"I'll Wait Zero Seconds": Faculty Perspectives on Serials Access, Sharing, and Immediacy

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This study explores how faculty across disciplines access and share scholarly serial content and what expectations they have for immediacy. The authors conducted twenty-five in-depth, semi-structured interviews with faculty of various ranks representing all Illinois State University (ISU) colleges. The findings, presented in the words of participants and triangulated with data from local sources, suggest that faculty use a variety of context-specific mechanisms to access and share serial literature. Participants discuss how they use library services such as databases, subscriptions, interlibrary loan, and document delivery, coupled with academic social networks, disciplinary repositories, author websites, and other publicly available sources to obtain the full text of articles, in addition to their manifold considerations for sharing and requesting content. The urgency with which faculty need to gain access to scholarly literature is dependent on intersecting elements of discipline, current projects, how the resource will be used, the perceived competitiveness of the field, career stage, and personal practices. The findings reiterate that scholarly literature remains integral to the research and teaching of faculty even as needs and practices for accessing and sharing it grow more individualized and distributed.

Introduction

The staggering increase in the cost of scholarly serials has contributed to a variety of mechanisms—sanctioned and not—to gain access to journal content. Whereas personal, library, or colleagues' subscriptions to print serials provided the only means to access these resources in a pre-digital era, scholars now have a multitude of options at their disposal to browse, discover, download, and interact with this content. The proliferation of options, as well as the rapid increase in the price of serials, raises many questions in a time of widespread budget cuts. Perhaps the most provocative question is: if libraries are priced out of serials subscriptions and

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academic communities have alternate means of accessing content, should librarians invest these funds elsewhere? Some argue that librarians "breach the principle of fairness and damage public interest" and are complicit in paywalling a public good by continuing relationships with commercial publishers.¹ Others proclaim the inevitability of pirate sites like Sci-Hub, given the inequities and costs of traditional and Open Access (OA) scholarly communication models, not to mention all of the coordinated change required to embrace a new model.² The role of the library in providing formal access to scholarly content—long assumed—is losing importance as informal access mechanisms proliferate.³

To further complicate matters, disciplinary differences have a profound influence on how and where scholars expect to access scholarly literature, the immediacy with which they expect to get it, and the culture around sharing it. The question remains as to how librarians with limited resources can best serve communities with such strongly differentiated needs. Faculty access to serials is of great interest to academic librarians; U.S. libraries typically spend a large portion of their budgets on journal subscriptions. By learning more about the processes faculty members use to interact with and gain access to scholarly serial content, librarians work to keep the library central to these processes.

The authors conducted interviews with twenty-five faculty members across academic disciplines to understand how they interact with serial content. This article reports their needs and practices related to serials; it also provides context from the literature and local usage data sources. In this study, the authors sought to learn:

- 1. What processes do faculty across disciplines use to access scholarly serial content?
- 2. How, when, and with whom do faculty across disciplines share serial content?
- 3. What expectations do faculty across disciplines have with respect to immediacy of access?

By conducting this research and presenting the findings, the authors aim to amplify the voices of faculty members using their own words—not to ascribe value judgements about their current practices or any perceived deficits in the services academic libraries currently provide.

Literature Review

The question of how faculty access scholarly content has been studied at scale.⁵ The Ithaka S+R US Faculty Survey was an important springboard for the study at hand. The authors reviewed recent iterations of that survey instrument to identify questions that could be probed more deeply in interviews.⁶ That survey and the interview instrument, for example, both ask participants "what do you do when you can't access the full text?" Survey research establishes which standard methods faculty use to access literature (e.g., "Search for a freely available version online, Use interlibrary loan or document delivery services provided by my library, Give up and look for different resources that I can access [...]").⁷ Although the same questions are posed, interviewers can follow up to ask for clarification or expansion and may allow subjects to shift the direction of inquiry; surveys do not allow for this.

The authors are all librarians and were accordingly interested in learning to what extent faculty needs are met via library collections and services. However, by asking participants to describe how they access and share scholarly content, as well as how important immediate access is, the authors understood that library access would only be part of the conversation and that other methods would also be discussed. Ideally, the library would fund comprehensive licenses that provide immediate and legitimate access to all published content. This

is not possible due to the proliferation of scholarly outputs in most formats, rapid increases in the cost of published research, and stagnant library budgets.⁸

So-called Big Deals—which provide subscribers more content by including access-only journals alongside subscribed journals from a single publisher—have been decried for being unsustainably priced, deprecating librarians' collection building expertise, promoting inequity in the library community, demonstrating price discrimination compared to title by title pricing, and delivering less value based on cost per cited journal, among other reasons. Many academic libraries have since unbundled these big deals and shared their evaluative considerations for doing so, including usage, citations, local authorship, cost per use, cost per citation, impact factor, impact per paper, local surveys, or subjective factors. Tools such as Unsub have facilitated unbundling by factoring in previously unavailable or unsatisfactory data on the availability of Open Access content, perpetual access entitlements, and paid fulfillment options in order to model the "Net Cost per Paid Use." Kohn studied use of ScienceDirect after unbundling a Big Deal with Elsevier and found that "the broad picture painted here is that patrons still turn to the library and may meet their requirements via substitution or reliance on open access."

The Open Access movement has the potential to disrupt scholarly communications and traditional subscription models.¹³ Subscription models persist for a variety of reasons, however, most notably the "protected competitive position and high profitability" of some commercial publishers.¹⁴ Studies into the costs of publishing have identified an average cost range per article from \$200 to \$1,000.¹⁵ Meanwhile, Open Access article publishing charges have far outpaced inflation, with some publishers charging over \$10,000 per article for their most selective journals.¹⁶ Providing publishing support is newer to libraries who have long provided "Read" access via subscriptions. Transformative agreements, also known as Read and Publish, provide many potential benefits, including publishing more articles OA, increasing the impact of local scholarship and making it free to read, centralizing payments and reducing double-dipping, and expanding read access to include the publisher's full portfolio. There are nonetheless considerable concerns about the equity and sustainability of most OA publishing models.¹⁷

Interlibrary loan (ILL) has long delivered materials to which a local library does not provide access, and the literature demonstrates that faculty use and appreciate this service. Research has demonstrated how ILL services fall short in providing the immediacy and seamlessness of subscribed and publicly available content. Knowlton, Kristanciuk, and Jabaily, for example, found that patrons submit ILL requests for only about a third of all desired articles. To address this disconnect between discovery and access, librarians have explored ways to make ILL more efficient for users and library personnel. Perhaps in response to the perceived limitations of ILL, a variety of services have proliferated to support "just-in-time" access to materials to which a library does not subscribe.

Librarians have documented their experiences with document delivery and tokens or pre-paid articles to provide on-demand access.²¹ Murphy and Buckley have written about the utility of replacing subscriptions with paid document delivery to provide access to articles in the wake of journal cancellations.²² Often, solutions to the perceived need of real-time access to specific materials is approached by multiple, complementary initiatives. Daugherty and Lowry recently described how the University of Alabama Libraries optimized and expanded access to library resources by implementing Lean Library, a browser extension that identi-

fies full text; Article Galaxy Scholar, a paid document delivery service; and EBSCO custom linking, an embedded "request item" that populates data in request forms.²³ Interlibrary loan costs are on average lower than those of paid document delivery or article tokens and are invested primarily in the employees engaged in that work.²⁴ Unfortunately, ILL services may have negative associations based on the previous experiences of faculty, as will be discussed in the results.

