of scholarly discourse, and a means of determining local education and outreach strategies that will be most impactful.[66] National collaboration is key to share the labour of education and outreach. Participants felt that now is the time to have a broad-level discussion with our faculty, administrations, and national organizations on approaches like the "University of California model"[67]. The strength of this model is that it has a clear rubric for investing in open scholarship. Institutional and regional working groups supporting open scholarship or open educational resources are a place to start in developing and describing sustainable models, and these models should be discussed within any conversations around national strategies.

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[65] Narayan, B., & Luca, E. (2017). Issues and challenges in researchers' adoption of open access and institutional repositories: A contextual study of a university repository. *Information Research: An International Electronic Journal, (22)*2. http://InformationR.net/ir/22-4/rails/rails1608.html

[66] Niles, M. T., Schimanski, L. A., McKiernan, E. C., & Alperin, J. P. (2019). Why we publish where we do: Faculty publishing values and their relationship to review, promotion and tenure expectations. *BioRxiv*, 706622. https://doi.org/10.1101/706622

[67] Office of Scholarly Communication, University of California. (n.d.). *Open access (OA) and scholarly communication at the University of California*. https://osc.universityofcalifornia.edu/

Refocus

Most academic libraries focus considerable outreach effort into OA Week, but participants questioned if this an effective use of time and resources. OA Week is a time-intensive activity that often does not result in change at the institution level. It has become a "one and done" branding exercise. It was suggested that time and resources would be better spent focusing on bringing about institutional change such as building OA compliance into institutional research applications/grants, developing OA policy, and lobbying to bring about change in promotion and tenure processes to value open scholarship.

Scholarly communications workers feel disconnected from broad decisions being made outside of their library and it is possible faculty/researchers feel even more removed — if they are even aware of changes in open scholarship and library efforts to create change. Strategies should be developed to engage faculty and university administration into the bigger conversions around scholarship, not just when there are "Big Deals" to be cancelled.

Beyond the institution, many open scholarship librarians feel a profound disconnect from the work being done in other open scholarship stakeholder groups like CRKN and Canada's federal granting agencies; practitioners feel that they are not being engaged with as a stakeholder group with valuable tactical experience and extensive experience — some now approaching a decade or more — talking to faculty about open access. The current relationship between practitioners and national open scholarship stakeholders as a whole feels counter-productive to the goals of those invested in community-led open scholarship efforts, and is a relationship that practitioners would like to improve.

Organizational Impediments

Many academic libraries have undergone organizational restructuring in the past decade, but few have made the necessary connections between resource acquisition units/staff cohorts and scholarly communications staff that would foster a cohesive institutional approach toward open scholarship. Collections, acquisitions and liaison librarians could all be more closely connected with scholarly communications; there was a sense of working in isolation but not tandem, and definitely not in a state of integration. Many participants communicated that traditional models of collections and resource discovery work need to be broadened to include open scholarship content and initiatives.[68]

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[68] Bulock, C., Hosburgh, N., & Mann, S. (2015) OA in the library collection: The challenges of identifying and maintaining open access resources. *The Serials Librarian, 68*:1-4, 79-86. https://doi.org/10.1080/0361526X.2015.1023690; Antelman, K. (2017). *Leveraging the growth of open access in library collection decision making*. ACRL Conference Proceedings. http://www.ala.org/acrl/sites/ala.org.acrl/files/content/conferences/confsandpreconfs/2017/LeveragingtheGrowthofOpenAccess.pdf

Together there should be discussions in academic libraries on the balance between collections and support for open scholarship initiatives, and if the current balance should be changing. Academic libraries should also think outside the box for new approaches like providing graduate student open scholarship-based opportunities; sending students and staff to OpenCon; or assigning library support staff to assist faculty with Green OA.

New Collaborations

Collaborations can work to the benefit of open scholarship and we observe successes such as Arca in British Columbia. However, not every province has the resources or other organizational environment preconditions to achieve this. Who provides the leadership that will nurture the relationships and ideas to enable similar successes in other provinces and territories? The conversations on this should include key national, provincial and territorial organizations. Local input and institutional branding needs are also very important to some institutions, and while this is something to consider, collaboration should be focused on making the most of contributors' unique strengths for greater effectiveness and the greater benefit of the collective.

Journal Collections & the Big Deal

Most academic libraries are struggling with the issue of "Big Deals."[69] There are often confusing messages for faculty and university administration regarding the reasons for leaving the Big Deal: is it to save money or are we trying to encourage faculty to publish open access? Those are different goals but we observe that somehow, these often get enmeshed in the same outreach message, which can create confusion.

