

JLSC

ISSN 2162-3309 | JLSC is published by the Iowa State University Digital Press | <http://jpsc-pub.org>

Volume 10, 1 (2022)

The Challenging State of University Campus and Library Open Access Policies

Paula C. Johnson & Ellen Dubinsky

Johnson, P.C. & Dubinsky, E. (2022). The Challenging State of University Campus and Library Open Access Policies. *Journal of Librarianship and Scholarly Communication*, 10(1), eP13049. <https://doi.org/10.31274/jpsc.13049>

This article underwent fully anonymous peer review in accordance with JLSC's peer review policy.



© 2022 The Author(s). This is an open access article distributed under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>)

RESEARCH ARTICLE

The Challenging State of University Campus and Library Open Access Policies

Paula C. Johnson

University of Arizona Libraries

Ellen Dubinsky

University of Arizona Libraries

ABSTRACT

Introduction: This study investigates whether United States university libraries' commitment to increasing open access (OA) to scholarly outputs as demonstrated by their support of campus level OA policies translates into adoption of OA policies that apply specifically to library employees.

Method: This mixed-methods study used an anonymous survey and optional open-ended interviews of scholarly communications librarians at Carnegie Classification Doctoral Universities (Very High Research [R1] and High Research [R2]) to gather information about OA policies or statements at their institutions and/or within their libraries.

Results & Discussion: Variation in campus culture and governance structure meant the path from creation to adoption to implementation of a campus and/or library OA policy was similarly varied. The research reveals librarians' motivations for and contributions to advancement of OA on their campuses, and sometimes also within their libraries.

Conclusion: Many of the rationales driving adoption of campus OA policies similarly drive adoption of library-specific OA policies. Those surveyed whose institutions did have library-based OA policies referenced both the importance of leading by example and alignment with institutional mission and values.

Keywords: open access policies, institutional repositories, library policies, values-driven policies

Received: 09/21/2021 Accepted: 05/26/2022



© 2022 The Author(s). This is an open access article distributed under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>)

IMPLICATIONS FOR PRACTICE

1. Although much scholarship has reported on academic librarian involvement with developing and implementing campus-based OA policies or statements, this research explores the participation of R1 and R2 US libraries in enacting their own OA policies.
2. Study participants offered comments and reflections on their experiences with OA, observations that may help librarians assess whether their OA policies rest on a strong philosophical and ethical foundation.
3. This study suggests that it is time to reorient the discussion of OA policies back to a values- and mission-driven context.

INTRODUCTION

No matter the specific job title, academic librarians play a pivotal role in the research communication ecosystem. Acquiring, managing, disseminating, providing access to, and preserving information resources are the framework on which library services are built. Many in the profession were inspired as the Internet developed, promising a means of expanding access to digital journal articles and reducing cost barriers. In 2002, the Budapest Open Access Initiative (BOAI) included the observation that the World Wide Web was creating conditions where “[a]n old tradition and a new technology have converged to make possible an unprecedented public good.” The BOAI was the first of many declarations and statements issued in support of open access (OA) publication. Although this statement and its aims sound straightforward, its realization has turned out to be exceedingly complex.

The objectives of the BOAI, as well as the Bethesda Statement on Open Access Publishing and Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities, resonated with librarians. Unfettered access to information, with as few barriers as possible, seemed a natural fit for librarians whose professional training centered on providing access to information resources. OA publication could possibly relieve strain on library budgets under stress from unsustainable increases in resource licensing fees that were attributed to the “Big Deal” licensing model and exorbitant pricing by the largest academic journal publishers (Okerson, 1989; Otto, 2016; Levine-Clark, 2018; Jurchen, 2020). David Lewis envisioned librarians leading the way to the transformation of scholarly communication by committing to digitizing content, establishing repositories, and providing infrastructure for OA publishing, claiming that the “central truth for libraries and the campuses they support is that scholarly communication based on subscription journals is no longer affordable and that better and more economical alternatives are at hand” (Lewis, 2008, p. 273).

The total amount of OA content published has continued to grow yearly. Piwowar et al. (2019) estimate that, by 2025, over 40% of all journal articles will be available as OA and that 70% of article views will be to OA versions of articles. However, this increase in OA content has not eased academic library budgets. STM, the trade association for academic and professional publishers worldwide, reports that the global publishing market continues to grow year to year and will regain its pre-pandemic value of \$28 billion by 2023 (STM Global Brief, 2021). Delta Thinks reported that “library spending on journals (‘serials’) continues to increase in real terms (regardless of the inflation index used), while overall library spend are now declining” (Michael & Pollack, 2020).

Early growth in OA publication was the result of calls from OA advocates upon funders and research institutions to issue mandates requiring OA to research outputs (Harnad et al., 2004; Pinfield, 2005). Many funders responded by adopting policies requiring deposit of a version of published articles based on funded research to an OA repository. The initial 2005 NIH Public Access Policy requested voluntary submission of articles based upon publicly funded research to PubMed Central. By the time the NIH policy was changed to mandatory deposit in 2008, the European Research Council, Howard Hughes Medical Institute, UK Medical Research Council, Wellcome Trust, and the UK Medical Research Council all had mandatory deposit requirements in place (Zerhouni, 2008). In 2008, Harvard University’s Faculty of Arts and Sciences and the Harvard Law School became the first United States university units to adopt OA policies. From 2009 to 2014, seven additional Harvard schools adopted their own OA policies, which granted the institution (Harvard) certain nonexclusive rights to future research articles published by the faculty. This type of “rights retention” policy provided rights retention by the institution (Harvard) and indirect rights retention by the authors. The policy also included an “opt-out” or waiver option for authors and required deposit in the institutional repository.

University OA policies differ somewhat across institutions, although Fruin & Sutton (2016) identified several common elements, including the key aspects of the Harvard model (rights retention, opt-out option, repository deposit). The researchers noted differences regarding which members of the campus community and which types of research outputs are included. Most commonly, the policies pertain to faculty members, a designation which may or may not include librarians. The OA policies apply to research articles, but some policies include additional research outputs such as monographs.

Both the Registry of Open Access Repository Mandates and Policies (ROARMAP) and the Berkman Klein Center for Internet & Society at Harvard University maintain lists of institutions that have adopted OA policies. As of spring 2021, over 80 higher education institutions in the US had adopted such policies (Shieber & Suber, ROARMAP). Although differing

in some details, at their core, these OA policies share the goal of providing open distribution of faculty scholarship, typically through deposit of a version of published, peer-reviewed research in a campus institutional repository. Campus repository administration and management have become a common service area for university libraries (Fisher & Read, 2017) over the past two decades. Libraries were thus linked to their campus OA policies as a service provider and often as advocate and sustainer.

This exploratory study was undertaken as a first look at library-specific OA policies and whether university libraries' support of campus OA policies relates to the adoption of library OA policies. For the purposes of this study, the term "campus OA policy" refer to policies that apply to the scholarship authored by the faculty of the institution, a designation that may or may not include university librarians. The term "library OA policy" refers to policies that apply solely to the scholarship generated by the university librarians and/or library staff.

