LYRASIS 2020 OPEN CONTENT SURVEY REPORT



Understanding the Landscape of Open Content Activities in United States Libraries

Hannah Rosen, Jill Grogg

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Introduction

Cultural heritage organizations have struggled for years to ensure broad and widespread access to information in a cost-effective way - a challenge and opportunity that has evolved over time. In particular, with the advent of digitized materials, libraries have fought for an economically sustainable future for their content, seeking a future where content costs do not overwhelm budgets to the detriment of other critical services. The serials crisis of the late 1990s coupled with the exponential increase in electronic resources led to the emergence of open access (OA) scholarship – the elder statesman, so to speak, of the open content movement. With the introduction of the Budapest OA Initiative (www.budapestopenaccessinitiative.org) in 2002, one of the first concrete roadmaps for OA was developed. In the years since, the movement has expanded to include a multitude of flavors, including those found within the two broad categories of gold OA (archived material usually found on the publisher's website) and green OA (material archived by other means, such as in an institutional repository). The need for raw research data to be housed and made available in open and accessible ways, as well as rising textbook costs, led to a new shared understanding of "open," which includes open educational resources (OERs) and open data.

The LYRASIS Research and Innovation division sought to better understand how LYRASIS member institutions participate in the open content movement. To that end, we designed a survey for our member institutions to gather data about how they are interacting with open in three broad areas: OA scholarship, open data, and OERs. For the purposes of the survey results and analysis presented herein, "open content" refers, at the most general level, to information that can be read or accessed without any barriers, be they paywalls or institutional logins. OA scholarship refers to any works written by scholars, academic faculty, or graduate students, covering, but not limited to, common formats such as theses, dissertations, journal articles, monographs, and preprints. Open data refers to any set or sets of raw research information gathered independently or in conjunction with a research publication. Finally, OERs refers to any materials used as teaching aids, including textbooks, webinars, syllabi, or other documentation designed for instructional use.

This report is not a comprehensive review examining the many initiatives, pricing and business models, advocates, and detractors of open content in all its guises. Overviews and analyses of each of the three areas abound, alongside other studies and research into specific areas of open content.

In the realm of OA, one such analysis might examine current models such as Read and Publish or Plan S (<u>https://onlinelibrary.wiley.com/doi/abs/10.1002/leap.1219</u>), while another may query experts about their opinions regarding article processing charges or APCs, (https://scholarlykitchen.sspnet.org/2019/10/24/ask-the-chefs-oa-business-models/).

One of the most comprehensive analyses of OA recently published is the "Pathways to Open Access" report prepared by the University of California Libraries (2018, <u>https://escholarship.org/uc/item/5gc4r5mg</u>). This report details the broad pathways to OA, including Green OA, Gold OA funded by APCs, and Gold OA funded by other means. For each approach or pathway to OA, the report examines the "nature of approach, prevalence and impact, strategies to achieve approach, systemic challenges, and systemic opportunities." Finally, the report develops possible next steps for each of the three broad pathways as well as universal strategies for OA as a whole. An extensive literature review published in 2018, "Open Access: Current Overview and Future Prospects" (<u>https://muse.jhu.edu/article/715060</u>), offers an exhaustive look at the state of OA, including items published in scholarly journals as well as

non-traditional outlets such as the Scholarly Kitchen blog, an invaluable resource for anyone wishing to know more about the nuances of OA and open content in general.

Regarding open data, organizations like the Open Knowledge Foundation (<u>https://okfn.org/</u>) offer handbooks explaining open data (<u>https://opendatahandbook.org/guide/en/what-is-open-data/</u>), as well as reports of various open data topics. A more granular examination of open data in academia was published in 2019, "Research Data Services in Academic Libraries: Where are We Today?" (<u>http://choice360.org/librarianship/whitepaper</u>) and presents the results of a survey on "the extent to which research data services (RDS) are supported in academic libraries."

With respect to OERs, the Open Educational Resources Commons (<u>https://www.oercommons.org/</u>) gathers a wealth of resources for the state of the OER movement, whereas articles like one published in 2019 in *College & Research Libraries*, "Bridging the Chasm: Faculty Support Roles for Academic Librarians in the Adoption of Open Educational Resources" (<u>https://crl.acrl.org/index.php/crl/article/view/17392/19519</u>) consider more granular aspects of OERs for a particular audience.

These few examples are but the tip of the iceberg regarding scholarship and commentary about open content and are presented as evidence of the complicated and variegated nature of "open" in our community. The survey results presented in this report pinpoint how institutions interact with open content in concrete ways, including content produced within and outside of participating institutions. While archives and museums were kept under consideration when creating the questions for this survey, it was acknowledged during formulation that the majority of the questions would fall under academic and, to a lesser extent, public library duties.

Within the academic world, the phrase "open access" can have very specific implications for both access and reuse. Therefore, the definition of "open content" was kept purposefully broad to allow for a wider range of questions.

While the definition of "open content" was kept broad for clarification in the questions, distinct initiatives were included as examples to guide respondents in their answers. For instance, when asking about financial support for outside OA repositories, examples such as arXiv or PubMed Central were included. Alternatively, when asking about financial support for outside data initiatives, examples like DBPedia were included. These examples were included to provide a snapshot in time about how libraries, in particular, engage with open.

Through an unfortunate coincidence, this survey was released on January 31, 2020, approximately two months before the COVID-19 pandemic truly started to affect the United States, and closed on March 22, 2020, during the time most institutions began moving off-site to online learning and working. Many publishers have since temporarily opened their content to greater or lesser degrees, but we were not able to capture any changes of perception about OA as the pandemic has unfolded. We hope to return to this survey sometime after the pandemic in order to reevaluate potential changes in perspective and policy.

The open content movement, particularly OA scholarship, has existed somewhat at the fringes of scholarly communication for nearly two decades, with bursts of varying success across institutional repositories, transformative agreements, and grant-funded projects for open and closed datasets such as CADRE (<u>https://iuni.iu.edu/resources/datasets/cadre</u>), and successful OER programs like Affordable Learning Georgia (<u>https://www.affordablelearninggeorgia.org/</u>). Some United States governmental agencies, such as the National Institutes of Health (<u>https://publicaccess.nih.gov/</u>), require public access to federally funded research within mandated timeframes. It remains to be seen if this modern unprecedented health and social crisis caused by the pandemic, which has opened content heretofore behind paywalls and

introduced budgetary uncertainty of monumental proportions, will galvanize the open content movement.

Methodology

Survey Design

The survey is divided into three sections concerning three different types of open content: open access (OA) scholarship, open data, and open educational resources (OERs). Each section was divided into two main subsections: Content produced within your institution and content produced outside of your institution. Information was gathered for both internal initiatives that can be done to support open content, as well as many external initiatives that can be financially supported.

The first section, OA scholarship, refers to any scholarship written by scholars, academic faculty, or graduate students, covering, but not limited to, common formats such as theses, dissertations, journal articles, monographs, and preprints. This section was presumed to draw responses from primarily academic libraries.

The second section, open data, refers to any set or sets of raw research information gathered either independently or in conjunction with a research publication. This could be qualitative or quantitative data, including, but not limited to, census/demographic information, scientific laboratory results, interview responses, audio or video recordings. We anticipated that this section could apply to both academic and public libraries.

The final section, OERs, refers to any materials used as teaching aids, including textbooks, webinars, syllabi, or other documentation designed for instructional use. We anticipated that this section would apply most to academic libraries, with a specific focus on teaching-dominant institutions, aka associate's and four-year colleges.

After gathering basic demographic information, each respondent was first asked if there was any sort of open content policy within their institution. From there, the survey moved into the subsequent sections of OA scholarship, open data, and OERs. The questions throughout the survey were a mixture of multiple choice and open-ended questions, and a complete list can be found in Appendix A.

Survey Distribution

This survey was conducted between January 31 and March 22, 2020. It was distributed via two listservs run and maintained by LYRASIS staff and sent to additional targeted groups within the LYRASIS membership. The broad distribution was needed in order to adequately cover different decision-making areas.

The listservs are as follows:

<u>lyroffers@lyralists.lyrasis.org</u> – This is a LYRASIS members-only listserv run by the Content and Scholarly Communication Initiatives (CSCI) department which distributes information about new scholarly content vendors and/or offers, discounts, and open access initiatives, as well as other relevant LYRASIS information pertaining to scholarly communication or publishing.

<u>archivpres@lyralists.lyrasis.org</u> – This is a public listserv also run by the CSCI department specifically designed to inform members and non-members about new vendors, discounts, and classes related to archives and preservation.

The following additional groups of LYRASIS members were targeted in to obtain a representative group of respondents:

- Current LYRASIS hosting clients using institutional repository software
- Community/associate's colleges
- Public libraries
- Leaders Circle members (this group of approximately 150 institutions represents the highest tier of membership with LYRASIS and includes a wide spectrum of institutional types and sizes.)

Due to the possibility of multiple users from a single institution receiving a request for participation, respondents were asked to submit their names and institutions at the beginning of the survey. Respondents were informed that their contact information would be confidential but would be used to identify multiple responses from a single institution. More details concerning multiple survey responses from single institutions are available in the following section.

A Note about Question Design

Many of the questions included an 'Other' option. Several questions appeared to require only simple 'Yes' or 'No' options, but we maintained the 'Other' option in case respondents felt that they could not easily opt for a black and white answer. Out of respect for the respondents, every answer left under 'Other' was maintained in that category upon analysis, even if some answers may appear to the reader to fit into a provided category.

Survey Results

The survey received two hundred and twenty-four (224) total entries. Completely blank responses were eliminated. Responses that indicated the institution did not have an open content policy and left the rest of the answers blank were also eliminated.