Practitioners suggested that the underlying principles of collections development and open scholarship be considered and agreed upon before making the decision to cancel deals. Framing the message is central to engaging users, conveying it not as a cut but as a well-thought-out decision based on clear principles. In considering cancellation of Big Deals, *Advancing Open* participants suggested focusing on how the money saved from those deals will be reinvested, and that unsustainable licensing costs are only a small part of the problems within academic publishing. Librarians should seek to involve our users more in the *entire* conversation around

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[69] Shearer, K. (2018). *Responding to unsustainable journal costs: A CARL brief*. Canadian Association of Research Libraries. http://www.carl-abrc.ca/wp-content/uploads/2018/02/CARL_Brief_Subscription_Costs_en.pdf

academic publishing and the challenges this component of our academic world presents to both university budgets and access to research.

> *"This [cancellation] is not because we mismanaged our budget."*
>
> *"Germany is able to do it because they aren't trying to save money and because of the funders mandate. Their principle is based on open access — that is their goal."*

Infrastructure

Within the discussions surrounding open scholarship outreach, the challenge of balancing between outreach and managing infrastructure to support open scholarship is significant. Most academic libraries offer institutional repository infrastructure aimed at faculty, but have significant challenges due to lack of time, expertise, financial resources, and a strategy for the support and sustainability of the repository. At this juncture most institutions are creating and managing their own IR, and the task of technical management often also falls to the scholarly communications librarian. This model is inefficient, not particularly realistic, and in many cases holds back both user focused developments and outreach efforts because staff are often focused on technical maintenance.

Both the technical work managing infrastructure and advocacy and outreach are equally essential in sustaining a robust scholarly communications environment. Therefore, collaborative sharing of resources for outreach and education as well as for infrastructure management is desired. Collaboration on all areas of the scholarly communications spectrum of work would result in advancement of repository systems that are more outward facing and easier to use for faculty researchers who want to participate more fully in open scholarship, and more robust education and outreach services to ensure researchers are supported at every step of the research and publishing process.

Open Workflows and Operations

Two discussion points were posed to each small-group facilitated session. In the Open Workflows and Operations groups the questions were:

> *What supports are needed to ensure open work is a priority in the library and the institution? What happens when there is little support for open initiatives?*
>
> *How can we sustainably manage multiple open resources (journals, monographs, IRs, etc)? Should we be managing multiple open resources?*

The discussion questions posed led into a number of broader areas especially around the support for scholarly communications with appropriate staffing, technical and institutional support.

Scope of Practice and Core Competencies

What is the role and scope of the scholarly communications librarian? This question came up frequently in discussion during this section of the event. There is a general feeling that the scholarly communications field is changing quickly and the scope of responsibilities for practitioners is growing correspondingly. There are concerns that the current resources for support of the range of scholarly communications activities are precarious at best, and unsustainable at worst. There is no consistent definition of the work of scholarly communications librarians, but it is clear that the practice of this emerging field requires a growing range of knowledge, technical skills, and literacy in the areas of open access, repository management, publishing advice, copyright awareness, bibliometrics, and research data management.

The need for identified core competencies was mentioned in discussion, and while they have begun to be defined[70],[71] they do serve to highlight skills gaps that exist for those currently in scholarly communications roles or new graduates moving into these roles for the first time. As one participant noted:

> *"It feels like we're making up things as [we] go."*

Frustration was expressed regarding lack of time for staff to adequately address the diverse range of areas involved in scholarly communications. Resources,

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[70] NASIG. (2017). *NASIG core competencies*. https://www.nasig.org/resources/Documents/competencies/CompetenciesforScholCommLibrarians_final_ver_2017-08-11.pdf

[71] Calarco, P., Shearer, K., Schmidt, B., & Tate, D. (2016). *Librarians' competencies profile for scholarly communication and open access*. https://www.coar-repositories.org /files/Competencies-for-ScholComm-and-OA_June-2016.pdf

staffing, time, institutional buy-in and technical needs are all identified as key to success, but participants felt that these were not currently in place in many locations, and most particularly in smaller institutions. Scholarly communication is so diverse that even with a reasonable amount of resources, gaps in service and operations still exist. Scholarly communications practitioners at many institutions, most particularly smaller ones, wear many hats, and time is a scarce resource to provide support to all areas of scholarly communications.

It was also felt that the scope of activities encompassed by scholarly communications has not finished evolving, and new roles will continue to emerge.