LITERATURE REVIEW

The majority of OA policy literature discusses the nuts and bolts of policy adoption, implementation, and support. The research often describes ongoing advocacy and education efforts and establishing processes within the library that maximize researcher participation in making their work openly available. Recognizing the variability of campus cultures, Finnie Duranceau and Kriegsman (2013) surveyed six universities with OA policies to distill a set of eight "common practices" that contributed to the successful implementation of an OA policy. In addition to providing these common productive practices, they tied implementation to an institutional repository (IR) and presented the specifics of Massachusetts Institute of Technology (MIT)'s IR workflow. Kipphut-Smith (2014) described an evolving, flexible process for harvest and deposition of manuscripts into Rice University's institutional repository. Mullen and Otto (2015) offered a case study that detailed how Rutgers University's library created a new repository portal to better support compliance with the university's OA policy. Stevan Harnad (2015) offered the eight most important features to ensure an effective OA policy, including immediate deposit of authors' peer-reviewed manuscripts in the institutional repository. Zhang et al. (2015) reported that direct solicitation of articles yielded more IR deposits than the Oregon State University OA policy did alone. Johnson et al. (2019) presented a case study describing two workflows created at the University of Colorado Boulder and stressed the need for flexibility and experimentation in devising them. A common theme stood out among the many implementation articles: the importance of simplifying the process for researchers to deposit their work in an institutional repository (Smith, 2012; Finnie Duranceau & Kriegsman, 2013; Kern & Wishnetsky, 2014; Kipphut-Smith, 2014; Mullen & Otto, 2014; Otto, 2016; Schiff, 2016; Johnson et al., 2019).

Although much of the scholarship relating to campus-wide OA policies centered on the experiences of libraries implementing and managing those policies, several researchers delved into the rationales and goals guiding the adoption of the policies. Fruin & Sutton's 2016 research study provided an in-depth examination of OA policies adopted or under consideration in over 50 North American universities and colleges at the time. The study identified strategies used in conceiving, promoting, and implementing OA policies. Key among the guiding principles for adopting a campus OA policy were retention of author rights, providing access to any reader, and supporting public access to tax-funded research.

Peter Suber's formative 2012 text *Open Access* framed university and funder OA policies as a method of fostering OA publication, tied to "their mission to advance research and to make that research as useful and widely available as possible" (p. 77-78). Lisa Schiff (2016) described how the OA policies for the University of California (UC) system were adopted as the "fulfillment of its public service mission as a land-grant institution" (p. 1). These policies opened UC scholarship that had been locked behind publisher paywalls, where it was "inaccessible to global communities who might benefit substantially from the discoveries, innovations and critical inquiry therein." The adoption and implementation of Florida State University's OA policy was detailed by Devin Soper (2017), who situated the adoption within a global trend among research institutions. Soper also cited some common rationales: "...OA policy adoption remains an important goal for many institutions, a symbolic affirmation of faculty support for the principles of OA. An OA policy can help an institution raise the profile of its institutional repository (IR), invigorate outreach efforts and content recruitment, and, in the case of Harvard Model policies, safeguard the author rights of its faculty" (p. 432).¹

There are frequent mentions of the alignment between librarians' and graduate students' shared goals throughout Cantrell and Johnson's 2018 case study on how the two groups collaborated on passage of the University of Colorado Boulder OA policy. The graduate students supported "fundamental changes in scholarly resource distribution and sharing" (p. 7) through OA publication's broadening of research impact and removal of access barriers. By engaging with graduate students, the librarians were able to build momentum to see the OA policy through to passage by faculty governance.

Beyond alignment with university missions or values, some university OA policy initiatives were sparked by economic concerns. Journal cancellations were the motivation behind the OA policy at Allegheny College (Kern & Wishnetsky, 2014) and were a pivotal component in the

¹ The "Harvard Model" or "Harvard-style" open access policy, described in the Introduction, has been adopted by not only Harvard but also Stanford University, MIT, the University of Kansas, and scores of other universities. Sample model Harvard-style OA policy language is available at <https://osc.hul.harvard.edu/modelpolicy/>.

OA policy at Rollins College (Miller, 2011). Lo L. S. (2021) reported on two R1 institutions whose OA policy rationales underwent refinement. Although the initial motivation for creating these OA policies was in response to the unprecedented increase in the cost of research journal subscriptions, the purpose evolved to incorporate widening dissemination of faculty research.

The digital revolution that fostered the emergence of the OA movement greatly impacted the perception of the academic library and opened new roles for librarians. A 2009 Ithaka S+R faculty survey pointed out that the shift toward online research practices meant that academic libraries were “being disintermediated from the discovery process.” Gate counts, reference transactions, and circulation numbers were decreasing, and, in a recession, campus administrators were looking at academic units with an eye on return on investment. One strategic direction taken by many libraries was to shift emphasis from collections to users and to align themselves with institutional priorities (Cox, 2018). Libraries began to position themselves more directly within the research enterprise, particularly research dissemination, to better address the needs of faculty and researchers. By engaging with OA, Mullen and Otto (2014) observed that librarians could demonstrate leadership and influence at their institutions and reinforce their alignment with the institutional goal of enlarging impact and reputation. Kipphut-Smith (2014) reported on the creation of a new scholarly communication liaison position at Rice and described how taking up OA as a library issue enabled the library to demonstrate their embeddedness in the research cycle, which now included implementing federal initiatives mandating OA to publicly funded research. A 2012 SPEC Kit (Radom et al.) noted that, in the 5 years since a previous survey on support for scholarly communications services was conducted, almost 75% of institutions had added or adapted at least one position to assume scholarly communication responsibilities. OA advocacy provided one avenue for embedding the library within the university’s research enterprise.

Campus OA policies have received some pushback from academics, often as claims of an assault on academic freedom or on intellectual property (IP) rights of authors. Alexander (2020) questioned the Harvard model OA policy, describing how such policies constituted a “landgrab” that worked against the interests of authors by denying them full control of their IP rights.² In a 2016 opinion piece, Anderson cited academic freedom as one of the main reasons OA policies in the US do not include mandates. An OA policy, even when it does not specify (as most do not) where one must publish, does generally ask that a version of a work be made openly available. This alone is viewed by some faculty as coercive, and,

² Peter Suber published a detailed response to Alexander that addressed these and other concerns: Suber, P. (2021). Author rights and the Harvard open access policies: A response to Patrick Alexander. *Insights*, 34(8), 1–13. <https://doi.org/10.1629/uksg.543>

for this reason, virtually all US OA policies offer a waiver or embargo option. Anderson mentioned additional reasons for the lack of mandates, including the decentralized structure of US higher education systems (i.e., no national governing body), the large number of private institutions, and competition between universities.

Samuel Moore (2021) posited that academic freedom arguments against OA were biased toward a minority of researchers in the developed world and considered OA in terms of social justice. He concluded that OA “works towards a more socially just global university system that is emancipatory from the inequalities of neoliberal capitalism and helps foster collectivity, experimentation and care” (p. 11). Joy (2020) explored how OA can play a role in actually expanding academic freedom, noting the tension between academic freedom and for-profit publishers, whose focus on revenues and “business-as-usual” practice was a barrier to new modes of thought. OA platforms “could have an important role to play in always clearing ground for more (and different sorts of) speech to emerge” (p. 321).

Johnston (2017) examined the potential tensions between OA policies and academic freedom and made a distinction between negative and positive versions. The first, negative conception of academic freedom, was freedom from external constraints, whereas the latter, or positive version of academic freedom, signified researcher autonomy. Although university OA policies differed in their specific conditions (e.g., waiver options, rights retention, opt-in, IR deposit, etc), Johnston concluded that all OA policies could be “harmonized with the principles of academic freedom” (p. 2).