How, when, and with whom faculty share serial content has been explored, though primarily via surveys and quantitative data analysis.²⁵ The primary options for sharing are one-to-one;²⁶ academic social networks, such as ResearchGate or Academia.edu;²⁷ crowdsourcing via social media, such as #ICanHazPDF;²⁸ and Sci-Hub and other platforms for filesharing.²⁹ The Ithaka S+R Faculty Surveys typically ask about engagement in related activities, but do not explore motivations.³⁰ Tenopir et al. looked at these motivations in a large survey (N=1,000) and found that "Sharing is done for both altruistic and personal interest reasons such as building reputations and careers. It is an important means of content discovery and dissemination."³¹ Segado-Boj, Martín-Quevedo, and Prieto-Gutiérrez recently published findings from a large survey (N=3,304) that explored academics' willingness to use piracy sites and other strategies for circumventing paywalls.³² These informal sharing mechanisms, as well as the highly nuanced distinctions in deciding when to share what are discussed in the results section.

Faculty expectations with respect to immediacy of access to scholarly serials have not been deeply explored in library and information science literature. In 2004, Meadows asked "How will the immediacy factor be affected by the electronic transition – will it increase the reliance on recent research?"³³ Although it may seem that immediate access to huge amounts of publicly available information online has only increased expectations with respect to immediacy and currency, several participants—especially those in the humanities—have articulated practices that do not necessarily prioritize it. Disciplinary expectations for deep, methodical, and sustained approaches to research may supersede current expectations for the quick and now.³⁴ The question of immediacy sets apart the study at hand from other library-led investigations of faculty needs for scholarly literature. By presenting participants' responses in the context of their practices and triangulating these with usage data, the authors provide insight for supporting timely access to desired content.

Methods

The authors conducted twenty-five in-depth, semi-structured interviews with faculty of various ranks representing all Illinois State University (ISU) colleges and schools. ISU is a public, Midwestern university with a Carnegie classification of R2 (Doctoral Universities – High research activity) and an enrollment around 20,000. Participants were recruited via the University faculty email list and fifty-six faculty members indicated their interest by emailing the PI. The team reviewed all prospective participants and selected the twenty-five whose college, school/department, and rank promoted the most diverse perspectives. This approach aligns with Maxwell's articulation of purposeful selection as a method that increases the relevance of information and richness of the pool by selecting based on specified criteria. The ISU Institutional Review Board approved the protocol and interview instrument as exempt. Two members of the team conducted interviews via Zoom in September and October 2022, receiving permission to record the interviews and enabling transcription. During the interviews, both took notes, which they afterward reconciled to ensure their interpretations matched and nothing was omitted.

In naturalistic inquiry, "data processing is a continuously ongoing activity, making possible the meaningful emergence or unfolding of the design and the successive focusing of the study." The participants' responses shaped the direction of their respective interviews and informed the analysis and future interviews. The authors relied on their notes, transcripts, and recordings to analyze the data for the frequency, intensity, connections, and conclusions drawn in participants' statements. The authors used inductive coding to organize the data into themes and subthemes. Due to the semi-structured nature of the interviews and the participants' highly varying responses, however, the authors did not conduct quantitative analysis of interview data. The authors are subthemes and subthemes are sponses, however, the authors did not conduct quantitative analysis of interview data.

In order to promote the validity of the data, the authors embraced several best practices for qualitative studies.³⁸ Creswell and Miller outline validity procedures within three different paradigms: constructivist, critical, and postpositivist. The postpositivist—or systematic—paradigm involves triangulation, in which researchers search for convergence among multiple and different sources; member checking, in which researchers take the data and interpretations to participants for their input on the credibility of the information and account; and the audit trail, in which professionals external to the project examine the account and consider its credibility. The constructivist paradigm offers, among other procedures, thick, rich description which "creates verisimilitude, statements that produce for the readers the feeling that they have experienced, or could experience, the events being described in a study."³⁹ Amplifying the voices of participants and conveying in their own words the richness of their preferences and experiences is especially important given both the strong personal and disciplinary differences and the processes for obtaining content that might not be in compliance with vendor agreements.

Demographics

Participants represented all academic colleges and twenty-two distinct departments / schools at ISU (see Appendix A) and all faculty ranks, with ten Assistant Professors, seven Associate Professors, six Professors, and two Instructional Assistant Professors. Among the participants, one is currently serving in an administrative capacity, one is currently in a doctoral program, and one completed additional coursework beyond their master's degree. Participants completed their terminal degrees between 1987 and 2022 (see Appendix B) and conduct research in diverse areas within applied sciences (criminal justice, family studies, geography, human development, information technology, and kinesiology); arts and humanities (film studies, history, literary studies, music education, and musicology); business (finance and management); formal (mathematics) and natural sciences (biology, chemistry, math, and physics); health sciences (communication sciences and disorders and nursing); and social sciences (anthropology, communication, economics, psychology, sociology, social work, special education, and teaching).

Limitations

The standard answer to the number of interviews needed in a study is "it depends."⁴⁰ The twenty-five interviews analyzed herein provide thick, rich description, but the authors make no claim that the results are generalizable to all contexts. Rather, their intention has been to collect data representative of the divergent perspectives within their Carnegie R2 context to consider how aspects of disciplinarity intersect with access to serial literature. Although the

data may not be generalizable, they nonetheless provide useful insights to librarians working in a variety of academic library contexts. The interviews extended up to one and a half hours and, in the coding process, it became clear that there were more diverse themes than could be treated in a single manuscript. The authors have accordingly split up the findings into discrete manuscripts;⁴¹ the questions treated in this article are provided in Appendix C. Dividing the findings allows for topics to be treated in great detail but could also be considered a limitation. Additionally, the interviews were conducted by librarians at ISU's Milner Library and participants may have been reluctant to disparage library services or fully disclose practices that may be incriminating.

Results

RQ1. What processes do faculty across disciplines use to access scholarly serial content?

Participants described how they typically access scholarly literature and some of the considerations and exceptions in their process. All typically begin by using Milner Library's search interfaces or resources, Google Scholar, or other databases external to the library. Two scholars typically start their search with PubMed. The database recognizes their University affiliation, but one scholar also has credentials from collaborators at two R1 institutions. Two other scholars both begin their process via arXiv. A formal scientist does this because it is "faster because it is a preprint. [Going] through publisher paywalls (JSTOR) takes too much time." They regret that JSTOR is not more comprehensive and takes so many clicks to navigate ("The interface was designed by someone who is not a researcher in my field"). A natural scientist is unsure if they are getting access to anything from Milner Library: "Because arXiv and NASA ADS [Astrophysics Data System] are so useful, I don't even check to see what we have through ISU."

