Open-ing the Library: Evaluating the Scholarly Publishing Landscape and Shaping Future Open Services and Organizational Structures at OSULP

Submitted to Dean Anne-Marie Deitering: June 6, 2023

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I. Introduction

The scholarly communication landscape, in particular scholarly journal publishing, is quickly moving towards open and the pace of that movement is rapidly increasing. In a paper that analyzed the percentage of open scholarly articles indexed in the Web of Science and Dimensions databases in 2021, Basson et al found that up to 46 percent of articles were open (2022). The largest journal publishers, including the big 5 of Elsevier, Springer, Wiley, Sage, and Taylor & Francis, as well as university presses, are fully on board the open train, charging authors article processing charges (APCs) to have their content openly available in gold open access (OA) journals or hybrid journals. At OSU we see a strong upward trend in the usage of gold OA journal articles among our campus community through these publisher platforms. In 2019 we saw gold OA usage for our big 5 publishers at 10%, which has steadily increased to almost 24% in 2023. These changes mirror the increase in the availability of OA content from these publishers, but may also correlate to an overall awareness of open content among OSU faculty and students.

Publishers are also increasingly working with individual libraries, library systems, and library consortia to enter into transformative agreements that “seek to shift the contracted payment from a library or group of libraries to a publisher away from subscription-based reading and towards open access publishing (Hinchcliff, 2019).” But, by charging costly and unsustainable article processing charges (APCs), the shift towards open is benefitting publishers, and their investors, at the expense of authors and institutions of higher education. Ivy League libraries noted in a recent letter to the U.S. Office of Science Technology and Policy that the APC model “lock[s] out scholars from less resourced institutions and less well-funded disciplines” (IPLC, 2023). In response to the National Institutes of Health’s (NIH) request for information about their public access plan, OSULP requested that “federal agencies … make a clear and unambiguous statement in their implementation plans that there is a pathway for researchers to comply with [public access] mandates without paying Article Processing Charges (APCs). It is important that the NIH does not inadvertently entrench the APC system by remaining neutral on it” (Boock, 2023).

For the purposes of this position paper, the authors focus on open scholarship as that which enables the broadest possible distribution and use of scholarly work by reducing and removing barriers to sharing, accessing, and distributing scholarly information. The authors interviewed select OSULP faculty and experts in the field who have written about these changes or enacted them at their own institutions. Responses informed our thinking and are shared in a Google Drive folder (https://drive.google.com/drive/folders/1nrT3372V6UF33mo2N_CVY4UMmJ7pUwPx; restricted to Oregon State University-affiliated persons).

The shift to open, and away from subscriptions, will require changes to many OSULP services, and OSULP’s reporting structure can be expected to evolve to accommodate such changes. This position paper recommends starting points for thinking about how OSULP could take on new roles and responsibilities that relate to the forthcoming OSULP 2024-2028 strategic plan emphasizing open. It is the authors’ opinion that OSULP should reinvest resources from
unsustainable journal subscriptions and article payment systems into community-focused and driven open projects, services, and infrastructure. Such resource expenditures, building on past successful efforts at OSULP and emerging services at other academic libraries, will promote the University’s open and sustainable scholarly communication principles (https://guides.library.oregonstate.edu/OSSC) and open access policy (https://library.oregonstate.edu/open-access), benefiting the University and its faculty by achieving the greatest possible sharing and impact of their research. At the same time, such projects and services will reinvest substantial money away from publisher profits. We expect that this reenvisioning of library services will have an impact on all library departments and personnel.