Academic libraries continue to participate in the adoption, implementation, and advocacy for campus OA policies. Whereas ROARMAP and the Berkman Klein Center document the growing number of institutions that have adopted campus OA policies, no comprehensive listing exists of university libraries that have adopted similar OA policies specific to the library. The present study investigates whether librarians’ commitment to increasing OA to scholarly outputs on the campus level translates into adoption of OA policies specifically applying to library employees.

DESIGN/METHODS

Quantitative data for this mixed-methods research project were collected through an anonymous online survey in late spring of 2020. The survey was created using the Qualtrics platform. Qualitative data was collected through video conference calls conducted in the summer of 2020.

A discrete data set of institutions with high publication activity was derived using the Carnegie Classification of Institutions of Higher Education® 2018 Public File, extracting a list of all

institutions with a classification of Doctoral Universities: Very High Research Activity (R1) and Doctoral Universities: High Research Activity (R2). This yielded a list of 266 institutions. Using the Sector data field, the lone for-profit university was eliminated, resulting in a data set of 265 institutions. The list was further refined by removing the branch campus entries for Rutgers and Arizona State universities (both have unique main campus plus two branch campus Integrated Postsecondary Education Data System [IPEDS] identification numbers). This brought the data set to 261 institutions, from which Teachers College at Columbia University was deleted. Although it is technically a separate institution, the Teachers College at Columbia University and Columbia University and their libraries are highly integrated. The final data set thus consisted of 260 R1 and R2 private or public, not-for-profit institutions.

To send the survey invitation to the relevant individual, university library websites were searched for job titles that included “scholarly communication,” “open access,” or “digital scholarship.” Absent such titles, library scholarly communication website pages or LibGuides were searched for contact names. In instances in which there were only departments or units with no individual names given (such as scholarlycommunication@university.edu), an email was sent with the request that the survey go to the most appropriate recipient. Where there were no identifiable individual librarians or library units, the survey email was sent to the library director or dean, with a request that it be forwarded to the appropriate party.

University institutional review board (IRB) approval was received in April 2020. The survey requests were sent initially on May 18, 2020. A reminder email to complete the survey was sent 3 weeks later. After the initial email solicitation, any emails that were returned as undeliverable or those with out-of-office responses were researched again to determine an additional point of contact. Email solicitations were resent in these cases. The survey was closed to responses on June 21, 2020.

The online survey invited participants to sign up for a follow-up interview, and, of the 95 complete survey responses received, 39 respondents indicated an interest in participating in an open-ended interview that asked interviewees to discuss their own thoughts or observations related to OA policies on their campuses, institutional and/or library. Topics included the following: policy creation; adoption process; advocacy efforts; actions that support the policy’s success; and collection of any metrics. Interviewees were also asked to offer an opinion concerning the value of OA policies. A random sample of 20 respondents was selected from the pool using the true random number generator at Random.Org. Of the requests for follow-up interviews, 15 appointments were scheduled and held in August 2020. SignUpGenius was used to schedule the follow-up interviews, which were conducted using Zoom. Interviews were scheduled to last 1 hour, and several interviews exceeded the allotted time. These interviews were not recorded, but both co-investigators took notes that were then compared and harmonized.

RESULTS

Phase 1: Quantitative survey data

Responses were received from 111 of the 260 institutions asked to participate in the online survey. Of these, 16 responses were incomplete, thereby yielding 95 complete responses for a response rate of 37%. Demographic questions included identifying universities as:

- Public or private
- Member of the Association of Research Libraries (ARL)
- Status as a land-grant university

A quick demographic breakdown of the respondents is shown in Figure 1.

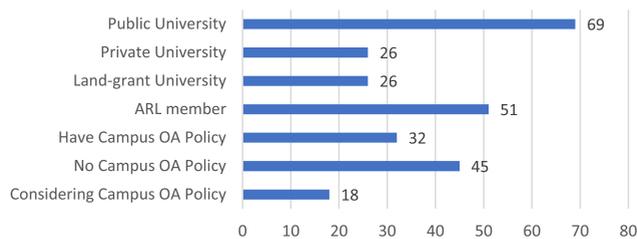


Figure 1. Survey Respondent Demographics (n=95)

Almost three-quarters (69 of 95) of the responses were from public universities. Of the 51 institutions that were members of ARL, 14 were private universities and 37 were public universities. The 26 respondents that identified as land-grant universities included 24 public universities and 2 private universities.

When looking at universities that had adopted a campus OA policy, land-grant universities were most likely (13 of 26, 50%) to have a policy in place. Universities with ARL library memberships were next most likely (24 of 51, 47%) to have passed a policy. Private universities (7 of 26, 27%) were the least likely to have passed a campus OA policy.

Institutions at which the libraries were ARL members were the most likely to have or to be considering adopting campus OA policies (37 out of 51, 73%). Land-grant universities were next most likely to have or to be considering adopting campus OA policies (16 out of 26, 62%).

There was minimal difference between public and private universities where campus OA policies were already in place or under consideration. Of the responses from public universities, 54% (37 of 69) had or are considering adopting a campus OA policy. Of the responses from

private universities, 58% (15 of 26) have or are considering adopting a campus OA policy (Figure 2).

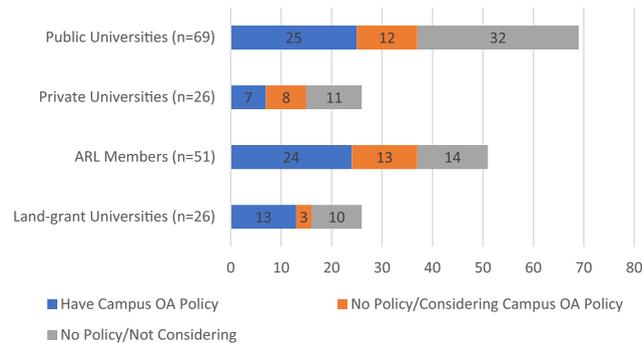


Figure 2. Campus OA Policies

As expected, fewer university libraries had adopted OA policy statements in addition to or instead of a campus OA policy. A total of 10 public universities had both a campus and library OA policy. No private universities had adopted both a campus and library OA policy (Figure 3).

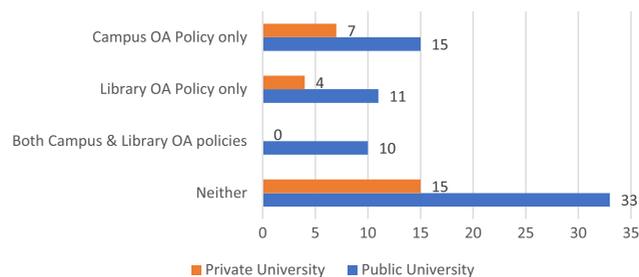


Figure 3. Campus & Library OA Policies

ARL member libraries (16 of 51, 31%) and libraries at public universities (21 of 69, 30%) were most likely to have adopted a library OA policy. Land-grant university libraries (6 of 26, 23%) and libraries at private universities (7 of 26, 27%) were the least likely to have adopted a library OA policy.

Although libraries in private universities were less likely to have already adopted a library-specific OA policy, they were the most likely to be considering adopting a library OA policy (8 of 26, 31%; Figure 4).