The survey received more than one response from twenty-six (26) distinct institutions. For each institution, the survey was designed to determine if the respondents were responsible for the same area (OA scholarship, open data, or OERs). If there was no overlap within the survey responses, both entries were maintained for analysis. If there was overlap, the authors looked to see if their responses were similar. If the responses were identical, one entry was kept for that institution. If their responses differed, both entries were removed from the overall survey data in order to avoid affecting the analysis.

After data clean-up, one hundred and sixty-six (166) distinct survey responses were used for central analysis.

Due to the demographic makeup of LYRASIS membership, which is primarily academic libraries, with fewer numbers of public libraries, galleries, archives, and museums, the authors anticipated that the majority of responses would come from academic libraries of various sizes. Subsequently, respondents were asked to identify themselves by Carnegie Classifications within the United States, with the possibility of identifying as an academic institution outside of the U.S., or not being employed by an academic institution at all:

Table 1.

Institution Type	Count	Percentage
Associate's Colleges: Mixed Transfer/Career & Technical-High Traditional	1	<1%
Associate's Colleges: Mixed Transfer/Career & Technical-Mixed Traditional/Nontraditional	5	3%
Baccalaureate College—Arts & Sciences (259)	14	8%
Baccalaureate College—Diverse Fields (324)	7	4%
Baccalaureate/Associate's College: Associate's Dominant (149)	7	4%
Baccalaureate/Associate's College: Mixed Baccalaureate/Associate's (259)	2	1%
Master's College and University: Larger programs (M1)	11	7%
Master's College and University: Medium programs (M2)	6	4%
Master's College and University: Smaller programs (M3)	8	5%
Doctoral University – Higher Research Activity (R2)	11	7%
Doctoral University – Highest Research Activity (R1)	36	22%
Doctoral University – Moderate Research Activity (R3)	10	6%
Doctoral/Professional Universities	1	<1%
I am employed by an academic institution outside of the United States	2	1%
I am not employed by an academic institution	45	27%
Grand Total	166	

As Table 1 demonstrates, the survey received a fairly concentrated response from academic institutions. Approximately 7% of respondents represented associate's or associate's dominant colleges, 13% represented baccalaureate colleges, 16% of respondents represented master's colleges and universities, and 36% of respondents represented doctoral universities.

Only two (2) institutions identified as academic institutions outside of the United States. Those institutions represented one doctoral institution in the Middle East designed on a U.S. -style model, and one Canadian doctoral institution. The authors believe these two institutions represent U.S. perspectives, and therefore have been included under doctoral categories in the analysis portion of the report.

Overall, as the chart demonstrates, this cross section represents every size of academic institution, but skews heavily towards the largest universities.

Of the forty-five (45) who replied "I am not employed by an academic institution," the breakdown was as follows:

Table 2.

Institution Type	Count	Percentage
Museum	3	7%
Other (please specify)	8	18%
Private/Industrial Library	2	4%
Public Library - up to 100,000 population served	10	22%
Public Library - 100,001 - 250,000 population served	9	20%
Public Library - 2,000,001+ population served	2	4%
Public Library - 250,001 - 500,000 population served	8	18%
Public Library - 500,001 - 2,000,000 population served	3	7%
Grand Total	45	

For non-academic respondents, the majority (71%) were public libraries, and they represent a range of sizes. This was important for the study in order to determine how much public libraries are participating in open content publishing, with a specific emphasis on open data curation. Of the remaining respondents, there were three (3) museums, two (2) private/industrial libraries, and eight (8) respondents who said 'Other.'

Of those respondents who chose 'Other,' four (4) respondents represented state agencies/libraries/commissions, one (1) represented a state historical society, one (1) represented a government special library, one (1) represented a cancer research institute, and one (1) represented a library consortium.

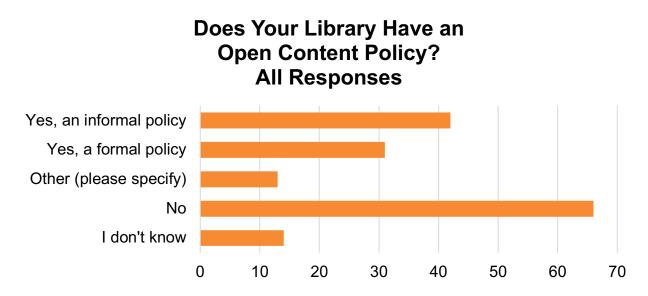
Three (3) respondents who chose Carnegie Classifications also chose 'Other', and clarified that they were independent non-profits that either are housed within an academic institution and/or produce academic research. For the purposes of this survey, they have remained within the Carnegie Classification breakouts.

Analysis and Findings

The survey analysis is organized in accordance with the three sections of the survey to allow for quick access to the areas of the survey that best reflect readers' primary interests and/or area(s) of decision making: Open Access Scholarship, Open Data, and Open Educational Resources.

Before entering into the three sections, the survey asked respondents an overarching policy question: Does your library have any sort of open content policy (e.g. any kind of policy regarding providing free access to campus faculty publications or data, financially supporting open publishers, publishing open journals, monographs, or educational resources, or any other form of support for free and open access to information)?

Chart 1.

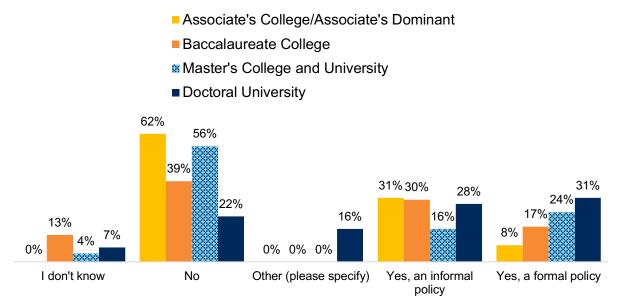


Looking at the one hundred and nineteen (119) responses to this question, 25% of respondents said they had an informal policy, and 24% of respondents said they had a formal policy. This means that approximately 50% of respondents have some form of policy. However, 37% of respondents said they have no policy whatsoever, which puts the other responses in perspective.

It is also helpful to see the breakdown of responses by type of institution:

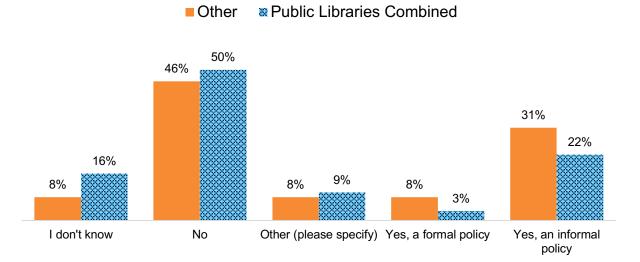


Open Content Policy by Percentage of Respondents: Academic Categories



In this chart it becomes evident that of the institutions who participated in this survey, associate's colleges are most likely to have little or no policy, while doctoral universities are most likely to have either formal or informal policies. Unsurprisingly, the larger the institution, the higher the percentage of libraries that have a formal policy. However, the results are more muddled in the middle – the master's institutions have a lower rate of informal policies than the baccalaureate colleges, but a higher rate of master's institutions have no policy than the baccalaureates.

Open Content Policy by Percentage of Respondents: Non-Academic Categories



In this chart, the independent institutions that self-identified as 'Other' match up very closely with the public libraries. The majority of these institutions have no policy, but if they have anything, it is more likely to be an informal policy than something codified.

Open Access Scholarship

In this section, OA was defined as any scholarship written by scholars, academic faculty, or graduate students, covering, but not limited to, common formats such as theses, dissertations, journal articles, monographs, and preprints. This did not refer to any raw data that has been collected by researchers on an academic campus or similar institution, either in conjunction with a publication, or as a stand-alone data set, nor did it refer to textbooks or other forms of teaching materials.

This portion of the survey was divided into two sections: Content Produced Within Your Institution and Content Produced Outside of Your Institution.

Content Produced Within Your Institution

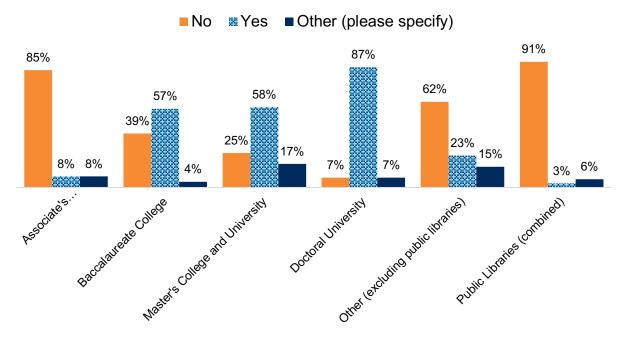
Do you have an institutional repository (IR) (either hosted locally or by a service provider) administered by your library that provides open access to scholarly/faculty and/or graduate student publications?

Institution Type	Νο	Yes	Other (please specify)	Total
Associate's College/Associate's Dominant	11	1	1	13
Baccalaureate College	9	13	1	23
Master's College and University	6	14	4	24
Doctoral University	4	52	4	60
Other (excluding public libraries)	8	3	2	13
Public Libraries (combined)	29	1	2	32

This question was presumed to exclude answers from public libraries, since scholarly content typically falls outside of the public library mission. The results confirm this theory, with only one public library saying they have an IR that holds scholarly materials, and two public libraries responding 'Other.'

Chart 4.

Do you have an institutional repository that provides open access to scholarly/faculty and/or graduate student publications?



Associate's dominant colleges overwhelmingly do not have IRs, which is not surprising considering their missions typically do not include promoting faculty or student scholarship. However, it is heartening to see that the three remaining academic categories – baccalaureate, master's and doctoral – show over 50% of institutions currently have IRs containing scholarly work. Doctoral universities responded overwhelmingly positively, with 86% saying that they have an IR for publications. Based on these results, one can draw the conclusion that a majority of U.S. higher education institutions have established their own institutional repositories for housing their institution's scholarly output.