II. Growth of OA - Why Are We Addressing This Now

In the United States, the push for open access has come largely as a result of government funding agency mandates. The push began with the launch of the NIH repository, PubMed, in 1997 (Moody, 2016). Although it initially lacked full-text access for most of the articles it indexed, PubMed allowed users to search through abstracts and bibliographic information of the research funded by NIH. The NIH continued to work towards increased open access with their policies when they first instituted a voluntary open access policy in 2005, followed by mandating in 2008 that all peer-reviewed articles deriving from NIH grants be made publicly available a year after publication (“A potted history of Open Access in the UK and worldwide, n.d.). Five years later, the Obama Administration issued the Holdren memo expanding the open access mandate to cover all federal funding agencies that distribute $100 million or more in research grants (Stebbins, 2013). With the Nelson memo released in the summer of 2022, the Biden Administration expanded the open access mandate to all federal funding agencies.

While the U.S. government, and subsequently institutions of higher education and public funding agencies, have pushed for open access to research they fund, implementation measures vary. Many universities either request or require faculty members to deposit articles in institutional repositories, known as green OA (Greussing et al., 2020), but enforcement has proven difficult and success varies (Swan, 2015). Gold OA, on the other hand, is done at the journal level. Under gold OA, the author pays an article processing charge (APC) in order to publish an open access article in a subscription-focused journal (Greussing et al., 2020). Science Europe is currently pushing for a model they call “Diamond Open Access”, where journals do not charge either subscription fees or APCs, and all articles are freely available to access (Science Europe, n.d.). Bosman, et al estimated that there were more than “29,000 diamond open access journals in 2021, [representing] a significant share of the total number of scholarly journals (Bosman, 2021).”

Within the academic sector, open access and open scholarship have accelerated over recent years. In their most recent article summarizing trends in academic libraries, the ACRL Research Research Planning and Review Committee had a section focused on the idea of open (2022). Specifically, the committee discusses the impacts of the COVID-19 pandemic on the use of preprint servers as a way to freely disseminate information. The report also discusses that one of the notable barriers to open is a lack of open access policies at institutions (ibid). This lack of
policies makes it difficult to strategize and prepare internally, but also hinders engagement of external stakeholders and prevents coordinated responses. Another recent article examining trends within academic librarianship noted that discussions around open scholarship have moved beyond being solely focused on open access (Appleton, 2022). Appleton notes that due to libraries positioning themselves as authorities on open access, it puts them in a unique position to further shape the discussion and how open scholarship will be addressed in a post-pandemic world (ibid).

Oregon State University has a long and successful history of supporting open scholarship, both at the library and university levels. For a comprehensive history of that support, see Appendix A. As a result, there are established positions, policies, and systems in place from which to move forward with support for open at OSULP. However, barriers still remain and need to be addressed in order to build capacity. Some pathways to supporting open scholarship have not been feasible for the library due to issues with pricing and a lack of transparency from library vendors. For example, we currently do not negotiate transformative agreements because they are currently ethically and economically unsustainable. Also, because these types of agreements are so new to publishers as well, very few are willing to make concessions or changes to the agreements during negotiations. Additionally, the library does not currently cover APCs for OSU researchers due to the variability in APC pricing, and the lack of transparency in determining APC pricing by publisher. The equitable distribution of APC offerings would also need to be considered, as well as what resource allocations (including positions, possibly) would need to be cut in order to cover APC costs, especially if no additional funding is available from the university. It is estimated that paying APCs for OSU faculty through transformative agreements or paying APCs ad hoc could cost as much as double or triple the price of OSULP’s existing subscriptions.

III. Reimagining OSULP Services to Support Open

Given a fundamental change in how resources are disseminated to researchers, libraries must respond with fundamental changes of our own. Historically, our role in research support has been to unlock doors; given the trends discussed above, we are increasingly confronted with a question of what the library does for our users when those doors are already open. We believe that the library will continue to bridge the gap between researchers and content, though specific services will need to evolve from those that have been used to provide traditional browsable collections to local communities. Our central role remains connecting users to resources, even as the resource landscape shifts dramatically (Figure 1).

Figure 1
On the “users” side of the bridge, the library provides our user community with the skills and tools to navigate the scholarly environment.

On the “resources” side of the bridge, the library provides expertise to identify high quality resources, and high quality description so those resources can be discovered and understood.