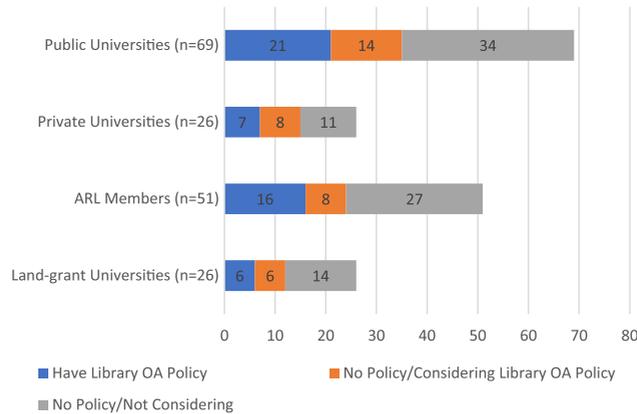


Figure 4. Library OA Policies Adopted or Under Consideration

A total of 30 of the 32 universities with campus OA policies made the policy publicly accessible online through a webpage or PDF, with no requirement of authentication or login. An error in the survey skip logic resulted in some survey respondents not seeing questions specific to the adoption and circumstances leading to adoption of library OA policies. This led to incomplete data relating to details about the library OA policy and whether the policy was available to the public (e.g., on a public-facing webpage or available for download as a PDF file). For this reason, data are unavailable on the public accessibility of library OA policies.

The survey asked when campus OA policies were adopted. The oldest policy was passed in 2008 and the most recent in 2020. Free text responses were sought for gathering details about how the idea for an OA policy or statement arose on the respondent's campus. All respondents with campus OA policies contributed free text responses. The university library played a role in nearly 60% (19 of these 32 cases), with reference to the university library, library dean, specific librarians, or the library committee of the faculty senate. Library involvement took many forms, including the following:

Policy originated with Library involvement, moved to faculty governing body:

- *Our policy was adopted first in the library and (with a lot of library advocacy) was adopted 4 years later, campus-wide, by the faculty.*
- *Libraries created draft and final versions of document. Document was endorsed by Library faculty. Dean of Libraries presented the policy to the Faculty Executive Committee, who had questions and wanted clarification on several items [before passage].*
- *The Library Dean was responsible for bringing the idea of an open access policy to the University Faculty Senate.*

Policy originated with faculty governing body library committee:

- *The idea arose from the work of our Faculty Senate Library Committee Task Force on Scholarly Communication.*
- *It arose from many fronts over many years, but was ultimately spearheaded by the Libraries Committee of the faculty council.*

Library worked with campus administration:

- *The Library Dean and Provost at the time were the primary initiators of the policy.*
- *Conversations between provost office, library, and key faculty.*

Respondents were asked to share details about the process of adopting a campus OA policy. Of the 29 responses, most referred to the policy passing through a faculty governance body such as the faculty senate, faculty council, academic senate, or faculty union. In many cases, the library was specifically identified as participating in drafting the policy, advocating its passage, and providing outreach to faculty. Responses included the following:

- *A lot of targeted outreach to each academic department with visits from the subject liaison along with a member of the Scholarly Communication department.*
- *We had to lead the draft policy through all departments and schools, the Faculty Senate, the university's Policy Review Group, the university's legal counsel, the Office of Faculty Affairs, the Office of the Provost, and the Office of the President.*
- *University administration put together faculty/library/press committee to discuss need for an OA policy or recommendation. They decided on a policy. Subgroup worked on the policy wording, the larger group approved. It was taken to the Senior Planning Group and they approved.*

In cases in which the library was not specifically referenced as a participant in adoption of a campus OA policy, the genesis of the policy included both campus and external actors:

- *The idea was initiated by the office of research and supported by the faculty senate.*
- *The state university system mandated that all its campuses develop and implement their own open access policies.*
- *A few faculty members proposed creating an OA policy. It was seen as a progressive move, and the president and provost at the time were both friendly towards the idea.*

- *A state legislator proposed a bill that institutions that get public funding needed to create an OA policy. So it was a requirement from the state.*

Phase 2: Qualitative interview data

The interviewees held a variety of titles and had a range of experience serving as leads in their library's OA initiatives. Of the 15 librarians interviewed, 11 worked at universities with campus OA policies. Of those 11, 6 worked at libraries with separate library OA policies or statements. Four of the fifteen worked at institutions with neither a campus nor a library OA policy (Figure 5).

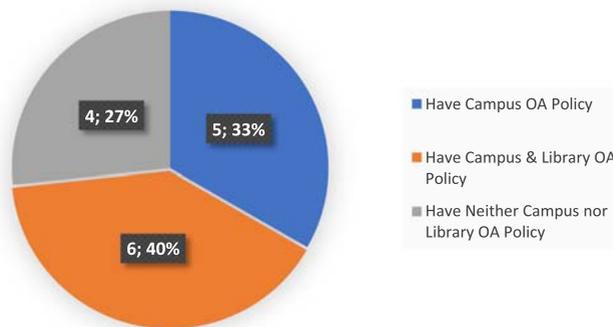


Figure 5. OA Policy Adoption

Some of the interviewees shared stories of success and/or optimism for OA initiatives underway. However, much of the discussion revolved around the challenges OA presented. A great deal was said regarding the persistence and hard work required to adopt an OA policy. Many librarians spoke to the difficulty of reaching faculty in a way that would elicit not only their support for a policy, but also their intention to make their own research openly available. Obstacles to achieving full or even partial faculty participation were brought up repeatedly. Despite the universal recognition of the inherent challenges presented by OA, most interviewees asserted their belief in the value of an OA policy and speculated about what lies ahead for academic libraries and OA. The following presents highlights from these interviews.

Significance of an OA policy

Although many interviewees acknowledged the gap between what a campus OA policy would ideally enable and what had been accomplished to date, there was agreement that having a campus OA policy was worthwhile. Even the four librarians working in institutions where

there was neither a campus nor library OA policy supported passing campus OA policies, with the proviso that, although an OA policy expresses a good intention, it must be followed up with genuine action. The primary function of a campus OA policy, it was often said, was to make the scholarly output of the academic institution freely and widely accessible. Additionally, an OA policy was identified as useful in communicating campus values and principles to not just the faculty and graduate students, but also to vendors and other libraries. Interviewees from libraries that had their own OA policies mentioned that this allowed them to “walk the walk,” demonstrating that they were not asking general faculty to do something they were not doing themselves.

Successes and OA initiatives underway

Many interviewees mentioned events or activities that they interpreted as indicators of successful OA policy implementation and progress. These included the following:

- Library marketing unit began sending out OA messaging
- Campus IR ingested not only faculty publications but also student research products beyond electronic theses and dissertations (ETDs)
- Creation of a diverse campus-wide OA advisory board (with a range of departments and colleges represented) to continue advancing OA
- IR platform was in the process of an upgrade (or migration) to a more robust or preferable software platform

How institutional culture influences OA policies

Although there were many recognizable similarities shared about the OA adoption process, there were also surprising differences noted. Campus OA policies originated at various levels, at the instigation of diverse parties, and were debated and ratified in a range of forums. Some OA policies were mandated by state laws requiring free and OA to scholarship originating from state university faculty. Some OA policies were reported as starting at the system-wide level, institution level, college or school level, or at a unit level. An individual (e.g., faculty member, administrator, librarian), or group of individuals may have first proposed the idea for a campus OA policy. Discussion, debate, and ultimate consideration of the policy may have involved faculty governance, individual departments, research and/or provost offices, or other campus units. No institution that had successfully adopted an OA policy did so without having faculty champion(s). Higher education funding cuts that resulted in library information resource budget reductions sometimes served as a factor in adopting an OA

policy. Fulfillment of the institutional land-grant mission, i.e., bringing the university's expertise and research to bear upon the community in which it resides, was cited by two of the interviewees as the motivation for a campus OA policy. Moving the OA policies through committee and the various levels of approval (e.g., provost, dean, college levels) was described as a protracted and frequently iterative process that sometimes took years to accomplish.