For those institutions that replied 'Other,' about half of respondents said they had a repository of a sort, but were in various phases of functionality (all responses were left unedited after removing identification information):

"We have a fledgling repository that provides access to a few course projects."

"One was purchased, but not yet accepting submissions"

"We just established an institutional Wiki that we hope will serve as a voluntary repository for such publications"

"Homegrown system. Restricted to on campus access only. Only hold Masters Theses. Not marketed at all b/c it needs replacing."

Other respondents said they have a repository, but it is not focused on scholarly publications:

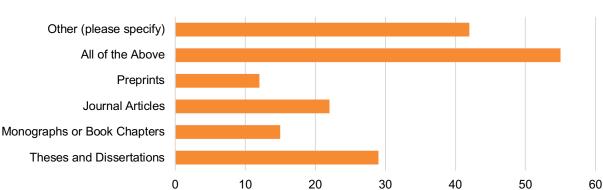
"Our repository provides access to college yearbooks, which might be considered student publications, if not scholarly student publications."

"We provide free open access to our digital newspaper collection to anyone, anywhere. But we don't have scholarly/faculty and/or graduate student publications."

And one institution noted that they prefer to call their institutional repository "a digital platform for scholarly publishing."

What Materials are Accepted into Your Repository?

Chart 5.



What Materials are Accepted into Your Institutional Repository?

This question was designed to determine which scholarly publications are being held in institutional repositories. The options were pre-prints, journal articles, monographs or book chapters, and theses and dissertations. Of the individual formats, "theses and dissertations" was the most common response, but the majority of respondents said they accepted all of the suggested types of content. Under 'Other,' the types of content expanded even further:

- Conference proceedings and/or materials
- Research reports
- Case studies
- Grant documentation
- Official institutional publications
- Creative writing, poetry and other creative output
- Student-run journals
- Other student scholarship
- Images, video and audio output
- Government documents and publications
- Historical images and collections

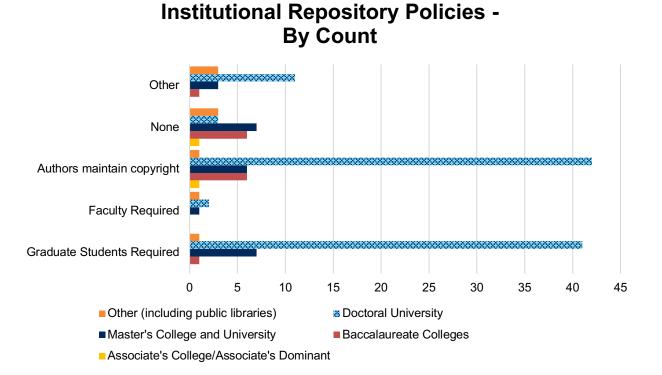
Of those respondents who have IRs, their repositories are being used to hold a wide variety of materials.

Please indicate whether your institutional repository (IR) has any of the following policies:

- Graduate students are required to place their dissertations into the IR, honoring embargoes or special exceptions
- Faculty are required to place publications (e.g. preprint, version of record) into the IR, honoring embargoes or special exceptions
- Authors depositing work into the IR maintain the copyright to their publications
- None
- Other (please specify)

The authors of this survey were interested in learning if there were any policies surrounding IR use, or if libraries were leaving deposit terms open ended. The first two response options above reflect policies that give libraries authority to influence graduate student and faculty output; the third response option reflects a policy that provides authors with more control over their publications.

Chart 6.



Since more doctoral universities replied to the survey, their response rates were higher than other types of institutions. Regardless, it is clear that doctoral universities have a much higher rate of IR policies than their academic counterparts. It is also evident that most policies permit authors to retain copyright. These flexible policies could be seen as incentives to encourage authors to deposit materials into IRs without sacrificing publishing or reuse options later on.

Equally notable, on the enforcement side, master's, and especially doctoral universities, are able to require graduate students to deposit their theses and dissertations into an IR, but almost no one within the higher education landscape is requiring faculty to deposit their material into an IR. U.S. institutions have the ability to influence graduate students' publishing actions but exhibit either an inability or a disinclination to influence faculty.

Under 'Other,' a large number of respondents expanded on the theme of encouraging faculty (and some graduate students) to deposit their work, but not requiring them to take any action:

"Faculty are expected to deposit but not required."

"Faculty are encouraged to support the college's open access policy and submit their eligible materials."

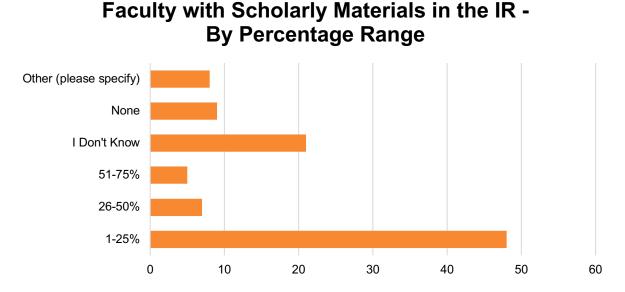
"Faculty are encouraged to place publications (they are not required)."

"[Some graduate students] are required to place their dissertations/theses into the IR, but not all. Faculty are encouraged to place publications in the IR, but it's not required. Copyright for the publications is between the author and the journal." "While faculty are supposed to deposit their publications into our IR, there is no real enforcement mechanism to do so in the [redacted] OA Policy."

"The campus OA policy strongly encourages, but does not require, faculty to place publications into the IR. We are not obligated to honor embargoes, but we will at faculty request. Second note: If an author receives funding for making an article OA, they are required to put it into the repository. If a faculty member creates OER, they are strongly urged to put it into the IR."

Approximately what percentage of your current institution's faculty have scholarly materials in the repository?

Chart 7.



Of the eighty-eight (88) respondents to this question, 49% indicated that less than 25% of faculty have material deposited in their institutional IR. 21% of respondents did not know how many faculty members have deposited material into their repository. Only 7% of respondents had 26-50% of faculty depositing material into their IR, and only 5% had 51-75% of faculty depositing material into their IR. No respondents had 100% participation.

Nine percent (9%) of respondents said that no faculty deposit material into their IR, and 8% said 'Other.' Of the 'Other' responses, most said that this question was not applicable to them due to their type of institution.

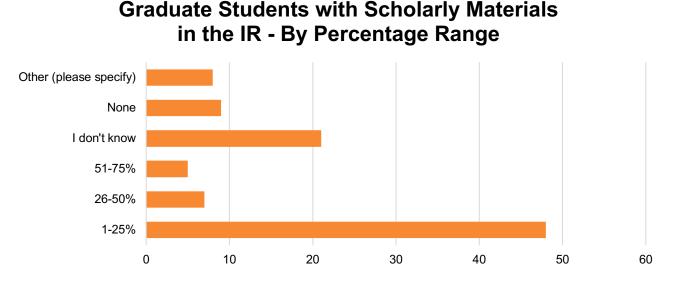
Broken down by type of institution, the results are largely the same within each category:

Table 4.

Institution Type	1-25%	26-50%	51-75%	l don't know	None	Other (please specify)
Associate's College/Associate's Dominant	1				1	
Baccalaureate College	9	1	1	3		
Master's College and University	7	3		2	5	1
Doctoral University	30	3	4	14	2	3
Other (including public libraries)	1			2	1	4

Approximately what percentage of your current institution's graduate students have scholarly materials in the repository?

Chart 8.



The picture changes slightly when looking at the percentage of graduate students with materials in their institutional repositories. The largest proportion of respondents, 30%, indicated that they do not know how many graduate students deposit work into their IR. The second largest proportion of respondents, 27%, said that only 1-25% of graduate students submit material into their repositories. While this is the largest section of known statistics, it is much smaller than the 49% of institutions with 1-25% of faculty participation. Five percent (5%) have 26-50% of graduate students publishing in their IR and 3% of the institutions have 51-75% of their graduate students publishing in the IR. Surprisingly, 11% of respondents say they have 76-100% participation. This could be due to enforced policies requiring graduate students to deposit their final work before graduation. Additionally, it should be noted that there are disciplinary differences in terms of the types of output that graduate level students produce – for example, some masters level professional programs do not require scholarly publication in the same manner as in other areas of study.

Under 'Other,' respondents either said they were not academic institutions or did not have graduate students, so the question was not applicable.

Looking at the breakdown between master's and doctoral universities (those institutions that have graduate students), it becomes clear that the doctoral universities are the institutions who have majority graduate student participation:

Institution Type	1-25%	26-50%	51-75%	76-100%	l don't know	None	Other (please specify)
Masters	9	2	0	1	4	2	0
Doctoral	16	2	3	10	20	1	4

Table 5.

Only one (1) of the master's institutions has full participation, while ten (10) of the doctoral universities have full participation. Considering fifty-eight (58) doctoral universities responded to the survey, as a representation of U.S. academic institutions, one potential conclusion could be that over 10% of top tier universities may be able to enforce IR participation for their graduate students, recognizing that there are disciplinary differences.

Does your library (alone, or in partnership with another part of the institution) maintain a fund to support article processing charges (APCs) or book processing charges (BPCs) for faculty and/or graduate students at your institution?