The bridge itself is the work we do to mediate or facilitate those connections – user services, robust and flexible systems, rights management, and ongoing evaluation and assessment.

Additionally, we expect to see growth in the role of the library as publisher, sharing locally created content broadly. We need to be able to inform and educate OSU scholars about publication options, and we have opportunities to provide accessible and effective platforms for open sharing. Below, we discuss the impact of the shift toward open for major library services, and suggest prompts for OSULP to consider in order to address this shift.

Collections
As the scholarly communication landscape changes, we must keep up-to-date with the best strategies for ensuring our researchers have access to important content in a way that prioritizes accessibility, privacy, and transparency. As responsible stewards of our collections we continually evaluate resources for their relevance to the curricular needs of our institution and work with publishers that align with our values, one of those being access to content. However, there are current challenges that the evaluation of OA materials presents. Many open resources do not supply usage statistics for individual institutions, and there are limited tools to gather that information for library employees. So, the effective evaluation of open resources for our researchers necessitates specialized knowledge of multiple free and proprietary collection assessment tools and the ability to keep up-to-date on evolving trends in usage evaluation.

- **Prompts:**
  - What strategies can we use to identify and invest in resources that support open access?
  - What acquisition models will be sustainable as the landscape shifts?
Position Paper

- How will we continue to facilitate access to closed resources to which we no longer subscribe?
- How do we communicate our principles and decisions with our users?
- What tools and methods can we use to evaluate open resources and their usage?

Discovery, Cataloging, and Metadata
Historically, making open content discoverable through library systems has challenged library employees, and these challenges continue today. Shifting the focus of our collections and services toward open will mean relying more heavily on resource description work by library staff, for several reasons. Records for open content are less likely to be included in vendor or community-provided bibliographic systems, so there are challenges related to adding consistent and findable individual OA articles and other resources that do not have records in OCLC. OSU’s open scholarship relies on original description in order to reach its audience and make an impact, which requires significant time and expertise from library staff. Current knowledge bases and library systems do not currently allow for streamlined access to open content at the title-level, but this may change in the future. In order to make access to quality open content achievable for OSU researchers, we need to keep up-to-date on tools and technological updates designed to mitigate these issues.

- Prompts:
  - What resources, staffing, and skill sets do our description services units need to support open content?
  - How can we build effective policies and sustainable workflows to support description of open resources?
  - How can we improve our systems’ capacity to leverage metadata to promote discovery and access for open content?

Instruction and Outreach
OSULP’s focus on teaching and instruction builds information literacy in the OSU community. As the nature of library collections changes, the way we teach basic research skills will need to reflect those changes. Right now, library instruction centers on how to access materials that are traditionally paywalled, and what to do in the event students are trying to access materials we don’t subscribe to or how to access materials off-campus. A move to more open materials would require a shift in how undergraduate instruction sessions are structured, and may need to include more discussion on what open means and how to evaluate open sources.

The scholarly publishing landscape can be confusing for researchers, for those early in their academic career and those whose practice is entrenched in traditional publishing outlets. Researchers face challenges identifying appropriate journals, understanding their rights, and following changes in policies. In addition, there may be an interest among faculty and graduate students especially, but also undergrads, in learning more about the publishing landscape. All the libraries we interviewed offer OA publishing support, with one university (Pittsburgh) helping researchers identify which OA journals to publish in. Engaging in dedicated instruction,
consultations, and outreach to OSU researchers about open scholarship topics would educate researchers on publishing options that are available to them, promote use of new and existing library services, and inform users about developments in this area, helping to meet community members’ needs in a transforming landscape. The feedback and discussions that occur during outreach events could inform future OSULP services, as well.

● Prompts:
  ○ What topics do we want to focus on for instruction and outreach efforts?
  ○ How can we integrate open scholarship topics into work we’re already doing?
  ○ What groups do we want to target?
  ○ What methods would be most effective?
  ○ What opportunities can we explore around open pedagogy?
  ○ What types of workshops can we offer on open scholarship in addition to those being hosted on data management?