Institutional culture also impacted the success of campus and library OA policy efforts. One interviewee discussed the difficulties of working within the structure of their Jesuit institution, where faculty lack a governance structure through which to advocate for and pass policies. Regional cultural differences were also mentioned as influencing whether an OA policy was passed. One interviewee from a western state noted that the university culture was not conducive to any policies directing faculty action. Institutional intellectual property policy was identified as a factor by a few interviewees. In one institution, copyright of faculty scholarship was retained by the Board of Regents rather than the faculty members. In another institution, the intellectual property policy did not clearly address ownership of staff scholarship. Librarians there were thus deterred from devising an OA policy because their scholarship could be considered work for hire whereby copyright is held by the institution.

Several interviewees discussed the role that library administration played in the initiation and adoption process. Library administrators were cited as helpful in passing a campus OA policy but necessary in passing a library-specific OA policy. Outreach by librarians was mentioned repeatedly as an important component of the adoption process. One interviewee estimated they spoke with 1,000 faculty members individually or in groups in the advocacy outreach leading up to the policy's adoption. Another interviewee described multiple meetings with faculty members and going college to college within the university until fears and concerns had been addressed and the faculty had no more questions to ask.

In four of the six institutions that had both campus and library OA policies, the library policy pre-dated the campus policy. In one case, the library policy was enacted 7 years before the campus policy. Librarians at all six institutions with both campus and library OA policies were included in the campus OA policy as either faculty members or as an equivalent of tenure-track faculty.

Persuading faculty

Several librarians brought up the idea that it was difficult to persuade faculty members to engage with OA because it represented a potentially risky change to their usual research practice. Publication in prestigious, or at least well regarded, journals was a top concern, as it had direct bearing on their achieving promotion and tenure. In addition to their concern that, in

publishing OA, their research would end up in a relatively unknown or worse, a predatory journal, there was a bandwidth issue. Faculty frequently are not only researching, teaching, advising, and writing papers, but also applying for grants, serving on editorial boards, doing committee work, and responding to other administrative demands. For this reason, librarians said it was counterproductive to include words such as “compliance” in an OA policy. In fact, unlike in European nations, OA policies in the US typically provide a waiver option. Many librarians reported that they “sold” faculty on OA policies by promising that they would have low to no burden if they chose to participate. Some “made the case” for OA by sharing studies that demonstrated higher visibility and impact (citation frequency) for OA articles. The “OA ethos” was mentioned as worthy of incorporating in educational outreach but was not believed to be a strong factor in convincing faculty to participate. However, one librarian stated that their philosophy was “OA advocacy is education; OA education is advocacy.”

Administering and supporting the campus OA policy

Most US campus OA policies identify the university library as the designated provider of policy support; however, no policy in this study comprehensively addressed how such support would be resourced. Many respondents commented on the challenges inherent in allocating sufficient personnel and technical infrastructure to effectively implement and sustain OA policy support. The ongoing work of obtaining content for the IR and doing outreach with new faculty and new librarians, as well as general continuous education efforts, all require funding, time, and effort.

Interviewees shared their experiences supporting campus OA policies through management of the campus institutional repository (IR). In many cases, librarians and library staff mediated the IR submission process. This was not always a practical or sustainable process because of the ongoing commitment of staff resources and a desire for high quality metadata. Interviewees described how they solicited and harvested content for deposit into the IR. Library staff frequently used Web of Science or Scopus alerts; some libraries were able to harvest through IR integration with a campus research information management (RIM) system.

One librarian responsible for management of the campus IR began supporting the campus OA policy by alerting publishers of the adoption of the campus policy and the intention to assert a nonexclusive right to publish a version of the scholarship in the IR for any scholarly articles published after the adoption of the policy. Such a process would be specific to institutions with a rights retention, Harvard-style OA policy that grants the university a nonexclusive right to make faculty-authored scholarship available.

Some interviewees described performing ongoing work within their libraries to share OA awareness and scholarly communication fundamentals with their colleagues. This enabled liaisons to assist in supporting the campus OA policy through continued outreach and advocacy directed toward faculty throughout the university. Some librarians cited specific on-boarding for new hires or mandatory online liaison training that addressed scholarly communication basics and the campus OA policy.

Several interviewees mentioned library programs that offer subvention funds to assist faculty in paying the article processing charges (APCs) often required for OA publishing in both fully open and hybrid journals. Such funding provided an avenue for outreach to faculty and contributed to advancing the campus conversation about OA publication and campus OA policy. Although APC funding was said to be difficult to sustain, offering this funding was credited with raising awareness of the importance of OA publication.

Participation and assessment

Passage of many campus OA policies was the result of the advocacy and participation of engaged faculty members. However, many of these faculty discovered that it was challenging to “make good” on their policy once passed. The incentives for participating were not always clear to faculty who were not directly involved in the OA policy adoption process. Depositing an acceptable version of a scholarly journal article was not always a seamless process, even when facilitated by the university library. Confusion about which version of an article was acceptable to submit or the author’s inability to retrieve the post-peer review manuscript were identified as challenges. On campuses where faculty were asked to self-submit, many uploaded article versions that were not permitted by the publishers’ policies and could not be posted to the IR.

Librarians covered by a campus OA policy were no more diligent in their compliance with an OA policy. One interviewee reported that only about one-third of their library faculty colleagues were submitting their scholarship. In some instances, library leadership, once highly supportive during the OA policy adoption process, were described as having shifted focus after policy passage as other priorities or initiatives arose. Library budget allocations for OA advocacy and policy support often suffered as a result.

Although most of these libraries found ways to provide base-level support, development of assessment and evaluation strategies was usually relegated to a wish list for the future. No interviewee could point to standard assessment methodologies, best-practice guidance, or widely used assessment strategies that were in use locally. Interviewees held a range of interpretations of what exactly should be assessed. Targets included OA policy compliance and faculty participation levels, participation levels by colleges/departments, waiver requests, identification

of research outputs covered by the campus OA policy, outreach to faculty, repository workflows, and IR usage statistics.

LIBRARY-SPECIFIC OA POLICY RATIONALES

Although all six of the interviewees with library OA policies were also covered by their campus OA policies, several did mention that other academic libraries might adopt OA policies to fill a gap at universities where librarians were not covered by the campus OA policy. Many interviewees indicated that the adoption of their library OA policies, passed prior to the campus OA policies, were accomplished in part to lead the campus by example. Even if mostly symbolic, a library OA policy was viewed as helpful in advancing the campus discussion about OA.