Google Scholar

Scholars in business and applied and social sciences all noted using Google Scholar as a frequent or exclusive starting point. A few scholars, including one in health sciences, indicated they only use Google Scholar when they have trouble finding articles through Milner Library. An applied sciences scholar indicated that access through Google Scholar is easier and access through the library "is more complicated—sometimes it takes me to the journal, and I have to find the article and I usually give up." A social scientist similarly noted that they start with Google Scholar because it is familiar and easier: "If I cannot access it there, I will search Milner but often rely on the library's chat reference service." Although another social sciences scholar typically starts with the library, they sometimes search Google because "sometimes articles are Open Access and if I don't feel like going through the ordeal of a library search, I will do a Google search. Milner requires SSO login." They also use Unpaywall, which allows them to access freely available content when they discover content outside of Milner Library's search platforms.⁴²

In one health sciences discipline made up of practitioners, there is a considerable emphasis on free and publicly available information. A scholar reiterated that they are often reminded that clinicians need examples, materials, and resources they can access. This expectation has informed where they start their research for practitioner-facing work. They search Google to help frame their expectations. As one scholar explained, "I go to Google and [ask], What are the clinicians going to see? Are they seeing Pinterest? Are they seeing an Etsy site? What do

they really see? Because it's going to help inform how I talk about it." This attempt to make their work accessible to audiences in order to show the evidence behind it has had a big impact on their research; they still use Milner Library resources, but with more understanding of content available to clinicians.

Several participants noted that, although they start with Google Scholar, they are often routed to Milner Library or its resources. One applied sciences scholar uses the link resolver through Google Scholar and another starts with Google Scholar and then "I'm pointed different directions for a PDF." A scholar in the social sciences noted some of the pain points in gaining access to full text via Google Scholar as follows: "It works well in my campus office because I'm already logged in. At home sometimes I've logged into the VPN–I find titles on Scholar and cut and paste them in Milner. [Library] databases don't have the reliable functionality that [Google] Scholar does." They admitted some frustration, stating, "I'm a pretty productive scholar; I steer students away [from library search] because I get confused and I can't expect them to figure it out." Another participant reiterated this by saying they could find things via the library's search, "but I have a hard time figuring out how to *get* something. Maybe this is a reason why I don't choose to start with the library website."

Milner Library

Participants in chemistry, geography, history, musicology, sociology, and special education shared that they typically begin their search using Milner Library's search interfaces or resources. A humanities scholar searches the library catalog, then the catalog of the state-wide consortium, then submits an ILL request, but notes that their students "start in Google Scholar and they give up really easily." A social sciences scholar starts at the Milner Library homepage, then searches specific databases: Academic Search, PsycINFO, or ERIC, with a limit to the past five or ten years. They search where full text is available, because "if the full text is not available there is no use."

For several participants, where they start depends on whether they are looking for a known item or exploring a topic by keyword. An applied sciences scholar, for example, shared that the process of access depends on topic and venue:

There are journals Milner doesn't have and I know those off the top of my head—I will ILL those articles or I will email the author. [...] I have a Google Scholar profile, and if someone has cited me, I get a notification and then I go to see who has cited me. I'm only moved to conduct research there if I'm prompted, I don't start with Google Scholar for searching.

An education scholar said they may start with Sage or JSTOR if looking for something specific. If Milner Library does not provide access, they often Google the desired article and find a PDF someone has posted, or one on ResearchGate or similar sites. An arts scholar will begin at the Milner Library website once they have a list of desired resources in hand. They will search Google for ephemera such as event programs, which they may buy from eBay or AbeBooks.

Meanwhile, a natural sciences scholar is usually looking for a specific topic and begins by searching SciFinder, which has linked full text. They have recently adopted Milner Library's DOI search, which they prefer to searching other citation information, which can be incorrect.⁴³ The link resolver is connected to Get It Now, a service of the Copyright Clearance Center that provides fee-based document delivery, and ILL. Although they occasionally find content on Academia.edu and ResearchGate, "I haven't needed to use them because SciFinder is such a fabulous resource. It's hard to not find stuff on SciFinder." Like one of the humanities scholars, this participant notes that their own means of access are not necessarily those of their students; however, they are working to impart the importance of these resources in the production and dissemination of scholarship, as well as the access. They explained, "In one of my courses we do a library database exercise. They go through SciFinder, Chemical Structure Database, talk about DOIs, and create ORCIDs."

A social sciences scholar was the only one to mention Milner Library's subscription to ThirdIron's BrowZine, a table of contents browsing service. This scholar said, "I go to BrowZine first, I was so happy when Milner added it. It's what I always wanted. Before that, I was using [the link resolver] and it's annoying, it's easy because it's integrated with the databases but it's not reliable, sometimes it doesn't work right." They enjoy browsing the issue's articles in an intuitive way, sharing that, "when I use [the link resolver] I would have no idea about related content. I do use [the link resolver] still when content is not on BrowZine." They appreciate that this connects them to the PDF of publisher's versions.

A scholar in the health sciences indicated that they typically access materials through either Milner Library or the library at the hospital at which they are also employed, and "I reach out to the librarian at my full-time job—she can give me tips." Some participants shared hesitations about asking for Milner Library to provide research materials. A humanities scholar said, "I censor myself in some ways because I'm afraid that I ask for too much. I'd rather privilege what I know I need for class and find an alternate route for what I would like to work on. Because then that's just me fending for myself to find it, and not fifteen students having to deal with finding [resources]."

Interlibrary Loan and Document Delivery

Several participants spoke to ILL or document delivery, their typical workflows, and the myriad strategies they have in place when full text is not immediately available. A variety of participants indicated that if they were not able to find a source via the library or Google Scholar, which may have the same limitations as the library, they Google it. Their Google searches have yielded PDFs on Semantic Scholar, ResearchGate, Academia.edu, National Center for Biotechnology Information, author websites, or other publicly available sites. Less frequently, participants reported using the "Request full-text" function within ResearchGate to get content from authors. A social scientist reported, "I think I'm on both [ResearchGate and Academia.edu] but I haven't used them a lot. The few times I've used those sites to contact an author for an article, I haven't gotten a reply." An applied sciences scholar has had more success requesting and sharing content via ResearchGate. Direct emails to authors are a more widely used strategy, and this will be discussed more extensively in the following section, as will direct requests to friends and collaborators.

Several participants shared their satisfaction with ILL and document delivery services, including scholars in business management, chemistry, communication sciences and disorders, finance, geography, human development and family science, literary studies, musicology, nursing, psychology, social work, and special education. One scholar said, "I find ILL fantastic, it's great to have scanning chapters and ILL as an option. There's only been one

time the library couldn't find a particular article, which was old, unique." Another said "It's been rare that ILL can't get an article for me. Then I move on because if they can't get it, then other places probably don't have it either." A few participants spoke to balancing ILL with direct requests to authors or colleagues at other institutions. A social sciences scholar places ILL requests when time allows but asks friends at an R1 if the need is more urgent.

A few participants expressed hesitations or concerns about ILL. An education scholar is reluctant to use ILL because they "want to look at it and know if it's going to be useful or not right away." They shared that the library is responsive, "but I feel badly when an ILL request comes through, and I realize I don't need it." A business scholar noted that although they have used ILL for books, "I wasn't aware that ILL is an option for articles—I don't recall it being obvious during a search that I could request an article." A social scientist shared that before the internet they used ILL a great deal, but no longer do so, and an applied sciences scholar indicated they have never used ILL or Get It Now. They suggested: "If it automatically popped up as a link, then I would use that option, but publisher websites don't facilitate ILL."