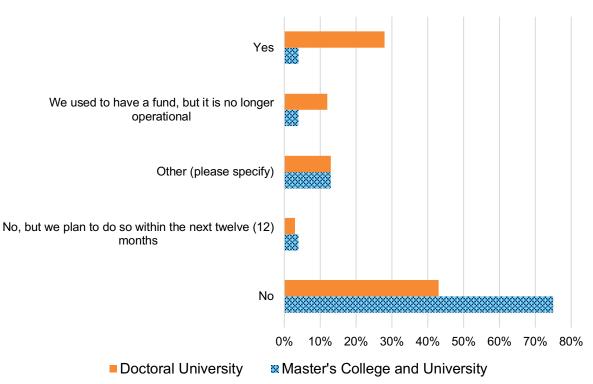
Many open access models are built around fees labeled "article processing charges" (APCs) or "book processing charges" (BPCs). In this fee structure, authors are expected to pay the publisher the amount of money necessary to cover the cost of publishing their content in an open format. Many faculty are not able to cover those costs, so some academic libraries have in the past several years begun to provide authors with those funds, even using those funds as encouragement to publish their material with OA publishers. The purpose of this question was to determine how widely adopted this strategy is within the United States (U.S.).

Table 6.

Institution Type	No	No, but we plan to do so within the next twelve (12) months	Other (please specify)	We used to have a fund, but it is no longer operational	Yes	Total
Associate's College/Associate's Dominant	13					13
Baccalaureate College	19				1	20
Master's College and University	18	1	3	1	1	24
Doctoral University	26	2	8	7	17	60
Other (including public libraries)	39	1	5			45

Since graduate work is outside of the scope of their institutions, it is unsurprising that no associate's colleges responded as having an OA fund, and only one Baccalaureate college had an OA fund. The non-academic institutions also overwhelmingly replied negatively to the question, along with the academic institutions outside of the U.S. Therefore, the master's and doctoral universities' responses are more illuminating in understanding the trends surrounding APCs/BPCs:

Chart 9.



APC/BPC Fund - By Percentage

The vast majority of master's universities, 75%, do not maintain APC/BPC funds. Roughly 4% have a fund, 4% previously had a fund, and 4% plan on having a fund in the next twelve (12) months. Of the five (5) who responded 'Other', one respondent said they did not know, one respondent said they were encouraging another department to provide funds, and one respondent said they were working through a consortium to provide this service.

With doctoral universities, there is a dichotomy. The largest group of respondents, 43%, said they have no APC/BPC fund, whereas 28% of respondents said they do have an APC/BPC fund. While 28% represents a sizable portion of doctoral universities, it is a decided minority. Twelve percent (12%) said they used to have a fund, but it is no longer operational. Three percent (3%) said they are planning to have a fund in the next twelve (12) months, and 13% marked 'Other.' Under 'Other,' some respondents said that there is a fund and/or development happening outside of the library:

"The university does this."

"A fund is available through the Provost Office and external to the Libraries"

"No, but there is a campus committee investigating this. Timeline for implementation is not in place"

Others said that they provide funding, but on a case by case basis:

"We used to have a fund, no longer operational. And we currently support a limited number of APCs and BPCs, as special projects."

"We have specific agreements with OA publishers to cover publication costs, in addition to read and publish agreements."

Could you please briefly describe how your open access fund operates (or will operate once it is put into effect)?

This was an open-ended question that sought to garner feedback around how specific institutions administer funding for OA scholarship. All responses are included, but the responses below have been edited to remove any institutional names or websites.

The Provost has a fund used to support faculty/staff travel for those who are presenting or serving on a committee or board. The use of this fund was, as of January 2019, expanded to cover Article Processing Charges. The faculty/staff member must apply to use the fund for APCs, and the journal title in question is vetted by the library's scholarly communication unit to be sure it is not from a predatory publisher.

University community members (faculty, staff, researchers, students, etc.) have access to up to \$3,500 of financial support to pay APCs during the financial year (Jul 01- Jun30). This academic year, 2019-2020 we ran out of the \$50,000 limit in the first semester; this has never happened before although we have seen a steady increase in fund popularity every year since the inception of the fund 5 years ago.

Call for applications is sent out; faculty apply and a committee decides whose applications get funded.

Any faculty member can apply to get funding from a central OA publishing support fund maintained by the main library and funded by all the schools.

The Provost's Office offers a subvention fund. All requests must receive chair/director endorsement and a commitment of at least 50% in matching support. Eligibility is for full-time faculty or academic administrators who are the sole or primary author/creator and allowed to apply once every 3 years.

Still under discussion but probably researchers will apply for funding and library will agree to fund those that meet specific parameters.

Users apply for funding; all university affiliates are eligible; only certain journals are eligible; there are caps on funds available per article and per author across multiple articles. Second note: Our fund will pay 80% of the Article Processing Charge (APC) up to a maximum of \$1500 per article. Expectations are that the remainder will be paid by the corresponding author's department.

We have two funds, one for articles and the other for books. We fund the article (APC) fund primarily out of the library collections budget. Total amount each year is \$84,000. Funds are disbursed on a first-come basis to any university-affiliated applicant who meets basic criteria:

-journal is part of DOAJ and publisher is part of OASPA -grant funds are not available publisher is an OA only PUBLISHER (not just OA only journal) For books, we fund books through the TOME initiative. We are committed to three per year though likely would do more if needed.

Library funds APC for journals in DOAJ. No hybrids. We pay up to \$3K for authors from our university. For all faculty and graduate students. Authors complete a form, send us an invoice, copy of the article and we pay the vendor directly. Article must be added to our IR and carry an acknowledgment to the library in the article if possible.

We have memberships and agreements with major OA publishers (PLoS, Frontiers, Copernicus, etc) that covers the cost of OA publishing for all corresponding authors from our institution. In addition to this, we have read and publish agreements with various hybrid publishers (De Gruyter, Oxford University Press, Cambridge University Press, Royal Society of Chemistry) that allows faculty to publish OA with no costs. We are working on an additional fund to cover small pure OA publishers so we can better support scholarly societies as well.

Researchers apply once their article has been accepted into qualifying open access journals, a team of librarians review the applications, accepted articles are paid for by (up to \$3000) the library's financial services team. Money is allocated by the office of the provost and the library. The fund is opened at the beginning of the FY and is closed when funds are expended.

We have had \$50k the past two years. There is an application on our website. It usually runs out very quickly into the academic year.

it's a limited fund but open to all faculty and research - and grad students if they have a faculty co-author. We do not pay for articles published in hybrid journals

We participate in TOME. We fund three monographs a year for five years. We are in year three.

Open access/APC subsidies are available to [institution]-affiliated first named or corresponding authors, including faculty, staff, or students. The maximum award is up to \$1500 for fully OA journals and up to half the APC with a cap of \$750 for hybrid journals. Authors must apply within 60 days of article acceptance. The program emphasizes that authors should only apply if they cannot obtain funds elsewhere, and authors are not eligible if the research leading to publication was supported by a funder with an OA policy.

These details are still being established; any guidelines developed would need to be agreed upon by campus stakeholders

Article cap – maximum funding per article is either 50% of the article processing charges or \$3,000 and Author cap – one funded article per fiscal year. Applicant must be listed as one of the authors and article must indicate [institutional] affiliation. Reimbursement will be made once the article has been accepted for publication and the author has been invoiced for the submission fee.

The open access fund is a reimbursement fund. Campus researchers must show proof of acceptance in order to qualify and the journal/book must meet certain required criteria to qualify for 50% (\$600) of the maximum award. There are additional bonus criteria that add to this 50% award, with a maximum of \$1200. Second: The Supporting OA Research (SOAR) Fund has a small fund supported by the library that contributes to APC charges based on a series of criteria including how many authors (only provides % of total if some outside [institution]), junior faculty or grad student with no other funding, etc. We send out letter to campus at first part fiscal year and it's usually expended by October unfortunately.

A small number of BPCs are supported by the University, using the TOME model. A small number of APCs are supported by the Library, to help enrich an OA journal published by a University dept outside the Library.

We have an APC deposit fund with PeerJ, and a fund that supports OA initiatives like Luminos, MDPI, and arXiv

We are closing the fund in June 2020. Paid for APCs to full OA journals for faculty and graduate students. Found that most APCs went to for-profit publishers, not advancing our goals. Second Note: The fund provides support for publication in fully open access journals (hybrid journals do not qualify). Faculty, postdoctoral researchers, and graduate and professional students are eligible. Journal must be listed in the Directory of Open Access Journals or be a member of the Open Access Scholarly Publishers Association. Limits on funding per article and funding per author within a fiscal year. Funding is prorated when there are authors from other institutions.

This is all still in the works. At the college/university level, we plan to start with mini grants to support faculty switching courses to OER materials. At the K-12 level, it's still too early to say. It will be offered by our Fellows and maintained by the Library. Criteria for qualifying will be set but hasn't been created yet.

When we began our repository, we had no such fund or relationships. Once the community became aware of our repository they approached us, asking to add their documents to the repository. We now have Interlocal agreements with agencies that have research materials (mostly gray lit) that they want preserved and made available to the public. All material is accepted as OA.

Content Produced Outside of Your Institution

Does your library have an open access policy to guide collection development?

Table 7.

Institution Type	l don't know	No	Other (please specify)	Yes, a formal policy	Yes, an informal policy	Total
Master's College and University		3			2	5
Doctoral University	3	19	3	2	15	42
Non-academic institution (including public libraries)	1	2				3

Always being interested in policy, the authors wanted to know how many institutions actually incorporate open access content into their collection development policies. Only forty-five (45) respondents answered this question, with the majority coming from doctoral universities. It is important to point out that only two (2) respondents in the entire survey said they have a formal policy that includes open access in collection development. Otherwise, the majority of respondents said they do not. Forty-five percent (45%) of doctoral universities have no policy, while 36% have an informal policy.

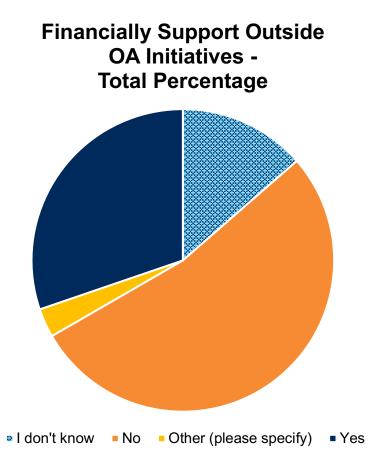
Does your library financially support any outside initiatives for open scholarly content?