Interviewees also mentioned that a library-specific policy serves as a more direct and targeted reminder to librarians and library staff of the commitment to open scholarship that their library has adopted. The immediacy of a library OA policy was thought to translate into greater familiarity and ease with OA policies, enabling more meaningful engagement with faculty and more effective advocacy around OA publication and campus OA policies. More than one interviewee described the library OA policy as a declaration of values. This statement was not aimed at just a campus audience, but also at an external audience that included library vendors. The library OA policy statement was seen as an element of the library's approach to collection development, helping to shape the language and type of publisher agreements it sought.

DISCUSSION

The 32 institutions with campus OA policies identified in this survey represent an equal number of different campus cultures, governance structures, levels of campus OA advocacy, external forces, strategic objectives, and history of cross-departmental collaboration. Although the survey and interview responses did not reveal a single or best path toward campus OA policy adoption, the responses did reveal several common themes, challenges, and desired policy outcomes. The survey data and the interviews revealed how the librarians in this study have created a narrative to explain OA's presence or absence within their libraries, in the work lives of their colleagues, and on their campuses. There were some commonalities across public/private and R1/R2 institutions, such as the need to combat the common misperception that OA publication means predatory journals, the importance of finding faculty champions, and the continual need to educate faculty on the cost/value of subscription journals.

This survey was not large enough to provide a truly comprehensive look at all library-specific OA policies. Although it is evident that some libraries have passed these policies to include

librarians or library staff who were not covered by their campus OA policies, there were library OA policies adopted on campuses in which librarians were covered by the campus OA policy. The library OA policies sometimes pre-dated the campus-wide initiatives, often serving as an attempt to lead by example or serve as a template for a campus OA policy. Some library OA policies were adopted after campus OA policies, serving to re-emphasize the value of open practice or, in some cases, to extend the scope of scholarship included beyond journal articles.

The underlying impetus for the adoption of campus-wide and library-specific OA policies was often related to institutional mission, values, and vision. There is a shared belief in the value of making a university's research outputs openly available. OA is recognized as a means of advancing scientific discovery, contributing to the global knowledge commons, and serving the information needs of researchers, scholars, students, and citizens around the world. Passage of an OA policy is often directly linked to specific language in an institution's mission statement or strategic plan. Therefore, it was somewhat surprising to note that Jesuit R1 and R2 institutions, with their historical interest in promoting social justice, have not adopted OA policies. One survey respondent noted that, in 2015, not one US Jesuit institution had passed an OA policy, offering that the reason might be an ingrained conservatism. Support of OA publication appears to be consistent with the mission of land-grant institutions, as 62% of these respondents indicated they have a campus OA policy. Rooted in the tradition of land-grant universities is the aim to share the knowledge they create with the community in which they are embedded. Libraries at land-grant universities are not as likely to have passed library-specific OA policies, but they may have been covered under the campus-wide policy, perhaps negating the interest in such a policy.

Although this research survey instrument did not ask which campus unit or department was responsible for managing or supporting the campus OA policy, the interview respondents from institutions with campus OA policies all indicated that the university library filled that role. The preponderance of published articles (Gilbert et al., 2011; Armbruster, 2011; Kern & Wishnetsky, 2014; Kipphut-Smith, 2014; Mullen & Otto, 2015; Zhang et al., 2015; Schiff, 2016) about OA policy implementation and support by university libraries adds to the evidence that such support has become an established library service. What is not acknowledged are the challenges inherent in building a sustainable model of OA policy support. Many libraries cover the costs of hosting and maintaining a campus institutional repository even though the IR is an enterprise system, for which the costs could be shared with other campus units. These costs could include paying for a hosted system, providing ongoing technical support for a locally hosted open-source platform, or developing and maintaining a home-grown repository platform. Many libraries provide mediated deposit of content into the institutional repository, which necessitates ongoing staffing and expertise.

OA policy support also may require a “discovery” step to identify new faculty publications eligible for ingest into the repository. This frequently requires access to licensed products such as Web of Science, Scopus, or a campus RIM system such as Elsevier’s Pure or Digital Science’s Symplectic Elements. There is no indication that university libraries wish to discontinue support of the institutional repositories or the campus OA policies, but there has been little consideration of how the support will be sustained.

Metrics for OA initiatives have been weak or missing. Many of this study’s interviewees remarked that there were no formal assessment procedures in place at their institutions, and the literature supports the proposition that relevant and verifiable assessment measures have not been established generally or even on a local basis (Armbruster, 2011; Radom et al., 2012; Coalition for Networked Information, 2017). Standard metrics for assessment of OA initiatives have yet to be widely adopted by US institutions. In an ideal world, a standard methodology for measuring the success of OA policies would have emerged in the years since these policies were adopted. Uniform, cross-platform impact measures such as usage statistics, further faceted by type and location of user; user satisfaction data; citation and altmetrics data related to downloaded content; cost savings and so on could potentially provide meaningful data to measure impact of the campus OA policy. However, the two-part problem of available technical expertise and sufficient support resources (financial and personnel) have hampered progress in the development of assessment measures.

Despite the challenges libraries face in supporting and assessing campus OA policies, survey respondents did reveal some strategies that contribute to success, however “success” is defined. Enlisting faculty involvement (e.g., via a campus-wide OA advisory board), performing librarian outreach, and continuing OA messaging when opportunities arise have proven to be helpful on many campuses. As libraries venture more deeply into assessment activities, additional strategies may become apparent.

LIMITATIONS AND CONCLUSION

Investigating the adoption and administration processes of campus and library OA policies revealed the variety of experiences and challenges at each institution. This study does not attempt to provide a proven path or method for adoption of either a campus or library OA policy. Rather, the intent was to explore more about the landscape of these policies and to begin examining university libraries’ adoption of policies and statements that are values-driven.

The primary limitations of this study relate to sampling, as participants self-selected. In addition, this study only looked at research intensive doctoral universities in the US. There is

ample evidence³ that campus and library-specific OA policies have been adopted at US colleges and universities with other Carnegie Classifications and at colleges and universities across the globe. Only R1 and R2 institutions were chosen for this study because the researchers wanted to first target institutions that were likely to have OA policies owing to their high quantity of research outputs. Additional research is needed to gain a more comprehensive understanding of the true prevalence and efficacy of these OA policies overall. Further investigation is warranted in several areas, including what specific types of scholarly output is covered, which subject domains are most represented in OA participation, methodology for evaluating the effectiveness of a campus OA policy, differences in policies in research-intensive and non-research-intensive institutions, and models of sustainable library support of these OA policies.

The R1 and R2 academic librarians who participated in this study provide a picture of an OA landscape in flux. “Transformative agreements” and alternative publication funding models were discussed, without a common expectation of what combination of publishing models would lead to a fully OA scholarly communication landscape. The COVID-19 pandemic was frequently referenced as a potential second major disruptor (the Internet being the first one) of the scholarly publishing ecosystem. The events of 2020 coalesced in ways that may serve to further advance a transition to increased OA publication. Immediate access to the latest science, research, and analysis of data about the disease was critical in creating an effective response to the crisis. Equally relevant was access to scholarly and research content beyond the medical and scientific literature, as that broader content provided a fuller understanding of the possible ramifications of the global crisis (van Gerven Oei, 2020). Data and research about education, sociology, economics, psychology, and more all contributed to addressing the damage, uncertainty, and challenges that arose quickly and without warning. Openly accessible scholarship filled an information resource void as educational instruction pivoted to completely online delivery. Similarly, social justice movements in 2020 may have indirectly contributed to the advancement of OA policy statements. OA policies are part of a growing number of values-based policies and statements issued by universities and their departments or units. Although many institutions already had diversity, equity, and inclusion policies, there was a dramatic rise in the number of anti-racist statements issued since George Floyd’s murder in May 2020 and the increase in anti-Asian hate crimes occurring during the COVID-19 pandemic.