Publishing and Sharing Platforms
Open access library platforms provide a primary means to share scholarship, data, and unique resources with a global audience. By offering solutions for open access digital publishing of scholarly work, via systems including the institutional repository and our open access journal hosting platform, we provide options for OSU researchers and scholars to disseminate their work. Our digital collections repository extends access worldwide to unique primary source materials held at OSU. However, we have work to do to ensure that our platforms are managed sustainably, and that they provide a competitive alternative for researchers. Relying on the personal initiative of OSU faculty rather than mediated workflows has resulted in low numbers of article deposits. Cross-platform discovery of open content in our repositories is an ongoing challenge.

● Prompts:
  ○ Do we have adequate staffing and prioritization to ensure ongoing support and improvements to existing open access systems – especially those using open source software?
  ○ What measures can we take to broaden discovery and reuse of locally hosted content?
  ○ How can we increase research deposits, and especially green OA faculty article deposits, to the institutional repository?
  ○ How can we build capacity for additional types of open content, such as open data, OERs, and open access books?
  ○ What changes will be needed to comply with emerging requirements for public access repositories housing federally funded research output?

IV. Organizing for OA
The current department structure at OSULP may act as a barrier to effective open scholarship services. Positions that currently support one or more aspects of open scholarship are distributed among several departments, and there are no formal structures in place, such as
committees or interest groups, dedicated to open scholarship. The lack of cohesion around open scholarship makes it difficult to facilitate broad conversations about needs and challenges. As a result, the work being done in this area is often more reactive than proactive or exploratory, and opportunities for new projects and services may be missed. Additionally, there are positions in the library that, in order to fully embrace open, require dedicated and specialized knowledge.

There are many current positions within the library with prominent open scholarship-related responsibilities in their position descriptions, and there are also positions that may not have incorporated their responsibilities for open in their position descriptions yet (e.g. open licensing, assessment, etc.). We did not include positions in the Special Collections and Archives Research Center, even though there are many staff with interests and responsibilities there for making unique materials openly available.

1. Director of Resource Acquisition & Sharing Department  
   a. Publisher/Vendor Negotiation  
   b. Collections
2. Scholarly Communication Librarian (Library Information Technology)  
   a. Copyright and Fair Use  
   b. Open Access Promotion and Implementation
3. Institutional Repository Specialist (Library Information Technology)  
   a. ScholarsArchive@OSU Operations
4. Digital Repository Librarian (Library Information Technology)  
   a. Digital Repository Management  
   b. Open Access Publishing  
   c. Metadata
5. Data Management Specialist (Research & Learning)  
   a. Data Management
6. Business and Social Sciences Librarian (Research & Learning)  
   a. Data Management for Social Sciences
7. Engineering Librarian (Research & Learning)  
   a. Data Management for Engineering
8. Science Librarian (Research & Learning)  
   a. Data Management for Science
9. Online Learning Librarian (Research & Learning)  
   a. Open Educational Resources

**Prompts:**
- What formal structures can we use to bring together OSULP positions that support open scholarship and other related services?
- What new positions are needed?
- Are there positions, units, and departments that could be transformed to support services related to open?
- Is there current interest among library employees to engage in work related to open?
V. Conclusion
The scholarly publishing landscape is rapidly changing. Authors, universities, and libraries are taking a stand, some might say “finally”, and refusing to give in to publisher demands to own all copyrights and charge exorbitant subscription and article processing charges to the same universities and authors who conduct the research, write it, peer review it, and serve on editorial boards for free. Late last year, Oregon State, Portland State, and the University of Oregon canceled their subscriptions to Elsevier journals. After lengthy and unproductive negotiations, it became abundantly clear to OSU that Elsevier had no interest in negotiating terms that reflect the OSU community’s goal of open and sustainable access to scholarly communication (https://guides.library.oregonstate.edu/c.php?g=1081992&p=7886144). To quote author/musician/songwriter/producer Robert Fripp, the journal publishing industry’s long-held practice of taking copyrights from authors and restricting research to only those who are able to afford it “was always questionable, often improper, and is now indefensible (Smith, 2019).”