An applied sciences scholar similarly noted that ILL and Get It Now options are not obviously or easily linked. Scholars also shared problems they have experienced along the order process. A health sciences professor said, "Sometimes I've tried to order it and I'm told I can't order it. But I can find it in other libraries, so I ask [a librarian] and we talk about why, often it's user error or a system glitch." A formal sciences scholar raised concerns about ILL taking too long and the processes being inefficient or unclear, stating, "they [ILL office] would write back to me and say, 'Oh, you can't get it through this channel, you should now write to this channel,' and I was thinking, 'This is your internal business, right?"' This participant rightly asked why they could not depend on the ILL office to figure out the request without several emails back and forth. Unfortunately, this has led the scholar to get content outside of library channels if unavailable via JSTOR.

Participants expressed a spectrum of perspectives on both the frequency of this issue and the extent to which it is a problem. A business scholar indicated they have not "had any trouble finding resources regularly at my previous institutions and here," while someone in the natural sciences indicated that of all their sources for articles, they are "least likely to get full text through ISU." This scholar typically texts colleagues at larger institutions "that have subscriptions to everything, and they get me the PDF within minutes." A clinician who also has access to resources via the hospital where they work indicates that access is not typically a problem, explaining, "if I don't have access through Milner I probably do through [hospital], and vice versa." An applied scientist spends considerable time trying to find resources and was among the very few participants who draw on personal subscriptions to their professional society's journals to access journal content.

An education scholar uses ILL and will also ask friends at larger universities. From their perspective, these options typically meet their needs, though sometimes they find similar articles and read those if they have given up on a specific article. Identifying alternatives was a solution mentioned by a few other participants. An applied sciences scholar shared that in their field, knowledge is cumulative: "It's not like this article is so unique that we can't find something similar." A scholar in business will look for other sources that discuss the same idea or topic, or they read the abstract and extract as much as possible from that. Similarly, an applied sciences scholar indicated that sometimes looking at the abstract "helps" or is enough. A social scientist indicated that if something is hard to get, they use an alternative source; ILL works for them almost all the time.

External Access Venues

The days of traveling to nearby institutions to gain access to their licensed content seem to have passed. One natural scientist mentioned that when they first started at ISU, a local liberal arts college had a database that ISU did not, so they would go there to use it. Some participants identified circumstances under which they would pay for content. Three scholars in the arts and humanities all mentioned buying books. No one, however, indicated experience or willingness to buy articles. One shared that "I've bought books—I don't mind if it's something I will keep and use. I'm not apt to pay for a journal article, especially if I'm not sure if it's that useful. I'll do about anything before I pay for a journal article." Several participants noted that they will not buy articles and advise their students to never pay for articles as well ("I have counseled my peers to not pay for articles when they encounter paywalls").

Although a few participants noted that they gain access to scholarly journals in exchange for their service as peer-reviewers, this is not a primary means for doing so. For example, one social sciences scholar said, "it's a hassle for me to go in there and register myself, so I am not using it." Another shared concerns about the implications of online availability for usage: "I think as everything has become more accessible online, people rely a lot more on the online resources and they tend to get cited more. They tend to get used more, you know, [than] if someone has to physically haul their American butt down to the library."

No participants indicated that they use Sci-Hub or similar means of accessing materials that have been illegally posted. One person mentioned casual networks for sharing scholarly content: "There is a poor man's file sharing, which is not through file sharing websites, but is through Slacks and informal communication channels where people at different universities may have different access, and we can share papers individually with each other by just requesting." They further note that this can be especially helpful for obscure and older journals: "For example, there are very strange things in [my field] where a lot of work was done in [another country], and those organizations are extinct, and scans have been made, and they are not even owned by the major publishers." The next section continues the theme of sharing serials content via more casual networks.

RQ2. How, when, and with whom do faculty across disciplines share serial content?

Sharing scholarly content—whether among friends, colleagues, collaborators, and even family—came up in most interviews. Participants note a variety of practices and several important boundaries around what they will and will not do with respect to sharing or requesting articles. The most common refrain is that scholars are happy to share the published version of materials they have authored and to directly request materials either from authors, collaborators, or friends; however, there are several caveats.

Direct Requests

Private or direct contact was the primary method articulated. Although phenomena like #ICan-HazPDF have normalized public requests for content on social media, only three participants indicated that they have put out a call for content in a potentially publicly identifying way. For example, one scholar has requested content from colleagues via a professional organization's Facebook group. A natural scientist is happy to request and share by direct contact, similar to a humanist who noted, "I'm not a public Twitter asker." Instead, they email friends from

graduate school who work at institutions with larger library collections, doing so when they need an article more quickly than ILL can deliver it. A business scholar indicated that they have both shared and received requests for content, stating, "I probably wouldn't hesitate to reach out to one of my colleagues and say, 'Hey, do you think you could get this at your institution and share it with me?' I've gotten those emails before in the past. [...] I'll share it with them, so I wouldn't mind asking someone for something."

When reaching out to colleagues, some participants have restrictions in place to prioritize active collaborators or to save face. A business scholar reaches out to co-authors at R1 institutions, as "they tend to have subscriptions to journals we don't." An applied sciences scholar is only willing to share with project collaborators, "but not outside that circle." A social scientist revealed that requesting content is an admission that one's own institution does not have it—which may create negative impressions. This scholar said, "I don't tend to ask R1 friends that I'm actively working on stuff with for resources because 'face management,' like when you're trying to manage everybody else's expectations and impressions of you. Admitting you can't get something impacts that." An applied sciences scholar emails people at the institution where they did a postdoc. Saving face is not a consideration when reaching out to family. Two participants indicate that they regularly ask their adult children to send them content. One said: "My son is at another university and has better access, so I ask him for articles, and he emails them to me."

Another concern was the agreements entered into by the supplier or requestor. One participant who willingly supplies resources to colleagues at other institutions and receives resources from them indicated, "it's part of being a good colleague." Their primary concern was adhering to agreements they had signed with archives that required them not to share images from the collections. In those cases, they "would only share with a colleague who I know has also signed that agreement." A few participants actively use login credentials from R1 universities to access more library resources, likely in violation of institutional agreements. A more complex situation was highlighted by a participant who indicated that there is a culture of sharing resources with others whose work might be impacted by the research. If the collaborative group includes individuals not employed by the organization that is providing access to licensed content, the letter of the law may not be obeyed.

Some participants noted the desire to make an exchange reciprocal. A humanities scholar described a case in which they needed something from another country that was unavailable via ILL: "Then I did reach out to a colleague and let him know how delighted I would be to read [x]. I try to make it reciprocal, you know, maybe because we have something in common. And so, maybe it's an exchange of pieces, but it's hard to burden overworked colleagues with requests. I have done it once or twice, and people were usually gracious, and likewise I've received some requests for me to send things, and I have done so." A social scientist echoed that asking colleagues for someone else's article is too much of an imposition.

Contacting authors to request the full text is quite common. Most often, such requests are well received and can even spark conversation and relationships. An applied sciences scholar noted: "I don't mind reaching out to a scholar for their article, because you may then make a connection, right? And maybe you'll follow up down the road after you've read the article, or something like that. People are usually happy to share their PDFs, and I'm certainly very happy to share mine." One social sciences scholar shared, "Personally, I love it when somebody asks me for one of my articles, because I know they're using it. I'm sure not everyone is

like that." This scholar will only email authors, which is fast and effective, if they know the person well enough to greet them at a conference. Similarly, another scholar will only contact authors if they have met them and enjoys receiving requests for their work, stating: "when I get requests, I send them quickly because it's kind of flattering." For an education scholar, emailing the author makes most sense for papers that have not yet been published or in cases where they saw the conference presentation. An applied scientist did note, however, that perhaps the confidence required to email an author takes time or experience to cultivate: "[I'm] less inhibited to reach out to someone in the field [than] when I was fresh out of graduate school. Maybe I would be a little shy about reaching out to an established professor."