In 2020, then Association of College and Research Libraries (ACRL) President and dean of Wayne State Libraries, Jon E. Cawthorne, asked other academic library leaders to use the societal disruptions occurring in response to the pandemic and ongoing racial oppression as

³ To start, see Berkman Klein Center for Internet & Society’s chronological listing of institutional adoption of university open access policies (https://cyber.harvard.edu/hoap/Additional_resources).

inspiration to take bold new action (Cawthorne, 2020). This was a moment of opportunity to “rethink, redesign, and reimagine scholarly communication that not only leads the academy but also changes the world” (p. 375). Cawthorne asked leaders to envision a different relationship with vendors, saying “Ultimately, the outcome of this call to action must benefit all college and research libraries across higher education, which means focusing on the hundreds of millions of dollars we spend currently for scholarship” (p. 376).

Librarians in non-leadership roles can also take valuable action by participating in opening access to their own scholarship, whether by complying with their campus OA policy or adopting library OA policies. Academic libraries and consortia can issue public statements asserting the value of “open” and their intention to incorporate that value in their policies, practices, services, and business practices. Examples of such public declarations include Western Libraries at the University of Western Ontario’s “Open Access Statement” (2018); MIT Libraries’ “Framework for Publisher Contracts” (2019) and the “MIT Libraries Vision: A New Urgency” (2020); Iowa State University Library’s “Principles for Advancing Openness through Journal Negotiations” (2019); the University of Maryland’s “Licensing Principles” (2021); and the Orbis Cascade Alliance “Commitment to Open Principles & Practices (2021).

This study confirms the strong and ongoing commitment of university libraries to support OA to scholarly research. R1 and R2 university libraries have been at the forefront of the push for adoption of OA policies for their campuses and within their libraries as well. The work reported by the librarians in this study represents years of dedicated effort with an acknowledgment that the work is not yet complete. This should not be interpreted as a pessimistic assessment of the future, but rather as a realistic acceptance of the necessary ongoing work ahead. Now is the time to take further action, centering our open values to advance the transformation of the scholarly communication system.

RESOURCES

Berkman Klein Center for Internet & Society at Harvard University: <http://bit.ly/goodoa>

Carnegie Classification of Institutions of Higher Education®: <https://carnegieclassifications.iu.edu/>

Random.Org: <https://www.random.org>

Registry of Open Access Repository Mandates and Policies (ROARMAP): <https://roarmap.eprints.org/>

SignUpGenius: <https://www.signupgenius.com/>

REFERENCES

- Alexander, P. H. (2020). Open access and author rights: Questioning Harvard's open access policy. *Insights*, 33, 1–8. <https://doi.org/10.1629/uksg.525>
- Armbruster, C. (2011). Open access policy implementation: first results compared. *Learned Publishing*, 24, 311–324. <https://doi.org/10.1087/20110409>
- Anderson, R. (2016). Why are there virtually no mandatory open access policies at American universities? *Learned Publishing*, 29, 215–218. <https://doi.org/10.1002/leap.1034>
- Berkman Klein Center for Internet & Society at Harvard University. (n.d.). *Good practices for university open access policies*. <http://bit.ly/goodoa>
- Berlin Conference. (2003, October 22). *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities*. <https://openaccess.mpg.de/Berlin-Declaration>
- Bosch, S., Albee, B., & Romaine, S. (2021). The new abnormal. *Library Journal*, 146, 20–25.
- Brown, P. O., Cabell, D., Chakravarti, A., Cohen, B., Delamothe, T., Eisen, M., Grivell, L., Guédon, J-C., Hawley, R. S., Johnson, R. K., Kirschner, M. W., Lipman, D., Lutzker, A. P., Marincola, E., Roberts, R. J., Rubin, G. M., Schloegl, R., Siegel, V., So, A. D., Suber, P., Varmus, H. E., Velterop, J., Walport, M. J., & Watson, L. (2003, June 20). Bethesda Statement on Open Access Publishing. <http://nrs.harvard.edu/urn-3:HUL.InstRepos:4725199>
- Budapest Open Access Initiative. (2002, February 14). *Read the Budapest Open Access Initiative*. <https://www.budapestopenaccessinitiative.org/read>
- Cantrell, M. & Johnson, A. (2018). Engaged citizenship through campus-level democratic processes: A librarian and graduate student collaboration on open access policy adoption. *Journal of Librarianship and Scholarly Communication*, 6(Special Issue: The Role of Scholarly Communication in a Democratic Society), eP2229. <https://doi.org/10.7710/2162-3309.2229>
- Cawthorne, J. (2020). Mountains to climb: Leadership for sustainable change in scholarly communication. *College & Research Libraries News*, 81, 374–377. <https://doi.org/10.5860/crln.81.8.374>
- Coalition for Networked Information. (2017). Rethinking institutional repository strategies (Report of a CNI Executive Roundtable Held April 2 & 3, 2017). <https://www.cni.org/go/rethinking-irs-cni-er-s17>
- Cox, J. (2018). Positioning the academic library within the institution: A literature review. *New Review of Academic Librarianship*, 24, 217–241. <https://doi.org/10.1080/13614533.2018.1466342>
- Duranceau, E. F., & Kriegsman, S. (2013). Implementing open access policies using institutional repositories. In P. Bluhand & C. Hepfer (Eds.), *The institutional repository: Benefits and challenges* (pp. 75–97). American Library Association.