Training and Professional Development

Training and professional development to acquire specialized scholarly communications skills is needed to support current and incoming staff. Some practitioners expressed concerns that new graduates from LIS programs are not armed with the necessary scholarly communications skill set, with many new staff not having the competencies to support research. Are library schools talking about these issues, or are they still teaching traditional models?[72] Students say they are not learning about open models of dissemination.

There are more scholarly communications librarians being hired but to be sustainable, all librarians have to have some level of knowledge as potential 'first points of contact.' The development of training materials to facilitate entry into the field would be a step in the right direction. It also should be recognized that support staff need a level of understanding of these emerging areas and their training should not be overlooked.

There is a lack of clarity regarding the roles of liaison and scholarly communications librarians and where they intersect. Boundaries are not clear, and many in both areas are feeling stretched thin with many competencies expected of them.[73] A reconception of liaison roles has started but no real clear direction has emerged.[74] Liaison librarians report feeling they must be all things to all people. Creating specialized positions like Scholarly Communications (RDM, copyright etc)

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[72] Ducas, A., Michaud-Oystryk, N., & Speare, M. (2020). Reinventing ourselves: New and emerging roles of academic librarians in Canadian research-intensive universities. *College & Research Libraries, 81*(1), 43. https://crl.acrl.org/index.php/crl/article/download/17113/32058; Raju, J., 2019. Embracing new trends in scholarly communication: From competency requirements in the workplace to LIS curriculum presence. *Journal of Librarianship and Scholarly Communication*, *7*(1). http://doi.org/10.7710/2162-3309.2291

[73] Johnson, A. M. (2019). Connections, conversations, and visibility: How the work of academic reference and liaison librarians is evolving. *Reference & User Services Quarterly*, *58*(2), 91-102. https://journals.ala.org/index.php/rusq/article/download/6929/9382

[74] Burpee, K. J., & Fernandez, L. (2014). Scholarly communication at Canadian research libraries: Conversations with librarians. *Journal of Librarianship and Scholarly Communication, 2*(2), eP1121/1- 21. https://doi.org/10.7710/2162-3309.1121

establishes separation of skill sets and collaboration as a natural element of daily work with liaison librarians is hampered. Does the institution set a priority on one or the other, or expect all liaison librarians to become scholarly communications librarians? Where a sense of divide between librarians exists as a result of "team of one" staffing strategies, there can be an increase in isolation, stress, discouragement, and low morale.

Community of Practice

The discussion turned to the development of a community of practice or external network to help mitigate some of those challenges — can the community of scholarly communications practitioners be leveraged? More formality in how the community operates and structure around sustaining the community would help with what is a very grassroots approach currently. An association may be a way to foster greater options for professional development, communication, training, and resource-sharing initiatives. There are a number of umbrella organizations who could sponsor a more formal group. One issue was clear with all attendees at *Advancing Open*: membership in such a group must be open to all practitioners, not just those at research-intensive institutions.

Infrastructure and Workflow

Participants reflected on the differing technical needs and limitations across institutions and how that impacts their ability to create unified systems. The participants felt that in particular the fragmented nature of repositories means practitioners are often isolated, and duplication of work is common.

While participants were interested in workflows, there was no way to come to a common understanding of what exactly is meant by workflows and how the work of scholarly communications, especially with respect to IRs, plays out in day to day environments. These are deeply operational questions; also, the differences between small, medium, and large institutions poses a challenge in transferring workflow strategies. It would help small to mid-sized libraries to see developed documentation be widely shared which identifies common workflows and operational guidelines that they could reuse or repurpose.

Interconnectedness of institutions is desirable so small institutions do not have to attempt to manage alone. Some larger institutions are hosting journals for smaller institutions so the latter don't have to invest in infrastructure and staffing an IT department. Local librarians are then free to focus on local support, vetting of users, copyright and other service elements of library publishing without being required to create and/or maintain technical infrastructure.

We need to move away from localized initiatives running so many different repository solutions. We need to seek out models that allow us to share solutions

while still emphasizing our unique collections. For example, the University of Alberta Library has forgone bespoke existing solutions and built a very basic web application IR with an emphasis on maintainability and simple stack infrastructure. This is coupled with core user needs, e.g. accessibility, discoverability, and preservation. The IRs we currently run often don't meet the requirements of our researchers on many levels including ease of use and discovery. Can a solution like this be shared with a large institution as host repository?

