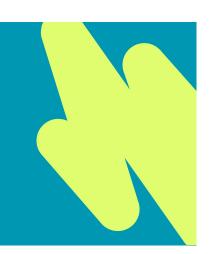# Open in UBC Library
Librarians & Archivist Research
Making Your Research Open

As academic librarians and archivists, we engage in research to interrogate our professional activities and improve upon our practices and theoretical approaches. As researchers, we can align our research practices with the principles of openness, including Open Access, Open Research, Open Data, and Open Education.

The following are prompting questions to use when conducting your original research or research conducted as part of a research team. Each section follows the stages of research and includes links to relevant examples and resources for making your research open.

Foundation

Foundations focuses on integrating openness in the beginning parts of the research process, including developing a search strategy and literature review.

Prompting Questions

- [ ] Is there a search strategy that already exists to help inform my literature search?
- [ ] Have I looked for reviews on similar topics or accessed a repository of search strategies?
- [ ] Can I make my search strategy open and available and does my institution have a repository for this?
- [ ] If conducting a formal review or knowledge synthesis, have I adhered to the PRISMA 2020 guidelines, sharing at least one of my database searches as part of my protocol and publication?
- [ ] Have I considered transparency when conducting my literature review, including documenting the search and screening process, documenting how relevant papers were chosen, recording all decisions, and making the documents open?
- [ ] Do I have access to a project management tool that can support this process?
- [ ] Should I create a protocol for this review? If yes, what is the most relevant place to deposit it? PROSPERO, Protocols.io, OSF, cIRcle, or others?

Examples

- [Documentation for McGill Librarian Knowledge Synthesis Search Materials Repository](#)
- [Search Strategy for Experiences of Women Who Have Planned Unassisted Home Births in High-Resource Countries](#)

Additional Resources

- [Search Strategies](#) for scoping review protocol
- [SearchRxiv](#): Platform for reporting, storing, and sharing searches consistently for review and re-use.
- [Screening Criteria & Decision Sheets](#) for scoping review

Conceptualization

Conceptualization focuses on integrating openness into the process of sharing research outputs at their earliest stages.

Prompting Questions

- [ ] In the idea development and instruments/methods development stage, where might you find data and feedback using open methods (e.g. OSF, CoPs, Associations, protocol)?
- [ ] If your research is grant-funded, what are the requirements of the granting agency (e.g. DMP, sharing data, use of a protocol)?
- [ ] Do you have a long-term goal for access and reuse? Where will you share this information?
- [ ] What outputs (research tools or instruments) might be shareable using an open license?
- [ ] Where might you share early ideas about your research topic/hypothesis (professional associations, community of practices, blog, other)?
- [ ] Are there opportunities for collaborating with other units, networks, communities, or the public?
- [ ] Are there action, participatory, or community-engaged research methods to employ?

Examples

- Kumaran, Maha; Levesque, Lisa; Gupta, Aditi; Roache, Darcia, 2023, "Recommendations and reflections: Marginalized graduate students navigating the academy during the Covid-19 Pandemic"

Additional Resources

- ActionCatalogue - An online decision support tool that is intended to enable researchers, policy-makers, and others wanting to conduct inclusive research, to find the method that is best suited for their specific project needs.
- Documentation and How-to for Librarians (University of Toronto) - This data management plan (DMP) contains guidance and documentation on how HSIC librarians can upload their knowledge synthesis search strategy data.

Data Collection

Data Collection focuses on integrating openness into the process of gathering and measuring research data.

Prompting Questions

- [ ] Is there open data that exists already that you can use in your research?
- [ ] Do you have a Data Management Plan? (DMP)
- [ ] Can you apply an open license to your data?
- [ ] Have you shared your data (e.g. repositories, blogs, personal websites, etc.)?
- [ ] Do you have any sensitive data (i.e. health information, identifying data or microdata, culturally sensitive material) that may require extra evaluations and processes to make the data open?