- Fisher, Z., & Read, K. (2017). Librarians and services in college and community college libraries. In T. Gilman (Ed.), *Academic librarianship today* (pp. 129–138). Rowman & Littlefield.
- Frederick, J. K., & Wolff-Eisenberg, C. (2020, December 9). *Academic Library Strategy and Budgeting During the COVID-19 Pandemic: Results from the Ithaka S+R US Library Survey 2020*. <https://doi.org/10.18665/sr.314507>
- Fruin, C., & Sutton, S. (2016). Strategies for success: Open access policies at North American educational institutions. *College & Research Libraries*, 77, 469–499. <https://doi.org/10.5860/crl.77.4.469>
- Gilbert, J., Kinger, M., & Kullman, L. (2011). Implementing an open access policy at Chalmers University of Technology. *Proceedings of the IATUL Conferences*. Paper 10. <http://docs.lib.purdue.edu/iatul/2011/papers/10>
- Harnad, S., Brody, T., Vallières, F., Carr, L., Hitchcock, S., Gingras, Y., Oppenheim, C., Stamerjohanns, H., & Hilf, E. R. (2004). The access/impact problem and the green and gold roads to open access. *Serials Review*, 30, 310–314. <https://doi.org/10.1080/00987913.2004.10764930>
- Harnad, S. (2015). Open access: What, where, when, how and why. In J. B. Holbrook & C. Mitcham (Eds.), *Ethics, science, technology, and engineering: An international resource* (2nd Edition of *Encyclopedia of Science, Technology, and Ethics*). MacMillan Reference.
- Henderson, K. S., & Bosch, S. (2010). Seeking the new normal. *Library Journal*, 135, 36–40.
- Johnson, A., Cantrell, M., & Caillet, R. (2019). Collaborating across campus to advance open access policy compliance. *Collaborative Librarianship*, 11, Article 7. Available at: <https://digitalcommons.du.edu/collaborativelibrarianship/vol11/iss3/7>
- Iowa State University Library. (2019, June). *Principles for Advancing Openness through Journal Negotiations*. https://lib.dr.iastate.edu/cos_reports/1
- IUPUI University Library. (2019, June 26). *Open values statement*. <https://ulib.iupui.edu/about/priorities/open-values>
- Johnston, D. J. (2017). Open access policies and academic freedom: Understanding and addressing conflicts. *Journal of Librarianship and Scholarly Communication*, 5, eP2104. <https://doi.org/10.7710/2162-3309.2104>.
- Joy, E. A. (2020). Not self-indulgence, but self-preservation: Open access and the ethics of care. In M. P. Eve & J. Gray (Eds.), *Reassembling scholarly communications: Histories, infrastructures, and global politics of open access* (pp. 317–329). MIT Press. <https://doi.org/10.7551/mitpress/11885.003.0032>
- Jurchen, S. (2020). Open access and the serials crisis: The role of academic libraries, *Technical Services Quarterly*, 37, 160–170. <https://doi.org/10.1080/07317131.2020.1728136>
- Kern, B., & Wishnetsky, S. (2014). Adopting and implementing an open access policy: The library's role. *The Serials Librarian*, 66, 196–203. <https://doi.org/10.1080/0361526X.2014.880035>
- Kipphut-Smith, S. (2014). *Leading a campus-wide conversation about open access*. <https://hdl.handle.net/1911/75897>

Levine-Clark, M. (2018). Open access and its impact on access and subscriptions. *Information Services & Use*, 38, 41–43. <https://doi.org/10.3233/ISU-180008>

Lo, L. S. (2021). The factors significant to the introduction of institutional open access policies: Two case studies of R-1 universities. *Journal of Librarianship and Scholarly Communication*, 9, eP2400. <https://doi.org/10.7710/2162-3309.2400>

Lewis, D. (2008). Library budgets, open access, and the future scholarly communication: Transformations in academic publishing. *College & Research Libraries News*, 69, 271–273. <https://doi.org/10.5860/crln.69.5.7989>

Michael, A., & Pollock, D. (2020, May 4). *News & Views: Library spending and the serials crisis*. Delta Think. <https://deltathink.com/news-views-library-spending-and-the-serials-crisis/>

Miller, J. (2011). Open access and liberal arts colleges: Looking beyond research institutions. *College & Research Libraries News*, 72, 16–19,30. <https://doi.org/10.5860/crln.72.1.8490>

MIT Ad Hoc Task Force on Open Access to MIT's Research, MIT Faculty Committee on the Library System, & MIT Libraries. (n.d.). Framework for Publisher Contracts (updated May 19, 2020). <https://libraries.mit.edu/scholarly/publishing/framework/>

MIT Libraries. (2020, May 6). *MIT Libraries vision: A new urgency*. <https://libraries.mit.edu/about/vision/new-urgency/>

Moore, S. A. (2021). Open access, Plan S and ‘radically liberatory’ forms of academic freedom. *Development and Change*, 52, 1513–1525. <https://doi.org/10.1111/dech.12640>

Mullen, L. B., & Otto, J. (2014). Open access policymaking: roles for academic librarians as “change agents” in research institutions. *Qualitative and Quantitative Methods in Libraries (QQML) Journal*, 1, 295–307. <https://doi.org/10.7282/T3SJ1HZW>

Mullen, L. B., & Otto, J. (2015). The Rutgers open access policy: Implementation planning for success. *Qualitative and Quantitative Methods in Libraries*, 4, 207–217. <https://doi.org/10.7282/T3FT8P32>

Okerson, A. (1989). Report on the ARL Serials Project. *The Serials Librarian*, 17, 111–119. https://doi.org/10.1300/J123v17n03_15

Orbis Cascade Alliance. (2021, May). *Commitment to Open Principles & Practices*. <https://drive.google.com/file/d/1H4O-eR4iNshWNRBcAMuefLLIZ6pSVn7E/view?usp=sharing>

Otto, J. J. (2016). A resonant message: Aligning scholar values and open access objectives in OA policy outreach to faculty and graduate students. *Journal of Librarianship and Scholarly Communication*, 4, eP2152. <https://doi.org/10.7710/2162-3309.2152>

Pinfield, S. (2005). A mandate to self archive? The role of open access institutional repositories. *Serials*, 18, 30–34. <http://doi.org/10.1629/1830>

- Piwowar, H., Priem, J., & Orr, R. (2019). The future of OA: a large-scale analysis projecting open access publication and readership. (preprint) *bioRxiv*. <https://doi.org/10.1101/795310>
- Radom, R., Feltner-Reichert, M., & Stringer-Stanback, K. (2012, November). *Organization of Scholarly Communication Services*, SPEC Kit 332. Association of Research Libraries. <https://doi.org/10.29242/spec.332>
- Schiff, L. (2016). *The UC Publication Management System: Fulfilling the promise of UC's open access policies*. www.ucop.edu/information-technology-services/initiatives/sautter-award-program/sautter-2016/UCOP-UC-Publication-Management-System.pdf
- Shieber, S., & Suber, P. (n.d.). *Good practices for university open access policies*. <http://bit.ly/goodoa>
- Smith, K. L. (2012). Why open access? The policy environment and process on one university campus. *Insights*, 25, 246–250, <https://doi.org/10.1629/2048-7754.25.3.246>
- Soper, D. (2017). On passing an open access policy at Florida State University: From outreach to implementation. *College & Research Libraries News*, 78, 432. <https://doi.org/10.5860/crln.78.8.432>
- STM. (2021, October 19). STM Global Brief 2021 – Economics & Market Size. *STM Report Supplement*. https://www.stm-assoc.org/2021_10_19_STM_Global_Brief_2021_Economics_and_Market_Size.pdf
- Suber, P. (2012). *Open Access*. MIT Press. <https://mitpress.mit.edu/books/open-access>
- UMD Publishing, Access, and Contract Terms Working Group. (n.d.). *Licensing principles*. University of Maryland. <https://pact.umd.edu/key-issues/licensing-principles>
- University of Southampton School of Electronics and Computer Science. (n.d.). *Registry of Open Access Repository Mandates and Policies*. <http://roarmap.eprints.org/>
- van Gerven Oei, V. W. J. (2020). *Viral open access in times of a global pandemic*. Punctum Books. <https://punctumbooks.pubpub.org/pub/viral-open-access-global-pandemic-covid-19-corona>
- Zerhouni, E. A. (2008, March 20). *The NIH public access policy: Overview and context*. https://publicaccess.nih.gov/sites/default/files/_migrated/comments/Overview_Context.pdf
- Zhang, H., Boock, M., & Wirth, A. A. (2015). It takes more than a mandate: Factors that contribute to increased rates of article deposit to an institutional repository. *Journal of Librarianship and Scholarly Communication*, 3, eP1208. <https://doi.org/10.7710/2162-3309.1208>