With the increase in open access to scholarship, and alternative methods of accessing that which is paywalled, OSULP has an opportunity to redeploy staffing and fiduciary resources once devoted to subscription payments toward community-focused and driven open projects, services, and infrastructure. Through the information and discussion prompts provided here, we offer a basis for OSU Libraries and Press to engage in conversations about the services we offer in relation to open scholarship. While changes to scholarly article publishing are a point of emphasis, open scholarship strategy considerations for OSULP ought to encompass open access, open research, open science, open data, open metadata, open education, and open pedagogy. The potential impact on library services and personnel is significant.

VI. References


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VII. Appendices

A. History of OA at OSU

OSU takes its land grant mission, succinctly described as the delivery and use of the university’s education and research to the community, very seriously, and open access services and infrastructure within OSULP have effectuated this. Open access, which allows the fruits of research to be read and used by the people who paid for it, by taxpayers, decision-makers, teachers and students, Oregon residents, as well as colleagues worldwide, by its nature helps to accomplish the delivery of its research to the community, helping to achieve its greatest impact within the state.

In 2005, OSU’s Faculty Senate passed an open access resolution that described “practices [that remain in effect today] that impede an open and sustainable system of scholarly
communication” and “actions that faculty members can take to improve the sustainability of scholarly communication (Wheeler, et al, 2005).” Such actions include:

- faculty with decision-making authority for professional societies should maintain control of journal pricing and access policies
- faculty as authors should choose outlets for their publications with an awareness of fair pricing and open access
- faculty as participants in the peer review system should support non-profit society publications and open access publications and should refuse to review for high-priced commercial journals.

Individual OSU colleges and academic units, working closely with their library liaisons and librarians in the OSULP technical services department (renamed the Digital Access Services department and then the Center for Digital Scholarship and Services (TS/DAS/CDSS)) passed open access policies that built on a Library Faculty Association OA policy passed in 2011. The Faculty Senate passed a campus-wide Open Access Policy, the second land grant university in the U.S. to do so, in June 2013, committing the university to the sharing of its research and scholarship as widely as possible. In addition to the public benefit of such dissemination, this policy is intended to serve faculty interests by promoting greater reach and impact for articles, and “direct[ed] faculty to submit an electronic copy of the author’s accepted (post-peer review, pre-typeset) manuscript of their articles to OSU Libraries for dissemination via the ScholarsArchive@OSU institutional repository (Oregon State University, n.d.).

There has been a lot of other OA-related work at OSU over the years. The OSU institutional repository, ScholarsArchive@OSU, was established in 2005, and managed by TS/DAS/CDSS. The repository was promoted to University academic units by librarians in that department and the library’s liaisons. Two key early repository stakeholders were the Graduate School and the Extension and Experiment Station Communications office. Beginning in 2006-2007, all theses and dissertations were required to be deposited to the IR. As well, all print theses and dissertations were digitized and made available in the IR by the Digital Production Unit within TS/DAS/CDSS. The Extension and Experiment Station Communications office, responsible for communicating their research to the Oregon community, began depositing new publications to the IR for preservation. The library also completed a mass digitization project that made available the history of their publications in the repository. OSU was the first land grant institution to make the entire corpus of their extension and experiment station publications open. To date, the IR contains 31,238 dissertations & theses from graduate and undergraduate students, and 13,498 articles of open scholarship that include journal articles, conference proceedings, presentations, journals, posters, book chapters and preprints. It also contains 183 datasets and 526 learning objects. 241 countries have visited and viewed materials from OSUL’s IR.