Regardless of policy, many libraries still commit financial resources to outside open scholarly initiatives, which includes any open content not created by the institution but which the

institution financially supports. Having looked at OA activities within an institution, it is equally important to understand the landscape of support for OA scholarly publishing outside of the institution – this paints a better portrait of U.S. commitment to open scholarship, since self-interest is less of a factor.

This question was followed by four (4) subsequent questions that delved more deeply into the types of open scholarly initiatives that U.S. institutions support. It was presumed that these questions would only apply to academic institutions. Therefore, for the purposes of this section of the report, the non-academic institutions have not been included in the results. Only two non-academic respondents in that section said they financially support OA initiatives.

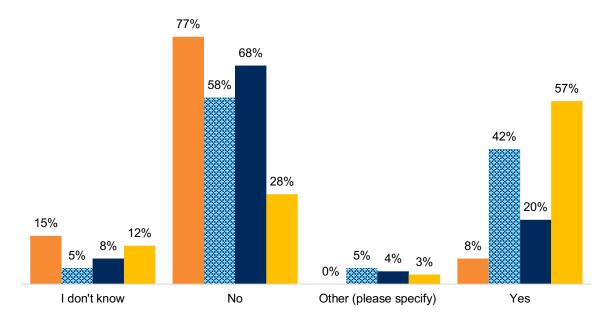
Chart 10.



Fifty-three percent (53%) of respondents do not financially support outside initiatives, while 30% do support outside initiatives. Fourteen percent (14%) said they did not know, while 3% said 'Other.' Of those that said 'Other,' the majority said they financially support outside initiatives indirectly through membership in organizations such as HathiTrust, SPARC, or library consortia.

Financially Support Outside OA Initiatives -Percentage by Institution Type

- Associate's College/Associate's Dominant
- Baccalaureate College
- Master's College and University
- Doctoral University



Broken down by type of institution, the results are similar, but with one crucial distinction. While doctoral universities lead the way for financial support, according to the survey, baccalaureate colleges provide more support for outside OA initiatives than master's universities.

Those respondents that said 'Yes' were led to four (4) follow-up questions about the types of OA scholarly models that they support. There were forty-nine (49) respondents that said 'Yes.'

Table 8.

Does your library financially support any outside repository (typically for preprints) such as arXiv or PubMed Central?

l don't know	No	Yes
5	18	25

Overall, U.S. academic institutions are fairly split between supporting outside repositories that include open content not created within the institution, and not supporting them. A slight majority

reported that they do support outside repositories. When broken down by type of institution, the survey results indicate that doctoral universities are the types of institutions that generally support outside repositories:

Table 9.

Institution Type	l don't know	No	Yes
Associate's College/Associate's Dominant		1	
Baccalaureate College	1	7	
Master's College and University	1	4	
Doctoral University	3	6	24

Does your library provide financial support for APCs only for fully open publishers, or for hybrid publishers as well? (Please select all that apply.)

In an earlier question, respondents were asked whether they have an internal fund to support scholarship from within their institution. This question was designed to identify whether libraries support outside initiatives that use APCs in their business model, and to what extent publisher models have to be open for the library to support them.

Table 10.

APCS for full open only		APCs for fully open and hybrid	No APCs	Other (please specify)	
Total Count	11	7	24	9	
Percentage	21%	14%	47%	18%	

Of the fifty-one (51) responses to this question, 47% said they do not support any initiatives that use APCs. Twenty-one percent (21%) support only APC publications that are fully open, and 14% support initiatives for fully open and hybrid publications. Under 'Other,' some respondents said that they try to support only open publications, but the publishers may have hybrid publications as well:

"I'd clarify that some publishers might publish both fully open and hybrid journals. We will not fund hybrid journals."

"The Library funds APCs for fully open publishers, but we administer funds from the VPR and Provost's Offices to fund APCs for hybrid publishers."

"Decision made at title level. Only fully open titles, but the publisher may publish both types."

One respondent said, "we are exploring transformative agreements where publishers have indicated a clear pathway to a full OA transition."

Taken together, these results indicate two major takeaways. First, that libraries would prefer to support APC programs that are fully open, but they may not be able to based on the publisher's

activities. Secondly, and perhaps more importantly, the majority of institutions indicated that they do not support any type of APC initiatives. While APCs are used to support a common business model for OA journal article publishing, that model does not appear to be broadly supported among U.S. institutions.

Please indicate if your library supports open access monograph initiatives such as Knowledge Unlatched.

Table 11.

	Yes	No	I Don't Know	
Total Count	29	12	1	
Percentage	69%	29%	2%	

Of the respondents who said they financially support outside open scholarship initiatives, only forty-two (42) responded to this question. Sixty-nine percent (69%) of respondents said they do support open monographs, while 29% said they do not, and 2% said they do not know.

Table 12.

Institution Type	l don't know	Νο	Yes
Associate's College/Associate's Dominant		1	
Baccalaureate College		2	6
Master's College and University		4	1
Doctoral University	1	5	22

When sorted by demographic type, the results indicate that the doctoral universities are providing the majority of support, but baccalaureate colleges are also supporting open monographs. This question reflects a trend that feeds throughout the survey – baccalaureate colleges appear to have higher participation in OA activities than master's colleges and universities. This could be due to a lack of master's representation in the survey results, or some other aspect related to the nature of master's institutions. We cannot verify the precise reason for these results, but they are still noted throughout the report.

Please indicate if your library financially supports open journal initiatives that are not based on APCs, such as the Open Library of the Humanities or Annual Reviews Subscribe to Open.

Of the respondents who said they financially support outside open scholarship initiatives, only forty-three (43) responded to this question.

Table 13.

	Yes	No	I Don't Know
Total Count	31	11	6
Percentage	65%	23%	13%

The majority of respondents, 65%, said they do support non-APC journal initiatives. When broken down by demographic type, the responses mirror the open monograph question above: doctoral universities drive the majority of support for non-APC journals, but baccalaureate colleges provide some support as well.

Table 14.

titution Type I don't know		Yes	
	1		
	3	5	
3	2		
4	4	26	
		1	

It is important to remember that within the survey, only 30% of respondents support outside open access initiatives. Within that sub-group, most institutions did not support APCs. However, each non-APC model offered in the subsequent questions was supported by a majority of the sub-group. No one model for open content works for all U.S. academic institutions. The majority of active supporters appear to take a multi-faceted approach; funding many different programs, regardless of model.

Open Data

In this section, open data was defined as a set or sets of raw research information gathered either independently, or in conjunction with a research publication. This could be qualitative or quantitative data, including, but not limited to, census/demographic information, scientific laboratory results, interview responses, audio, or video recordings.

As with the previous section, this portion of the survey was divided into two sections - Content Produced Within Your Institution and Content Produced Outside of Your Institution.

Content Produced Within Your Institution

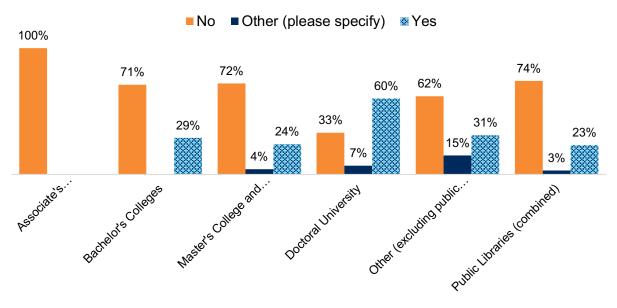
Do you have an institutional repository and/or data repository (either hosted locally or by a service provider) within your library that provides open access to research data (including, but not limited to, faculty/graduate student data, city demographics data, or other forms of rough information)?

Table 15.

Institution Type	No	Other (please specify)	Yes	Total
Associate's College/Associate's Dominant	13			13
Baccalaureate College	15		6	21
Master's College and University	18	1	6	25
Doctoral University	19	4	35	58
Other (excluding public libraries)	7	2	4	13
Public Libraries (combined)	23	1	7	31

Chart 12.

Do You Have an Institutional Repository with Research Data and/or a Data Repository? By Percentage



Respondents overwhelmingly stated that they do not house research data within their institutions. As it does not typically align with their missions, no associate's colleges said they have research data. Twenty-nine percent (29%) of baccalaureate colleges said they do have access to research data, which is only slightly higher than 24% of master's institutions. The only academic demographic where a majority of respondents do provide access to research data was the doctoral universities, where 60% of institutions do have research data in their repositories.

An increasing number of public libraries have started curating local, state or other government demographic data within their collections, so understanding the public library response was equally important when looking at this section of the survey. Seventy-four percent (74%) of

public libraries responding to this survey said they do not have research data, while 23% said they do. Of those respondents who said 'Yes,' two (2) institutions serve less than 100,000 people, four (4) institutions serve between 100,001 and 250,000 people, and one (1) institution serves between 250,001 and 500,000 people. Considering these were the bottom three demographic options in the survey, it is clear that the size of the population served is not a determining factor.

Of those institutions who said 'Other,' three (3) respondents said they have the capacity, but either have not received any submissions, or do not see it as a key feature:

"We allow data deposit in our IR; no one has done so yet."

"Our IR supports some data deposit but we do not market it as a data repository."

"We host some data in our IR, but it is not a solution for large, complex data sets."