A centralized repository — working with OpenAIRE — has the potential to bring together different software and offer an approach that is more sustainable. Participants discussed the potential of supporting a partial national service, with aggregation and a single metadata schema that can crosswalk to other systems. Most likely we as a community need to aim for a mixed model in order to accommodate flexibility, sustainability and interoperability.

We need to be conscious of the open systems environment and be willing to contribute back to the open community; e.g. documentation for OJS, using open sources when possible and contributing to the support and development of community-led open solutions.

Institutional Support

Institutions need to find worth in open scholarship resources and activities in order to provide more support. Knowledge of how administration values work, and how that impacts scholarly communications reporting is important; there is an expectation of return on investment among administration.

Participants discussed the idea of success in scholarly communications: how it can be defined, what it can look like, and how success can be reportable in both quantitative (metrics) and qualitative perspectives (user feedback, anecdotes). Communicating use is important, though participants noted that a lack of time to quantify and identify some type of metric tool for tracking is a challenge.

A recent CARL survey to determine the resources (financial, staffing, etc.) put toward open initiatives (PKP, IRs, etc.) at Canadian institutions may prove very informative when it is released; results will hopefully reveal some measure of how institutions currently direct their support to open scholarship.

Canada does not have a unifying national mandate and vision for open access, so there is no concomitant investment at that level.[75] The lack of a national mandate makes it all the more important, though more difficult, to establish an institutional

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[75] CARL Scholarly Publishing Working Group. (2017). *Final report*. Canadian Association of Research Libraries. http://www.carl-abrc.ca/wp-content/uploads/2017/07/CSPWG_final_report_EN.pdf

mandate informed by scholarly communications practitioners' expertise. This often needs to build over time until it becomes a critical mass for the institution. Open resources are beginning to be elevated in provincial mandates, such as dedicated funds for Open Educational Resources programs in BC[76] and Ontario,[77] but such programs can be negatively impacted by changing government priorities, as evidenced by the recent budget cuts made by the Alberta provincial government.[78]

Collaboration and Communication

There was a general feeling among *Advancing Open* participants that we need to push toward opening communication lines and collaboration within and between institutions as an essential precursor to growth of open scholarship. They noted that we need collaborative sharing of workflows, infrastructure, expertise, and more. Silos are so easily created when communication is absent.

Librarians need to work beyond the libraries, be strategic in finding the right people, and find allies with Associate Vice Presidents, curriculum directors, researchers, and more. Scholarly communications work spans across the organization and thus needs support from the institution, library, and library administration to work freely across the institution. Senior administration is where change decisions are made and where librarians need to be.

Scholarly communications must be a priority for library directors/senior leadership, and they must be able to identify opportunities within open scholarship — addressing publishing and research dissemination needs is an opportunity to fill a gap on campus.

Reassessing Collections

There was a sense among practitioners that academic libraries have been slow to change collection strategies and there is a need to review traditional practices to make way for new initiatives that reflect open scholarship strategies. The traditional goal of "excellence in collections" is often tied to the amount of money that libraries spend on their collections; this measurement is somewhat opposed to the principle of open scholarship which strives to make the collection entirely open. Is the traditional collection becoming superfluous?

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[76] B.C. Open Textbook Collection. https://open.bccampus.ca/

[77] eCampus Ontario. (n.d.) *Supporting open educational resources in Ontario*. https://www.ecampusontario.ca/open-education-resources/

[78] Government of Alberta. (2019). *Fiscal plan: A plan for jobs and the economy 2019-23*. https://open.alberta.ca/dataset/3d732c88-68b0-4328-9e52-5d3273527204/resource/2b82a075-f8c2-4586-a2d8-3ce8528a24e1/download/budget-2019-fiscal-plan-2019-23.pdf

Faculty members are sharing information in new ways, but libraries sometimes harbour a reluctance to move to new ways. Participants expressed the sense that a "stay in your lane" mentality still exists in libraries, offering the example that the collection budget does not reflect the change in scholarly publishing and there is often no "fund" to pursue initiatives or innovation in this area. Academic libraries have to challenge the practice of buying material "just in case" and instead focus efforts on buying or supporting tools and resources that faculty and students actually need and use.[79] This is especially the case for a library that is not a heavy research library; as a few participants noted, "We are not all the University of Toronto or University of British Columbia," making the point that many institutions do not all have access to large collections budgets. All post-secondary libraries purchase similar resources that support foundational learning in post-secondary institutions; how much time and resources do we spend on resources that make our institutions unique, such as special collections or archives, or our institutions' intellectual output?