ResearchGate Requests

Several participants mentioned making and receiving requests via ResearchGate. A social scientist indicated they gladly share the published version privately via this platform; an applied sciences scholar receives and shares content via ResearchGate sometimes, but they do not use the platform to discover content. Most of the participants who engage with ResearchGate and Academia.edu expressed issues with these platforms generally, or for sharing content specifically. An education scholar who does download content from ResearchGate said, "a problem with using sites like this is that you have to join and [...] the email notifications may not be worth being able to get the papers for free." A social scientist concurs that the notifications from such commercialized platforms are annoying. A health sciences scholar shared their process for sharing content via ResearchGate: "when I publish the article, and it gets added into ResearchGate. But I found, as my sort of trick to remember, so I don't have to keep going through the copyright forms is to upload whichever version as a private file for myself, whether that has to be the preprint or whether that can be the actual published version. I put that on there, so that I have it, and I don't have to keep remembering which one I can share. If the request comes in the next time. I can just send that to them, whatever that is."

Reluctance to Share

For others, reaching out to the authors is "a last resort" or problematic in various ways. One of the scholars, who had recently completed their PhD, reported a rather awkward exchange in which the author of the article was reluctant to share: "I really wanted to read that specific article. I emailed the author, and it was this whole back and forth. He finally sent it to me, but he wanted to know who I was first. I was like, 'Come on, give me a break, I just want to read your article." A social sciences scholar finds it a bit embarrassing to ask the author for a paywalled article to which the library does not provide access, saying, "it sends two signals simultaneously—one that I'm working at a university that can't afford this journal, so it looks bad on me, and then it looks bad on them because they published this thing, and people don't have access to it, you know, so it's almost like it's like 'Oh, your journal is not accessible, you should have published higher." They acknowledge, however, that asking the author is largely positive "because you're helping them by reading their work and citing it."

A participant in the natural sciences indicated they do not get requests from others to share licensed content, noting, "SciFinder is very picky about who you share data with that you get from them." They have, however, been asked to share NSF grant proposals. A business scholar shared that they have reached out to authors to request interview instruments and usually do not hear back. An applied sciences scholar shared that people send them literature

and ask them to cite it: "usually I have seen the article anyway, but they tend to download it on their end and send me a PDF." One social scientist has encountered some authors who are annoyed by direct requests, which they attribute to the lack of opportunity to increase usage and Altmetric data.⁴⁴

RQ3. What expectations do faculty across disciplines have with respect to immediacy of access?

Most participants indicated that "the faster I can get resources, the better." The relative time they would be willing to wait, however, varied from an hour to a month—or longer for an essential resource. The most common explanation for needing materials immediately is that "research time is precious" and, when time is allocated for research, faculty need their resources at hand. The most frequently articulated considerations were time or schedule, application, timing, importance to project, and format. Several participants noted how expectations for instant gratification and immediate access in other areas of their life influence their needs for scholarly literature (e.g., "there's a pervasive mentality of wanting something right now.")

Time and Schedule

One participant in the natural sciences rated immediacy as "extremely important," saying "if I need it, I usually have it within the hour. My time to peruse literature is really demarcated. And so, if this is the time I need to read it, then I need it now. I can't wait." An education scholar said, "I'll wait zero seconds. If I want it, I want to go online and have it. I don't want to go through the process of requesting it or waiting," and a natural sciences scholar said, "this may be the most important thing. If it's not immediately available, I probably won't wait and won't cite it." Participants in chemistry, communication sciences and disorders, HDFS, and nursing shared that they tend to be planners and work ahead of known deadlines to request materials. For example, one of these scholars shared: "when I'm preparing for my main conference in March, I usually have it ready to go by December. I try not wait until the last minute and do that to myself."

How Will it Be Used?

The application for the desired text also plays into the perceived urgency of the need. One social scientist indicated, "when it's a revision for a journal, I'm forced to be impatient. Then I would say [I can wait] less than a week." Another social sciences scholar reiterated that the urgency "depends on how I'll be using the resource and when the deadline is. If ILL will be too slow, I'll post on Twitter that I need a PDF or ask a friend at another institution." A third social scientist concurs, noting that it depends on what they are working. If a grant deadline is coming up, more immediate access is preferred. Writing a meta-analysis was an example of a situation in which a business scholar needed all of the content to get started. Similarly, an applied scientist emphasized that, when writing a literature review, scholars must clearly articulate their procedure and note the number of articles that were unavailable and therefore excluded from the analysis.

Several scholars indicated that urgency tends to be more of an issue if they are working with a student. One person shared: "Students' perceptions of the library and research are different than [those of] faculty, but this is part of my role as a faculty member. I build this into students' timelines—they have to do a systematic search and realize it takes time and

planning." A participant who is also a Ph.D. student indicated that they are more willing to wait for materials related to their dissertation; however, they also encounter hard deadlines as a student and their needs for scholarly literature accordingly feel more urgent.

Timing

Several scholars indicated that, although they can be somewhat patient if the application is not urgent, there is a risk that "if I get too patient, then the project might fall off my radar." A few other participants shared the concern about forgetting having placed an ILL request or remembering what piqued their curiosity (e.g., "Sometimes I put in a request and by the time it arrives, I forget, and it gets lost in my email. Timing is really important"). A social science scholar shared: "My general preference is immediate access so I can make the notes and citation then and don't have to go back and do it later." An applied sciences scholar reiterated:

Immediate access is awesome, especially because of the particular balance of teaching and research, where sometimes I only have one day a week that I'm doing research, and I'm in the moment, you know. [If I] request it from ILL, it may hit at a moment when it's going to be another six days before I can sit down and do research. For that reason, I really do like to have access.

A scholar in the formal sciences also emphasized being "in the moment," saying,

oh, God! It's like I want it yesterday. Because I need to check something from several sources at the same time, and I have only so much time for research, which means several hours all at the same time. It's like art, I have to put it down or it goes away. I can't do some of it now and check something later; two days later I'll have forgotten what I'm thinking about. I need to see several articles [at the same time], look at them and see which one is more relevant, which one tells me something better. There's no point in writing down something from one article only to find out several days later, or this guy has better and newer research, and I should have used that."

Importance of the Source

A business scholar tied immediacy to the importance of the source for their current project: "If it's something tangential I can drop it. If it's important I have to wait, right?" An applied sciences scholar shared, "I can be impatient if I'm excited about something!" They typically get materials in a few days from ILL and that meets their needs. Four weeks was the hard limit cited by one health sciences scholar, but they indicated there have been times in the past when they have waited longer for important sources. Another person in the health sciences shared that it is hard to determine the potential importance of a source without the full text, saying, "if the whole article isn't available, I question: 'Is there something in the article that I wanted to write about? It's hard to tell without full text." One of the more novel perspectives came from a social scientist, who suggested that individual sources are not necessarily important. They shared: "I am not fishing for ideas generally. You know, I have enough ideas. My work is not extending other people's work. I'm just trying to see where they are."