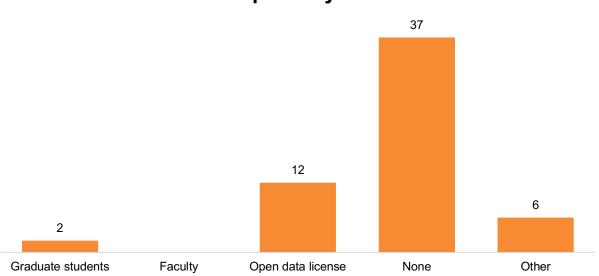
Two (2) other respondents indicated that they handle state level repositories.

Please indicate whether your institutional repository/data repository (IR) has any of the following policies. (Please select all that apply.)

- Graduate Students are required to place their data sets into the IR, honoring embargoes or exceptions
- Faculty are required to place their data sets into the IR, honoring embargoes or exceptions
- An open data license is required at the time of deposit
- None

Fifty-eight (58) respondents said they have a data repository or institutional repository containing data. Of those respondents, the breakdown of policy adoption was as follows:

Chart 13.



Data Repository Policies

Very few institutions implement any of the listed policies (or for that matter any policies at all) for data retention. Thirty-seven (37) respondents said they have no policy. Only twelve (12) respondents said they require an open data license, while only two (2) respondents said they require graduate students to deposit data sets into their repositories. Of those who replied 'Other,' three (3) respondents said they were not sure, while two (2) respondents said policies were not applicable. The remaining responses were as follows:

"They need to sign a release."

"A license of some sort is required for deposit but it doesn't have to be an Open Data license. CC-BY and CC0 are encouraged but depositors can upload their own license text."

"Data sets produced by the State Library for public use would be considered state government publications and eligible for inclusion in our repository."

"Meets guidelines for local history acquisition policy"

When broken down by type of institution, the majority of institutions with data policies are doctoral universities:

Table 16.

Institution Type	Graduate students	Faculty	Open data license	None	Other
Baccalaureate College	1			4	1
Master's College and University				6	
Doctoral University	1		10	19	4
Other (including public libraries)			2	8	1

The two (2) institutions under 'Other' that require open data licenses are public libraries with 100,001 – 250,000 population served.

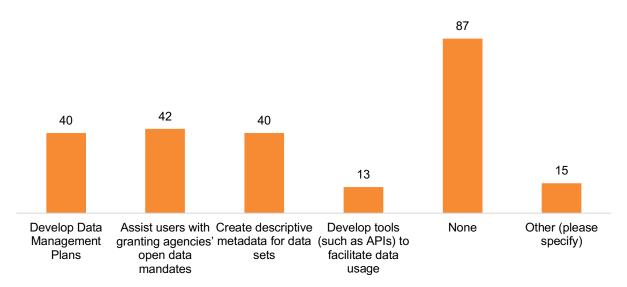
Does your library (alone, or in conjunction with another part of the institution) perform any of the following services around open data? (Please select all that apply.)

- Develop data management plans
- Assist users with granting agencies' open data mandates
- Create descriptive metadata for data sets
- Develop tools (such as APIs) to facilitate data usage
- None
- Other (please specify)

Table 17.

Develop Data Management Plans	Assist users with granting agencies' open data mandates	Create descriptive metadata for data sets	Develop tools (such as APIs) to facilitate data usage	None	Other (please specify)
40	42	40	13	87	15

Chart 14.



Open Data Services - Total Responses

In previous questions, respondents indicated that stewardship of open data sets is not a priority for U.S. libraries. In this question, the majority of respondents corroborated that, saying they do not offer any services around data. However, a smaller, but not insignificant, portion of respondents did indicate that they provide one or more of the services laid out in the question. Forty (40) respondents said they develop data management plans, forty-two (42) respondents said they assist users with granting agencies' data mandates, while forty (40) respondents said

they create descriptive metadata for data sets. Thirteen (13) respondents said they develop tools to facilitate data usage, and fifteen (15) respondents marked 'Other.'

Under those who marked 'Other,' the responses fell into roughly three (3) areas. Some respondents said they offer limited services, or are just developing their services:

"We do have an online archive of institutional knowledge that we manipulate and help others use, but it isn't raw data."

"We are starting to look into what we can offer regarding research data services/ open data; this project is in its infancy."

"Not currently but will be doing these things soon."

Others said they work with outside departments/teams to provide these services:

"We also work with our institution's Educational Technology Services group to provide these services."

"Other campus libraries provide these services."

"We are part of the Data Curation Network and curate our data as it is deposited."

The remainder of respondents provided more detailed strategies:

"Assist users with selecting data repository"

"Assist with researchers with (sic) thinking through how to create descriptive metadata for datasets. Only the researchers/scientists or one collecting the data can create the context and provide meaning for datasets. Assistance is in the form of recommending best practices, guidelines, and standards for capturing and presenting descriptive metadata. Assist researchers/scientists with data repository selection to share data (e.g. Zenodo)"

"Help researchers create descriptive metadata for deposited datasets"

"Working on a connection between Dataverse and big storage at our supercomputing center"

"Train teams on creating metadata and documenting workflow provenance"

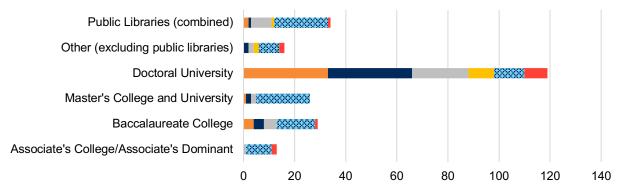
"Provide guidance as to other dataset repositories."

Table 18.

Institution Type	Develop Data Management Plans	Assist users with granting agencies' open data mandates	Create descriptive metadata for data sets	Develop tools (such as APIs) to facilitate data usage	None	Other (please specify)
Associate's College/Associate's Dominant			1		10	2
Baccalaureate College	4	4	5		15	1
Master's College and University	1	2	2		21	
Doctoral University	33	33	22	10	12	9
Other (excluding public libraries)		2	2	2	8	2
Public Libraries (combined)	2	1	8	1	21	1

Chart 15.

Open Data Services - By Institution Type



- Develop Data Management Plans
- Assist users with granting agencies' open data mandates
- Create descriptive metadata for data sets
- Develop tools (such as APIs) to facilitate data usage
- None
- Other (please specify)

When the question is broken down by demographics, it is still evident that doctoral universities provide the most data services, but all other tiers participate, even associate's colleges. All library types, both academic and non-academic, create descriptive metadata for data sets. This makes sense when looking at traditional library duties. Creating descriptive metadata is a core part of facilitating access to content, so this is a logical service for libraries to offer. The second most popular service across libraries is assisting users with granting agencies' open data mandates. Among the academic institutions, doctoral universities are the most likely to develop tools to facilitate data usage, indicating the advantage of size and resources. The three (3) non-academic institutions that develop tools were a public library serving 100,001-250,000 people, a historical society, and a laboratory, showing interest in providing data services across a variety of organizational types.

Content Produced Outside of Your Institution

Does your library financially support any outside open data initiatives, such as DBPedia?

As with OA scholarship, libraries have opportunities to use financial resources to support outside open data initiatives. Having looked at data activities within an institution, it is equally important to understand the landscape of support for open data outside of the institution.

Table 19.

l don't know	No	Other (please specify)	Yes	
27	123	1	9	

Only nine (9) respondents to the survey indicated that they financially support outside open data initiatives. Of those nine (9) institutions, eight (8) were doctoral universities, and one was a master's college and university. Under 'Other,' a public library serving between 100,001-250,000 people said, "in kind," which was interpreted as supporting an open data initiative, but not DBPedia specifically.

Based on the survey results, open data is not a high priority for U.S. libraries. Within the academic library community, only the largest institutions, doctoral universities, are accepting data into their repositories. Less research-intensive institutions are not. When looking outside of their institutions, only a handful of doctoral universities are financially supporting open data initiatives. Some public libraries are hosting data, but not a majority. Of note, public libraries that do host data are not constrained by size.

Open Educational Resources

Open Educational Resources (OERs) were defined as materials that are used as teaching aids, including textbooks, webinars, syllabi, or other documentation designed for instructional use.

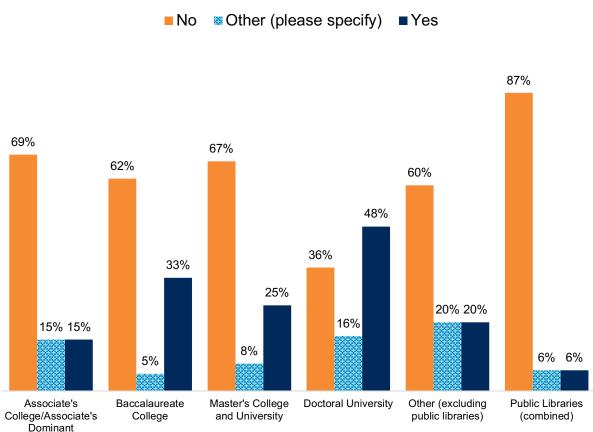
Content Produced Within Your Institution

Do you have an institutional repository (either hosted locally or by a service provider) within your library that hosts and provides access to open educational resources (OERs) created by your faculty and/or graduate students?

Table 20.

Institution Type	No	Other (please specify)	Yes	Total
Associate's College/Associate's Dominant	9	2	2	13
Baccalaureate College	13	1	7	21
Master's College and University	16	2	6	24
Doctoral University	21	9	28	58
Other (excluding public libraries)	9	3	3	15
Public Libraries (combined)	27	2	2	31

Do you have an institutional repository which provides access to OERs created by faculty and/or graduate students? By Percentage



This question was presumed to exclude answers from public libraries, since teaching material typically falls outside of the public library mission. The results confirm this theory, with only two (2) public libraries saying they have an IR that holds OERs, and two (2) public libraries responding 'Other.'