Conclusion: Moving Forward

The *Advancing Open* event brought together 70+ scholarly communications practitioners from across the country to discuss a range of open scholarship issues. The fact that so many made the effort to attend attests to the level of interest, concern, and commitment that exists for an open future in Canada. The majority of participants had a high level of expertise and knowledge in the field and this un-conference provided an opportunity to voice concerns, discuss issues with counterparts, and propose possible solutions that could meaningfully advance a community-led vision of open scholarship in Canada.

Participants brought enthusiasm and engagement to match their knowledge and expertise. The result was a free-wheeling exchange of information and ideas based around five main themes. The event offered a respectful and safe place to express ideas on issues that in many cases participants deal with on their own on a day-to-day basis.

The small-group breakout sessions were all led and facilitated by members of the scholarly communications practitioner community, and this resulted in discussions that were insightful, informed, and focused on finding ways forward.

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[79] Shorley, D. (2008). Past its shelve by date? United Kingdom Research Reserve (UKRR): A twenty-first-century strategy to protect our research information for the future. *New Review of Academic Librarianship*, *14*(1/2), 115-120. https://doi.org/10.1080/13614530802519246; Knievel, J. E., Wicht, H., & Connaway, L. S. (2006). Use of circulation statistics and interlibrary loan data in collection management. *College & Research Libraries*, *67*(1), 35-49. https://doi.org/10.5860/crl.67.1.35

While this loosely structured unconference emphasized the informal exchange of information and ideas between participants, at the end of the event there were enough commonalities that coalesced to allow some conclusions to be drawn and some key areas of emphasis identified.

The following areas of focus identified by this large grassroots group of practitioners deserve consideration by open scholarship leaders, decision-makers, scholars, and other stakeholders in the domain of open scholarship work in the Canadian academic library sector, and the practitioner community invites all such groups to review this report. Our collective goal is the advancement of open scholarship, and we look forward to debate and discussion around these proposed actions (or any other matter raised in this report). Feedback should be provided c/o Lise Brin (lise.brin@carl-abrc.ca), Program Officer at CARL, who will share it with the CARL Open Repositories Working Group's Task Group on Community Building and Engagement for consideration.

Areas of focus:
1. Explore a national approach to institutional repositories similar to what has been established for research data as exemplified by the Portage Network initiative.
2. Advocate for federal funding to support shared infrastructure, discoverability and interoperability of institutional repositories. Include small post-secondary institutions in this conversation to determine their capacity to be active participants in, and supporters of, developing this infrastructure.
3. Convene a group of interested and knowledgeable individuals to develop guidelines, toolkits, and workshops to inform scholarly communications practitioners on best practices to decolonize open scholarship and ensure that Traditional Knowledge is served appropriately. This work *must* be done collaboratively and driven by the expressed needs of Indigenous Peoples and communities and in constant, persistent consultation.
4. Bring together key stakeholders (libraries, scholarly communications practitioners, researchers, funders) to develop a Made in Canada plan for open scholarship in order to build a community-led, non-commercial scholarly communications ecosystem.
5. Convene a wide variety of low-cost and free training opportunities for library staff to help develop scholarly communications skills, with particular emphasis on advocacy and policy approaches to changing institutional culture toward open scholarship, as well as the development of technical skills.
6. Open a dialogue on the role and scope of scholarly communications work. Expand the conversation beyond scholarly communications practitioners to

include library staff in resources, collections, liaison roles, copyright, archives, and IT specialties.

7. Devote institutional funds to collaborative open scholarship efforts (regional and national) and bring leaders and practitioners together in these efforts. Prioritize cross-institution resource, expertise and knowledge-sharing.

8. Invigorate the discussion on transitioning funding from supporting traditional collections development to supporting open scholarship — and open collections — at our academic institutions

9. Further nurture the scholarly communications community of practice to foster the exchange of ideas and professional development to support practitioners in the expanding range of open scholarship endeavors.

10. Ensure equity, diversity, and inclusion form the foundation of any future open scholarship initiatives, systems, and developments.

In order to truly advance open access in Canada, it is necessary to clearly establish the roles of national open scholarship stakeholders — including CARL, CRKN, Canada's federal granting agencies, and Library and Archives Canada. Leadership at the national level is necessary for many of the aforementioned areas of focus to be moved forward. The scholarly communications practitioner community encourages these national stakeholders to clarify their current capacity to support these areas of focus, thus allowing the community to identify potential areas where formal leadership is needed and pursue alternative collective action.

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