Examples

- OpenAIRE. "Data Reuse Stories. Some Concrete Cases Involving Several Institutions and Consortia in Europe," November 30, 2020. https://www.openaire.eu/blogs/data-reuse-stories-some-concrete-cases-involving-several-institutions-and-consortia-in-europe.
- Gregory, Kathleen. "A Dataset Describing Data Discovery and Reuse Practices in Research." *Scientific Data* 7, no. 1 (July 13, 2020): 232. https://doi.org/10.1038/s41597-020-0569-5.

Additional Resources

- Open Data (POSE) - An open online course module covering the principles of data openness, steps to implementing open data practices, and how to describe administer, and structure open data metadata.
- Open Data Handbook - A guide outlining the legal, social, and technical aspects of open data, including case studies and a resource library.
- FAIR Principles - Guidance on best practices in sharing your data
- Re3Data - Search several repositories for existing data that researchers have made open.

Data Analysis

The data analysis part of the research lifecycle focuses on integrating openness into the selected analysis tools and processes.

Prompting Questions

- ☐ Are there Free and Open Source Software (FOSS) and tools you can use in your data analysis? Can you use collaborative platforms?
- ☐ What research or data analysis processes can you share (e.g. codes, processes, workflows, lab manuals, etc.)?
- ☐ Are you sharing preprints or other research materials like documents, posters, data notes, protocols, and slide decks?
- ☐ Do you have plans for long-term preservation or archiving of any web resources you are using or creating?
- ☐ Have you pre-registered your research plan?

Examples

- Several journals now require authors to make public any code related to their research articles, including Nature Computational Science and PLOS Computational Biology. See:
- "Code Sharing in the Spotlight | Nature Computational Science." Accessed January 15, 2024. https://www.nature.com/articles/s43588-023-00566-4.
- The Official PLOS Blog. "Uphold the Code: How Complete, Detailed and Open Code Can Enhance Understanding, Improve Reproducibility, and Change the Shape of the Research Article," May 24, 2022. https://theplosblog.plos.org/2022/05/uphold-the-code/.

Additional Resources

- Open Software Tools (POSE) - An open online course module covering open-source tools for use in gathering and analyzing data.
- OSF- An open platform to develop projects, collaborate, store data, and post papers, data, and materials associated with your research project.
- Zooniverse (Citizen Science) - A platform supporting the partnership of researchers and community volunteers contributing to real academic research.

Publication

Publication focuses on integrating openness into all publication options, including data, protocols, and traditional and alternative forms of publication.

Prompting Questions

- [ ] If your research is grant-funded, what are the requirements of the granting agency when it comes to open access publishing and knowledge mobilization?
- [ ] Have you prepared your knowledge mobilization plan to help translate your research findings for your intended communities, including partners, collaborators, and the broader public?
- [ ] Are there other ways to tell your research story including public scholarship? Are you prepared to negotiate your author rights and be clear about what you would like to make open (e.g. appendices and your search protocols)?
- [ ] How can you reach the broadest audience with your publication choice? Does UBC offer any discounts on your preferred journal if it is gold open access?
- [ ] What self-archiving/green open access opportunities could you pursue?
- [ ] What would you like to share on a personal website, Google Scholar, or social networking platforms?
- [ ] Have you investigated any journals with an open peer review process (OPR)? For instance, some examples include Library with the Lead Pipe, Journal of Radical Librarianship, and Journal of Creative Library Practice, which uses an opt-in version of OPR.

Examples

- cIRcle's UBC Library and Archives collection showcases events and projects supported by the Library, and scholarly and professional output of UBC's librarians, archivists, and staff.

Additional Resources

- Open Access (POSE) - An open online course module covering the history and economics of academic publishing and open access, predatory publishing practices, and the relationship to author rights.
- Article Processing Publisher Discounts – UBC Library
- SPARC Author Addendum - A legal instrument that modifies the publisher's agreement and allows you to keep key rights to your articles.
- Author's Guide to Self-Archiving, Publication Versions and Permissions - A guide discusses some of the copyright and reuse issues authors should consider when self-archiving.
- List of Preprint Repositories