Format of the Source

The format of the desired content also has implications for how quickly it can be obtained. An applied sciences scholar wants access to articles right away, for example, but will wait for a book. They softened this by saying: "research takes a long time, and if I don't have the article today it's okay; I'm not going to read the twenty-five articles I found today, it will take me time." A humanist shared: "I'm used to waiting for books, a couple days feels pretty standard for me. [... With respect to] primary sources, access is so important for research and teaching and that's done on a much larger timeline. We plan those trips a year or two out, [though the] digitization of collections has changed this." An arts scholar reaches out to friends and colleagues near archives they work with and finds that they are willing scan physical materials and send a PDF. An applied sciences scholar can wait a day or two but finds that authors respond quickly on ResearchGate, explaining, "If I don't hear back in a day, I usually don't hear back at all." They noted that they wait more for journal articles than conference proceedings because the latter are usually available Open Access.

The Limits of Immediacy

Some scholars pushed back against the expectation of immediacy with statements such as, "I can't read everything all at once, anyway, so if I have to wait a few weeks to get something, it's not the end of the world." A humanities scholar said, "it's lovely to have immediate access, but my research doesn't hinge on one source. There's always something else I can work on while I'm waiting." A social scientist provided some levity, saying: "It's not like if I don't get this research paper paragraph written by the end of the day, people die. It's not that important, you know. I think generally a couple of days is fine." An arts scholar spoke to generational differences in expectations—for example current students having instant access to music recordings—to highlight that, although students gain immediacy, they may lose elements, such as anticipation, which contribute to a deep and transformative learning experience. They shared concerns about what immediacy means for research processes, saying,

I also recognize that some individuals may get hyper-focused on the speed with which they can access something, and they stop actually paying attention to the quality of a thing that they're able to be able to access, or there's the concern and the risk that they might just jettison that thing entirely, because they simply don't have the patience to wait to receive it.

Participants' willingness to wait for scholarly literature has implications for how they obtain access, of course, and so does their tenacity. An arts scholar reported: "It's rare that I'll give up—if I do, I probably just forgot that I was looking for it." Some participants were less invested in specific sources, perhaps especially those that are not widely available. A health sciences scholar shared that, "if it were going to be that game-changing to what I'm doing, [...] it's not something that would be a huge paper, you know, in some well-respected journal, because I would be able to find it somewhere." The same person reiterated that much of the important work in their areas is government-funded and available for free, which "helps with access." A social sciences scholar shared that their first response is frustration—they need these materials to do their research. An applied sciences scholar said: "Often I don't need to cite every article I am seeking, but sometimes there is 'the' article – often super new

or super old and I need to get a hold of it." A natural scientist begins to "dig" and an arts scholar is "a dog with a bone."

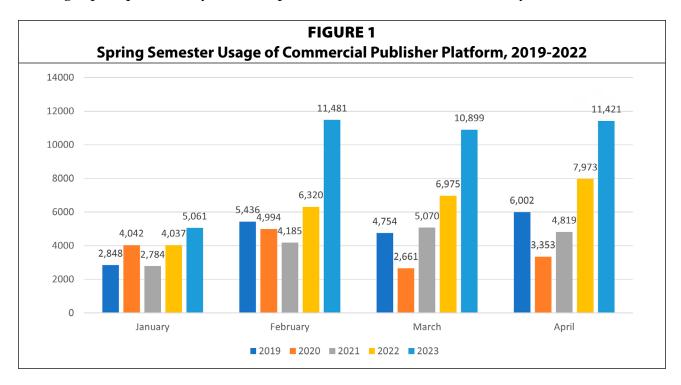
Discussion

RQ1. What processes do faculty across disciplines use to access scholarly serial content?

One alternative to placing requests or sharing content is to offer more comprehensive collections and immediate access. Milner Library has historically preferred a la carte agreements and therefore has limited data with which to evaluate the impact of transformative agreements, access-only content, and big deals. Studies have shown that institution size and classification have an impact on the cost of journal bundle pricing and the savings afforded by cancelling Big Deals—in other words, a Carnegie R2 such as ISU does not benefit from unbundling to the extent an R1 does. Local data suggest that agreements promoting expanded "Read" access have been well used and provide a better value based on cost-per-use. A transformative agreement with a university press beginning in January 2021, for example, has more than doubled total item requests and decreased cost-per-use from \$15.37 in 2019 and \$22.81 in 2020 to \$8.30 in 2022.

TABLE 1									
Total Item Requests and Decreased Cost-Per-Use									
	2019	2020	2021	2022					
Total_Item_Requests	2,419	1,837	4,976	5,201					
Cost-per-Use	\$15.37	\$22.81	\$8.67	\$8.30					

Similarly, an access-only agreement with a commercial publisher beginning January 2023 has increased usage and decreased the total cost-per-use. The total_item_requests in spring semester 2023 almost doubled the average usage in the same months from 2019 to 2022 and, although quite preliminary, the cost-per-use has decreased considerably.



These agreements to expand access to serials and make them immediately available are in direct response to frequent faculty requests to "buy everything from [specific science publisher]" or complaints that the library does not provide comprehensive access to a particular publisher's journal portfolio. Milner Library cannot reasonably provide access to everything given its flat budget. In an interview, one applied sciences scholar said, "I don't feel like the collection of accessible electronic journals is bad or inadequate. I recognize that every scholar can probably identify journals that they would like to have electronic access to but don't." Librarians regularly solicit the input of departments on potential cancellations or acquisitions, and the understanding that the library cannot provide everyone with everything they need is reassuring.

RQ2. How, when, and with whom do faculty across disciplines share serial content?

Many participants view sharing scholarly literature as part of being a good colleague. There are many limitations to this practice, however, and ways in which sharing and requesting content are moderated by reputational, relationship, status, timing, and disciplinary considerations. Some share materials to promote their work or that of their colleagues, some share materials to help students or practitioners without other means of access. The legal considerations of sharing copyrighted materials seemed to be of less importance to participants than did professional ethics of ensuring the availability of scholarship created by a community of which they are part. Scholars have noted the "conspicuous gap between discovery and publication," but no participants in this study mentioned sharing the publisher-provided free copies of their work to help bridge this gap.⁴⁶

Although no participants in this study indicated that they take advantage of illegal filesharing platforms to obtain serials content, the large collection of articles available via Sci-Hub, for example, suggests that it is a useful service to many scholars. Recent surveys and site statistics confirm it is well-used; in 2022, the United States had the second most downloads worldwide. 47 More common means of sharing content — via email requests and ResearchGate, or wherever Google (Scholar) leads—are frequently used and not perceived as inappropriate by participants. Locally, ISU has 3,776 accounts on Academia.edu and 3,970 members on ResearchGate. The authors requested information on campus use of Sci-Hub, ResearchGate, Academia.edu, and Google Scholar. Although traffic to these sites is not retained, referrals are. Google Scholar was the only platform to have more than a few referrals – 150 in the past ten years. A review of total referrals shows that library platforms far outpaced these, including Milner Library's Springshare account (85,426), the former consortial discovery layer (48,367), the former proxy server (47,477), and the current unified library service (41,548). These referrals do not prove that library platforms are preferred, however, and quantifying the extent to which scholarly literature is informally shared across email, file sharing services, social platforms and other mechanisms is beyond the scope of this study.

RQ3. What expectations do faculty across disciplines have with respect to immediacy of access?