The majority of institutions do not have IRs that provide access to faculty and/or graduate student OERs. Only 15% of associate's colleges, 33% of baccalaureate colleges, and 25% of master's colleges and universities have repositories that host teaching materials created within their institutions. Forty-eight (48%) of doctoral universities provide access to faculty/graduate student OERs, and only 20% of non-academic institutions provide access to OERs.

A large percentage of respondents selected 'Other.' The responses fell within roughly three (3) thematic groups.

Three (3) respondents said they plan on collecting OERs in the future:

"Being planned in the near future"

"Working on it"

"We are discussing this and plan to host one in the near future."

Six (6) respondents said they have the capability, but have not received any submissions:

"We encourage our faculty to use the OER Commons and the Canvas Commons"

"No, but only because faculty have not produced such content."

"We would be happy to host OERs on our institutional repository, but we don't have any at this time."

"We have an IR but no faculty have deposited OERs yet."

"We are willing to host OER, but none has been deposited"

"Theoretically our "digital platform for scholarly publishing" could host/provide access to OER, but I don't think there are any OERs in there at present."

Three (3) respondents said they are not primarily responsible for OER work, or it falls outside of their collecting capabilities/scope:

"OER is handled by our campus IT unit. We engage, but do not directly host or support."

"Educational resources can only be deposited in [repository] if they are a result of scholarship/research."

"We have places people can make OER available, but not preservation-quality repository"

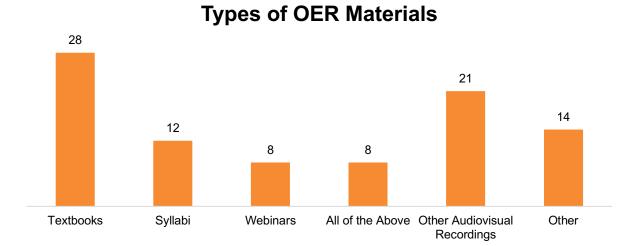
Among the remaining seven (7) responses, four (4) people said the question was not applicable to their institution, one person said "*People can upload OER into the IR*," one person said "*We don't use the IR to host OER content but use other software*," and one person said "*We have lots of open educational resources but none created by staff or students*."

Please indicate which types of OER materials your repository hosts (please select all that apply.)

- Textbooks
- Syllabi
- Webinars
- Other Audiovisual Recordings
- All of the Above
- Other (please specify)

Of those respondents who replied 'Yes' to the previous question, the types of OER materials in their repositories are as follows:





The most common OER format is the textbook, followed by 'Other Audiovisual Recordings.' Due to the design of the question, it is not clear what those other audiovisual recordings might be, and the answers under 'Other' did not provide any clarification. Under 'Other,' additional formats were suggested, such as journal articles, course lessons/lesson plans, case studies, non-textbook readings, handouts, assignments, quizzes, book chapters, study guides, PowerPoint presentations, and other ancillary materials. One museum said they carry home schooling materials, while one public library said they carry genealogical information, local newspapers and local history resources.

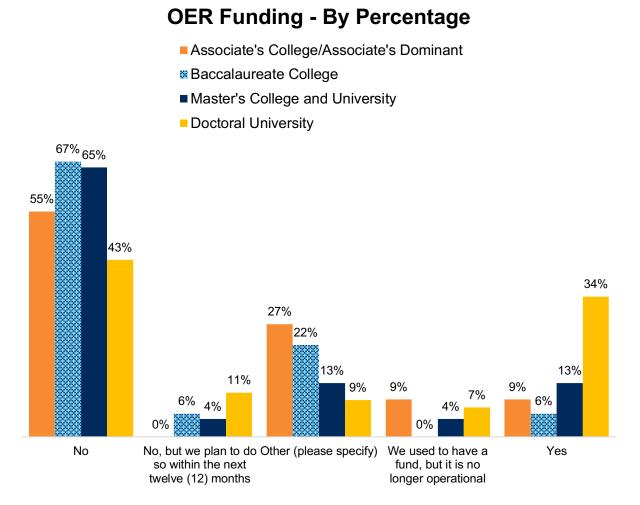
Does your library (alone, or in partnership with another part of the institution) provide funding to compensate faculty for switching to OERs and/or creating OERs for their students?

Note: due to the low rate of positive responses from public libraries, they were not broken out for this table.

Table 21.

Institution Type	No	No, but we plan to do so within the next twelve (12) months	Other (please specify)	We used to have a fund, but it is no longer operational	Yes
Associate's College/Associate's Dominant	6	1	3	1	2
Baccalaureate College	13	1	4	0	2
Master's College and University	15	1	3	1	3
Doctoral University	24	6	5	4	19
Other (including public libraries)	42	1	3	0	0
Total	100	10	18	6	26

Chart 18.



None of the academic tiers have a majority of respondents whose libraries provide funding for OERs. Doctoral universities have more participation, at 33%, while the other tiers range between 10-15% funding faculty/graduate students to switch their materials to OERs. A high number of respondents chose 'Other' for this question. Eight (8) libraries said that while they do not offer funds for OER conversion, other areas of their institution, or larger consortial entities, administer the funds or grant programs:

"Another division is compensating faculty"

"The library doesn't but the institution has a grant for this"

"Our state consortium provides funds for this."

"The University Systems...provides (sic) grants; however, these funds do not come from my institution's budget."

"Funding comes through provost office"

"The library doesn't but the institution does."

"University system level grants are available. Nothing is available at the institution level."

"OCIO Funds this activity"

"We have VIVA funds that support this."

Two (2) libraries said that they have monetary resources, but not a formal fund:

"We are looking to fund individual requests at this time. There is no formal fund and no plans to establish such within the next year."

"on an ad hoc basis"

The next question was designed to be open-ended in order to garner feedback about how a funding program for open data operates. All responses are included, but the responses below have been edited to remove any institutional names or websites.

Could you please briefly describe how this funding program operates (or will operate, once it goes into effect?

The library assists faculty applying for grant funding from a consortia (sic) for their projects. Stipends would be provided for faculty adopting OER in their classes.

Our campus bookstore is Barnes & Noble and through a contract created by our VP we receive \$10K annually to support OER adoption, adaption, and creation projects by our faculty.

\$500 for adapting an OER course in our LMS.

This is done on a case by case basis as the need arises.

Course developers are paid from a fund administered by the Administration

Faculty are paid a one credit-hour stipend for converting a course to all OER for required course materials.

it's a grant program that solicits proposals. Only a limited number are chosen for funding.

We offer two types of grants--investigation and implementation. Investigation grants are for faculty wanting to explore OER options; and implementation grants are for redoing a syllabus to use OER. Investigation grants often lead to implementation grants.

If attend Open Textbook Network workshop and if switch to OER, a stipend will be received

Most likely will be a grant program.

It is stipend based.

\$1,000 grant to change course to OER, must participate in campus learning community

Special funds

Consortial grant program

Our library is a member of [consortium], a statewide library resources program, which provides grants to support faculty transitions to use of OERs.

We are planning on offering a handful of stipends to faculty who review with the intention to adopt an OER to replace a current textbook.

the library partners with IT to provide a small amount of annual funding to the winner of the OER grant award and we also offer a support team of technologists and librarians to help them execute their proposed plan for the grant.

Our faculty, along with other faculty in the state apply for funding from VIVA. A VIVA committee reviews the submissions and selects those that will receive funding. There is funding for adoption of OER as well as for the creation of OER.

We work with our state library association to secure funding on a class by class/textbook basis. The Provost has also stated all online, undergraduate classes' tuition includes textbooks.

We provide mini-grants to promote the adoption or adaption of OER. The College of Basic and Applied Science is offering 20k. The library is working with a group in the provost's office to provide 7 \$1500.00 grants this year. We are also joining the Open Textbook Network (library funded) and starting a Faculty Learning Community around the topic of OER.

Full- or part-time faculty who are interested in converting their courses from traditionally published materials to low or no cost materials are eligible to apply. Second note: We currently have funding to provide approximately 18 grants of \$2,500 per year. Applications are due twice a year and 9 faculty members are chosen. The chosen faculty member can be adopting or adapting or creating resources.

Our library sponsors OER development grants. Faculty apply by submitting a project proposal.

\$3000 is equally provides (sic) by the library, online learning, and academic affairs. It is distributed as a small travel stipend for faculty who review open textbooks through OTN.

Call for applications goes out; faculty apply and a committee decides whose applications get funded.

For now, it will be a grant supported, pilot program. Faculty apply, work with a librarian to identify resources and are paid a stipend for integrating new, accessible materials into courses.

A stipend will be provided to faculty who create OERs.

Course redesign grants

Textbook/Course materials grants are offered three times per year. The grants cover OER content and content with no cost or low student costs. The grants range from around \$3000 to \$30,000 depending on the project size. \$3000 covers ancillary course materials. \$30,000 would be for something like converting all sections of a course to OER.

We provide a competitive grant program that supplies instructors with \$500-\$5,000 per project. Faculty, staff, and grad students with teaching responsibilities can turn in a proposal (once per year) which is judged by a committee of faculty judges for feasibility and impact. If a grant is received, they must also participate in a workshop to scope their project, receive regular support from a librarian, and complete a report at the end of the grant on their project's final product.

Initiative is jointly managed between the library and core faculty members, with the library taking on core administrative duties. We have a grant program to aid in OER creation and adoption and a student fee to help incentivize continued use by departments. Applicants apply, a review committee reviews applications, and decides with (sic) applications to fund, based on available funds.

We will be generating an OER fund with a small course fee for those courses that have adopted OER. That fund will be used to provide grant funding for faculty who want to adopt, adapt, or create their own OER material.

The Initiative will fund grants to migrate existing course materials for undergraduate classes to open educational resources (OER). The amount of funding depends on the needs of the proposed project, and the reach/impact of the outcomes for students.