In 2011, the Center for Digital Scholarship and Services began monitoring the Web of Science database for articles published by authors affiliated with Oregon State University. The Center contacted authors and requested and deposited articles on behalf of the authors. Over the course of the next several years, Center staff contacted every OSU faculty member who had
authored an article indexed in Web of Science in that time period, resulting in the deposit and open availability of over 50% of the articles published by University faculty during this period (Zhang, 2015). The OSU green OA policy, based on the Harvard model (https://osc.hul.harvard.edu/modelpolicy/), permitted OSULP and OSU faculty authors to deposit articles without embargoes. Around this time, OSULP began working with the University’s News and Communications office to make articles that appeared in university press releases open access. Each time the office wrote a story about an author’s research, the office contacted the author asking for permission to deposit the article in the IR. TS/DAS/CDSS deposited the article and News and Communications would then add a link from the press release to the article in the IR so that readers of the resulting news stories could access the full text.

Mediated article deposit work—the identification, request, and deposit of OSU faculty-authored articles to the IR—was suspended in 2016 when the Center for Digital Scholarship and Services department was discontinued and staff from that department were moved to other library departments. As a result, the rate of OSU faculty-authored deposits is now fewer than 5%.

In addition to services related to the availability and impact of research articles, the library has committed to OA journal hosting via the Open Journal Systems platform, the minting of identifiers, the creation and management of distinctive digital collections via Oregon Digital, and a variety of Open Data Initiatives including the certification of ScholarsArchive@OSU as a Core Trust Seal trustworthy data repository in 2022.

B. Questions asked of peer institutions

The authors asked librarians at seven peer and state institutions—MIT, Florida State University, University of Pittsburgh, UCLA, Grand Valley State University, University of Oregon, and Portland State University—the following questions. Responses are available in tabular form: https://docs.google.com/spreadsheets/d/1pjUJdl7C-U_Y-slc2Ug-BueN90hy4gQwsgRPzADleZY/edit?usp=sharing

1. Which of the following services relating to OA do you provide in your library? (Please highlight or bold each of the services you provide)
   a. OA outreach, advocacy, and training
   b. OA journal publishing support
   c. Article Processing Charge payments
   d. Transformative agreement negotiations
   e. OA policy
   f. Article deposit services
   g. Repository management
   h. Author rights
   i. Other?

2. Where in your organization’s structure does each of the following OA-related services reside?
   a. OA outreach, advocacy, and training
   b. OA journal publishing support
c. Article Processing Charge payments
d. Transformative agreement negotiations
e. OA policy
f. Article deposit services
g. Repository management
h. Author rights
i. Other?

3. What training have you conducted to inform your library staff and the larger campus community about open scholarship?

4. Does your university support library open scholarship initiatives?
   a. If yes, how so?

5. Has your library already disinvested in journal subscriptions or have plans to disinvest in the near future?

6. Have you made changes to your organization’s structure or positions to support open scholarship?
   a. If yes, how so?

7. Has your library begun to consider changes to its organizational structure on the basis of subscription disinvestments?
   a. If yes, how so?

8. If applicable, how has your library used funds from subscription disinvestment for purposes related to open scholarship? (Please highlight or bold those that apply)
   a. Creation of new positions
   b. Investment in OA collections or resources
   c. Payment of article processing charges
   d. Investment in tools that support the availability and preservation of your university’s research
   e. Investment in tools that support the discovery of OA collections
   f. Other (please explain):

9. How does your library negotiate your commitment to open scholarship with library vendors?

10. Does your library track the usage of OA materials?
    a. If so, how?

11. Is there a strategy for communicating with researchers on campus about open scholarship?

C. Resources (Examples from peer institutions)
1. Environmental Scan – Library Organizations around Open Scholarship
2. Open Scholarship and Collections Strategy | UCLA Library
3. Open Scholarship Strategy | Big Ten Academic Alliance
4. Open Scholarship Commons | University of Washington
5. Open Scholarship Services | University of Maryland
6. Collections Strategies | Grand Valley State University
7. Scholarly Communications and Collections Strategies | MIT
8. Principles and Strategies to Support Open | Iowa State
9. Sustaining Open Scholarship | University of Virginia