Participants divided neatly into two camps when asked about their needs for immediacy: those who are willing to wait and those who are not. Those who are not willing to wait can only be served by a library with comprehensive collections, otherwise, they will seek and find access via their informal networks. These individuals cannot be served by ILL and may

not even by be satisfied with paid document delivery services such as Get it Now, which can deliver articles in a matter of minutes. Studies have shown that simply placing a request is a deterrent to access.⁴⁸ The interviews confirm that faculty have a variety of valid reasons for not placing ILL requests, even though Milner Library has three full-time employees dedicated to operating the service and averages twenty-seven hours for article fulfilment. Although total local statistics for ILL requests continue to trend downward, a few departments show stability or growth (see table 2).

TABLE 2 ILL Article Requests From ISU Departments with a Graduate Program, 2019–2022								
	2019	2020	2021	2022	Average	% Increase		
Accountancy	38	53	54	15	40	5.26316		
Agriculture	11	29	139	39	54.5	395.455		
Anthropology	115	62	77	61	78.75	-31.522		
Art	29	27	20	32	27	-6.8966		
Biological Sciences	482	186	332	265	316.25	-34.388		
Business	15	11	50	41	29.25	95		
Chemistry	508	306	274	245	333.25	-34.4		
Communication	658	227	216	346	361.75	-45.023		
Communication Sciences & Disorders	333	113	166	285	224.25	-32.658		
Criminal Justice	142	121	122	142	131.75	-7.2183		
Economics	86	33	36	24	44.75	-47.965		
Education Administration and Foundations	277	160	224	202	215.75	-22.112		
English	249	94	112	102	139.25	-44.076		
Family and Consumer Sciences	237	97	194	184	178	-24.895		
Geography, Geology, and the Environment	361	154	231	264	252.5	-30.055		
Health Sciences	119	37	34	126	79	-33.613		
History	152	24	85	125	96.5	-36.513		
Information Technology	36	0	42	0	19.5	-45.833		
Kinesiology and Recreation	314	152	251	363	270	-14.013		
Languages, Literatures and Cultures	415	80	129	171	198.75	-52.108		
Management and Quantitative Methods	69	47	78	65	64.75	-6.1594		
Marketing	59	13	35	23	32.5	-44.915		
Mathematics	133	54	78	159	106	-20.301		
Music	128	42	49	46	66.25	-48.242		
Nursing	903	439	828	848	754.5	-16.445		
Politics and Government	130	54	85	61	82.5	-36.538		
Psychology	701	267	297	479	436	-37.803		
Social Work	176	76	157	110	129.75	-26.278		
Sociology	307	47	140	129	155.75	-49.267		
Special Education	252	120	184	214	192.5	-23.611		
Teaching & Learning	427	201	253	289	292.5	-31.499		
Technology	117	67	85	93	90.5	-22.65		
Theatre and Dance	60	8	12	16	24	-60		

A natural sciences scholar has an ongoing joke with colleagues about a departmental ILL service in which they would hire a student to sit in the library of a nearby R1 university to scan and send them research. They conceded that Milner Library's services meet their needs in a reasonable timeframe, saying, "Get It Now is amazingly fast. Sometimes I need older articles and come to the library to get those in bound volumes." Get It Now is indeed fast and convenient. Unfortunately, Milner Library has almost doubled the amount of money spent on self-serve Get It Now in the past few years: \$24,467 (FY19), \$28,648.85 (FY20), \$48,167.90 (FY21), and \$49,692.29 (FY22). These increases are due to two primary use cases: activating Get It Now in response to the cancellation of a subscription, or to "trial" a specific journal to assess its usage. Some publishers have increased their per-article costs in recent years, and Milner Library will also factor this into considerations of the value of access-only and transformative agreements.

Some participants indicated that they did not use ILL because it was not immediately apparent how to do so. The perceived inconvenience and invisibility of ILL may be contributing to its lack of use. Meanwhile, reliance on Get It Now has increased in terms of total requests and cost. Those patrons who are willing to place requests are increasingly doing so via Get It Now rather than ILL. This suggests that there may be an opportunity to reduce the amount of content available via Get It Now and direct those users instead to ILL. Both require that users submit a request; although ILL may take one day longer to fulfill, the costs of ILL are committed in the personnel budget and ILL employees can purchase content via Get It Now when unable to source it by other means.

Milner Library implemented Ex Libris' Alma unified library services platform and Primo VE discovery platform in the summer of 2020 and continues to strive to improve their usability. In the summer of 2021, Milner Library implemented OpenAthens and has leveraged that product's Wayfinder application to ensure that users can login directly on publisher's webpages instead of requiring they begin their process at the library homepage. Like other libraries, Milner uses third party tools in the hopes of making subscribed content more easily findable and accessible to users. One participant called out BrowZine as particularly useful in their access of materials; Milner Library is currently expanding the integration of Third Iron's LibKey products to promote ease of access alongside the discovery of materials.

Conclusion

This study contributes to the literature by investigating not only how faculty across disciplines access and share scholarly serial content, but also their expectations for immediate access to it. By presenting the findings in the words of participants and triangulating interviews with data from local sources, the authors offer a more comprehensive analysis of the context- and individual-specific mechanisms in place to access and share serial literature. Library-provided access via databases, subscriptions, ILL, and paid document delivery remain central to the processes of many participants; however, most participants couple these with less formal mechanisms, drawing on contacts in their professional networks, using academic social networks, and finding publicly available content.

Faculty hold very different perspectives with respect to the immediacy of need for scholarly literature. Participants articulated a variety of considerations for immediacy including their teaching load and schedule, time available to focus on research, how the material will be used, project timing, the relative importance of the source, and the format of the source.

Their responses also suggest that their discipline, the perceived competitiveness within their particular specialty, their career stage, and personal expectations also factor into their understanding of urgency. There was consensus that life in a digitally mediated culture sets high expectations for immediacy, but some participants pushed back against allowing such expectations to influence their research practices.

The scholarly literature to which all participants contribute is integral to their research and teaching. Where the library was previously more consistently central to scholars' access of serials, modes of access and sharing have grown individualized and distributed. The authors have been intentional in seeking out a variety of perspectives to inform initiatives to support faculty members' legal and timely access to desired content. Learning that immediate access to scholarly literature is not a universally held expectation allows the authors to focus their efforts on balancing immediate access for those who demand it and request-based access for those who are willing to wait.

Acknowledgement

This research benefitted from a University Research Grant funded by the Office of Research and Graduate Studies at Illinois State University. The authors are indebted to the interview participants and this journal's anonymous reviewers.

Appendix A. College and School / Department

College of Applied Science and Technology - Criminal Justice Sciences; Family and Consumer Sciences; Information Technology; Kinesiology and Recreation

College of Arts and Sciences - Chemistry; Communication; Communication Sciences and Disorders; Economics; Geography, Geology, and the Environment; History; Languages, Literatures, and Cultures; Mathematics; Physics; Psychology; Social Work; Sociology and Anthropology

College of Business - Finance, Insurance & Law; Management & Quantitative Methods

College of Education - Special Education; Teaching & Learning

Mennonite College of Nursing - Nursing (2)

Wonsook Kim College of Fine Arts - Music (2)

Appendix B. Year of Terminal Degree

1987
1993
1994
1999
2005 (2)
2006
2008
2009 (2)
2011 (2)
2013
2016
2017 (5)
2018
2020
2021
2022 (3)

Appendix C. Interview Instrument

Demographic

- In which department(s) do you teach?
- Which subject area(s) do you research?
- In what year did you complete your terminal degree?