We have an affordable course transformation fund that faculty can apply to and receive funds to transform their traditional course into an OER.

Faculty stipends co-administered with our Center for the Advancement of Teaching via an annual application process. Second note: We offer awards from 500-1500 to incentivize and support faculty to move off of a traditional commercial textbook. We fund about 10-14 awards a year and have been doing so for 10 years. faculty submit proposals for projects in March and then conduct their open project in the following fall or spring semester

Faculty receive grants to review OERs for potential adoption, to adapt an OER textbook for their course(s), and actually to flip courses to using OER. It is a rolling grant application process open to any faculty and awarded by the Library.

The program is currently ad hoc. When funding is needed for a particular project, brief rationale and budget developed and submitted to Asst. Vice Provost for Teaching and Technology and funding awarded based on each submission.

The Libraries, in collaboration with the Office of the Provost, offers incentives for instructors to adopt OER. Award recipients must implement an open or alternative textbook in their course(s). In exchange for using an open or alternative textbook in their course(s), the fund offers monetary incentives for instructors that can be used for any purpose. Instructors apply for funding and must meet eligibility criteria and fulfill a set of expectations

The library hosts the Alternative Textbook Grant Program at the university.

We have \$20,000 co-funded by library and provost's office. We provide various funding levels depending on faculty adoption, adaption, or creation of content in the next or the following semester. The Provost sends out Call for Proposals during OE Week, small group evaluates and works with faculty to implement.

Faculty would apply for funding to create an OER resource which would be the equivalent of a course buy out. Criteria for funding will include number of class sections and students reached by development of an OER, cost of current textbook(s), ability to create an accessible resource, etc.

We've received outside funding from a foundation to establish an endowment. We will use money generated by that endowment for an OER incentive program. Funds will not be available for at least twelve months as the endowment matures.

VIVA OER funding for course redesign and OER course adoption. Second note: The program provides funding, project management, technological, and other types of project support for faculty looking to transition their courses to zero textbook costs. Faculty are able to submit their own budget, with the goal of providing the option for course release. Partners from across the institution assist the projects in identifying OER or library content or adapting or creating OER.

The faculty apply to one of several awards. An OER committee determines viable proposals. The faculty work with the librarians and instructional designers to redesign their curriculum to incorporate OER. Awards are distributed once the faculty provides a revised syllabus and a report with answers to a set of questions.

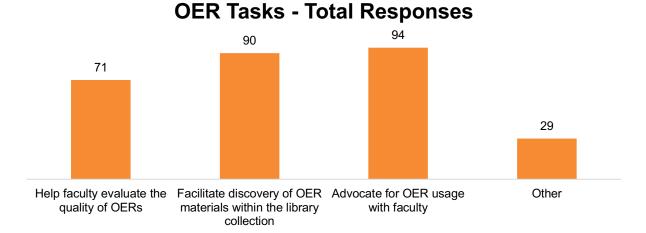
Initially it will be a mini grant program for faculty who apply and switch a course over to OER materials. Recipients will also attend a workshop in advance and report on their findings after the course is complete.

Many institutions appear to have highly comprehensive grant/stipend programs to offer funds for OER creation/conversion. When the 'Other' responses are combined with the descriptions of operational OER funds, it additionally becomes clear that a large portion of U.S. academic libraries are collaborating with other groups – either directly with faculty, with academic deans or provosts, or with regional consortia, to create funds that encourage OER creation and/or conversion. OERs clearly touch a wide variety of areas within the academic university, and libraries do not appear to hold domain over their creation, storage or dissemination.

Please indicate whether your library (alone, or in partnership with another part of the institution) performs any of the following tasks (please select all that apply).

- Advocate for OER usage with faculty
- Facilitate discovery of OER materials within the library collection
- Help faculty evaluate the quality of OERs
- Other (please specify)

Chart 19.



Each of the categories received a high number of responses. Providing non-custodial services appears to be very popular for librarians within the U.S. In the OA Scholarship portion of the survey, the majority of respondents said that less than 25% of faculty have material in their institutional repositories, possibly reflecting the limited influence libraries have on faculty publishing decisions. Keeping that in mind, a potential conclusion from the above chart is that libraries may have better success performing evaluative or discovery work on behalf of faculty, without affecting their publishing actions.

Under 'Other,' a small selection of respondents listed additional advocacy activities:

"train faculty on copyright as relates to OERs, open source materials, etc."

"Present OER workshops and training"

"Hosted workshop on OER for faculty"

"We developed and make available the Mason OER Metafinder, used by 400+ institutions."

"lead an institutional textbook affordability taskforce"

"Have an OER website to support faculty"

"work closely with faculty in the creation of new OER materials following best practices in the field."

"purchase services from content providers that are intended for educational use, i.e. Kanopy"

"We help our patrons discover and evaluate quality and advocate for OER from other institutions."

Content Produced Outside of Your Institution

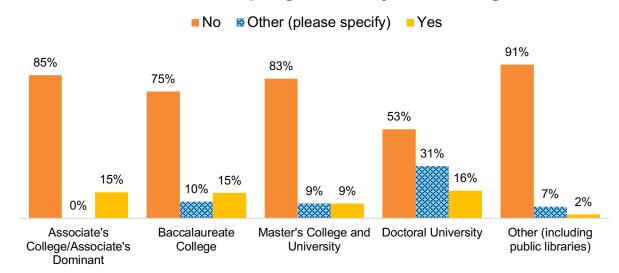
Does your library financially support any OER programs outside of your institution, such as the Open Textbook Network or OpenStax?

Table 22.

Institution Type	No	Other (please specify)	Yes	Total
Associate's College/Associate's Dominant	11		2	13
Baccalaureate College	15	2	3	20
Master's College and University	19	2	2	23
Doctoral University	29	9	17	55
Other (including public libraries)	42	3	1	46

Chart 20.

Does your library financially support any outside OER programs - By Percentage



The majority of U.S. libraries from this survey do not support outside OER programs, which include any open content for educational resources not created by the institutions. Only 15% of associate and baccalaureate colleges support outside OER programs, dropping down to 9% for master's colleges and universities. There is higher participation among doctoral universities at

31%, but they are still a minority. Under 'Other,' the predominant response was that the library supported the Open Textbook Network (OTN) through their regional or statewide consortium:

"Our state consortium supports OTN and we are members--so indirectly."

"We are members of Open Textbook Network through consortial membership in the Texas Digital Library."

"PALCI (Pennsylvania consortium) is a financial partner and has supplied us with educational opportunities from OTN"

"Through our consortium"

"Yes, through our participation in the Consortium of Academic and Research Libraries of Illinois (CARLI)"

"we are part of a consortium that supports OTN"

The 'Other' responses reveal that individual libraries are delegating support for OERs to membership-run consortia instead of supporting them directly.

Conclusion

As would be expected given the demographics of the LYRASIS membership, the vast majority of survey responses came from academic libraries, with some public library participation. Therefore, any overall conclusions largely apply to academia.

Across the three categories – OA scholarship, open data, and OERs – some trends cross boundaries. While both formal and informal policies exist, many institutions have no policies in place, resulting in a scatter-shot approach to open content of all types and less than cohesive institutional strategies. Policies may be in place for one of the three areas, but institutions continue to treat these three categories as separate endeavors rather than a holistic approach to "open."

Additionally, across the three categories, libraries feel more empowered when advocating for open content through training and outreach as part of their traditional library services than they do when administering open content programs. Even though the infrastructure may exist to administer and provide access to open content through institutional repositories and other tools, uniformity across the community only emerges with regards to advocacy.

When looking at policies, advocacy, or financial support for open content created inside or outside the organization, doctoral institutions largely lead the pack, with some baccalaureate institutions and fewer numbers of master's institutions participating.

Across academic libraries, institutional repositories for OA scholarship are widely adopted regardless of institution size. However, policies reflect limited control over faculty submissions. More control exists for graduate student submissions, although most institutions still hold only a small percentage of those publications.

Less than half of responding institutions financially support outside OA initiatives such as Knowledge Unlatched or Open Library of the Humanities, and the majority do not support article processing charges (APCs). One interpretation of this data could be that APC-based business models are not attractive for sustainable OA scholarship in the U.S. For those institutions that do support OA, either for content created inside or outside the institution, financial support is dispersed via a number of pathways. No one model rises above the others.

With respect to open data, there is no consistent adoption at this point. The adoption that does exist largely resides within the doctoral institutions. Among the academic institutions, only a modest majority of doctoral universities offer data hosting services. Externally, according to the survey results, very few institutions provide financial support for outside initiatives for open data. While libraries may not currently be the stewards and administrators of open data, there is high participation for advocacy work in this arena. For the limited number of public libraries who responded, a small percentage do have open data repositories hosting material such as city demographics or genealogical data.

Finally, most institutions are not providing access to OERs through their institutional repositories, and most are not currently providing funding for faculty to transition from toll-based educational resources to openly available content. Similar to the other areas, libraries conduct a high degree of advocacy for OERs while not necessarily providing access to the content itself. Responses to open-ended questions revealed that while libraries may not be hosting or funding OERs directly, they are ceding financial support for outside initiatives through consortia or state libraries, with these groups supporting OERs on their behalf.

Ultimately, what emerges is not surprising: libraries are most familiar with and provide the most financial support for OA scholarship, with the newer types of open content – open data and OERs – receiving less direct financial support at this time. However, as mentioned in the introduction, this survey was released and closed immediately prior to the current health and social crisis of COVID-19. With the increased emphasis on online learning and remote work, our definitions of and support for all types of open content may radically alter. If this survey is repeated in a year, in 2021, after institutions have withstood significant and possibly catastrophic budget cuts, the results could conceivably be quite different. Will this unprecedented event in modern history be a galvanizing force for open content? That remains to be seen.

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