Access

- Please describe how you access scholarly journal articles and conference proceedings.
- How important is immediate access?
- What do you do when you can't access the full text?

Notes

- 1. Jack E. James, "Pirate Open Access as Electronic Civil Disobedience: Is it Ethical to Breach the Paywalls of Monetized Academic Publishing?" *Journal of the Association for Information Science and Technology* 71, no. 12 (2020): 1500–04, at 1503. https://doi.org/10.1002/asi.24351.
- 2. Toby Green, "We've Failed: Pirate Black Open Access is Trumping Green and Gold and We Must Change our Approach," *Learned Publishing* 30, no. 4 (2017): 325–29. https://doi.org/10.1002/leap.1116.
- 3. William H. Walters, "Beg, Borrow, and Steal: Formal and Informal Access to the Scholarly Literature at US Master's Universities," *The Journal of Academic Librarianship* 45, no. 6 (2019). https://doi.org/10.1016/j.acal-ib.2019.102059.
- 4. Laura Taylor, "2021 ACRL Academic Library Trends and Statistics Survey: Highlights and key academic library instruction and group presentation findings," *College & Research Libraries News* 84, no. 4 (2023): 149–57. https://doi.org/10.5860/crln.84.4.149.
- 5. Melissa Blankstein, "Ithaka S+R US Faculty Survey 2021: Research Report," (2022), https://doi.org/10.18665/sr.316896; Walters, "Beg, Borrow, and Steal."
 - 6. Blankstein, "Ithaka S+R US Faculty Survey 2021."
 - 7. Blankstein, "Ithaka S+R US Faculty Survey 2021," p. 22.
- 8. Bo-Christer Björk, "Why is Access to the Scholarly Journal Literature so Expensive?" *portal: Libraries and the academy* 21, no. 2 (2021): 177–92. https://doi.org/10.1353/pla.2021.0010; Carol Tenopir and Donald W. King, "Trends in Scientific Scholarly Journal Publishing in the United States," *Journal of Scholarly Publishing* 28, no. 3 (1997): 135–70. https://doi.org/10.3138/JSP-028-03-135.
- 9. Kenneth Frazier, "The Librarians' Dilemma: Contemplating the Costs of the 'Big Deal," *D-Lib Magazine* 7, no. 03 (2001), http://www.dlib.org/dlib/march01/frazier/03frazier.html; Fei Shu et al., "Is It Such a Big Deal? On the Cost of Journal Use in the Digital Era," *College & Research Libraries* 79, no. 6 (2018): 785–98, https://doi.org/10.5860/crl.79.6.785.
- 10. Jaclyn McLean and Ken Ladd, "The Buyback Dilemma: How we Developed a Principle-based, Datadriven Approach to Unbundling Big Deals," *The Serials Librarian* 81, no. 3-4 (2021): 295-311, https://doi.org/10.108 0/0361526X.2021.2008582; Catherine Anne Johnson and Samuel Cassady, "How Librarians Make Decisions: The Interplay of Subjective and Quantitative Factors in the Cancellation of Big Deals," *Collection and Curation* 39, no. 1 (2018): 6-14, https://doi.org/10.1108/CC-05-2018-0013; Joel B. Thornton, and Curtis Brundy, "Elsevier Title Level Pricing: Dissecting the Bowl of Spaghetti," *Journal of Librarianship and Scholarly_Communication* 9, no. 1 (2021): eP2410, https://doi.org/10.7710/2162-3309.2410.
- 11. Scott Chamberlain, "Lessons Learned from Reevaluating Big Deals with Unsub," *Serials Review* 48, nos. 3-4 (2022): 1–4, https://doi.org/10.1080/00987913.2022.2132090; Matthew J. Jabaily, "Recalibrating Cost-per-Use: Implications of COUNTER Release 5 and Unsub," *Serials Review* 46, no. 4 (2020): 292–99, https://doi.org/10.1080/00987913.2020.1850040; Peter McCracken et al., "Indispensable or Unnecessary?: A Data-driven Appraisal of Postcancellation Access Rights," *Insights* 36 (2023): 1–11, https://doi.org/10.1629/uksg.601.
- 12. Karen Kohn, "When the Big Deal Gets Smaller: Use of ScienceDirect after Cancellations," *portal: Libraries and the Academy* 23, no. 2 (2023): 333, https://doi.org/10.1353/pla.2023.0012.
- 13. Ralf Schimmer et al., "Disrupting the Subscription Journals' Business Model for the Necessary Large-scale Transformation to Open Access," *A Max Planck Digital Library Open Access Policy White Paper* (April 2015), http://dx.doi.org/10.17617/1.3; Nina Schönfelder, "Article Processing Charges: Mirroring the Citation Impact or Legacy of the Subscription-Based Model?" *Quantitative Science Studies* 1, no. 1 (2020): 6–27. https://doi.org/10.1162/gss-a-00015.
 - 14. Björk, "Why is Access," 176.
- 15. Alexander Grossmann and Björn Brembs, "Current Market Rates for Scholarly Publishing Services," F1000Research 10 (2021), https://doi.org/10.12688%2Ff1000research.27468.2.
- 16. Shaun Yon-Seng Khoo, "Article Processing Charge Hyperinflation and Price Insensitivity: An Open Access Sequel to the Serials Crisis," *Liber Quarterly* 29, no. 1 (2019): 1-18, https://doi.org/10.18352/lq.10280
- 17. Lisa Janicke Hinchliffe, "Expanded Access to Paywalled Content: A Hidden Benefit of Transformative Agreements," February 23, 2022, https://scholarlykitchen.sspnet.org/2022/02/23/expanded-access-to-paywalled-content-a-hidden-benefit-of-transformative-agreements/; Karen Brunsting et al., *Open Access Literature in Libraries: Principles and Practices* (American Library Association, 2022), https://ir.library.illinoisstate.edu/fpml/163/.
- 18. Jung Mi Scoulas and Sandra L. De Groote, "Faculty Perceptions, Use, and Needs of Library Resource and Services in a Public Research University," *The Journal of Academic Librarianship* 49, no. 1 (2023), https://doi.org/10.1016/j.acalib.2022.102630.
 - 19. Steven A. Knowlton et al., "Spilling out of the Funnel: How Reliance upon Interlibrary Loan Affects Ac-

- cess to Information," Library Resources & Technical Services 59, no. 1 (2015): 4-12, https://doi.org/10.5860/lrts.59n1.4.
- 20. Rachel E. Scott and Gail Barton, "Promoting Interlibrary Loan in the Traditional Catalog and Discovery Layer: Two Pilot Projects," *Library Resources & Technical Services* 62, no. 2 (2018): 74–79, https://doi.org/10.5860/lrts.62n2.74; Kirstin I. Duffin, "Comparing Open Access Search Tools to Improve Interlibrary Loan Fulfillment Efficiency," *Technical Services Quarterly* 37, no. 4 (2020): 415–31. https://doi.org/10.1080/07317131.2020.1810442.
- 21. Matthew J. Jabaily, "An Analysis of a Pay-per-View Article Token Report: Lessons for Better Understanding Value and Reporting," *Serials Review* 44, no. 2 (2018), 113–21, https://doi.org/10.1080/00987913.2018.1471651; Beverly J. Geckle and Denise FitzGerald Quintel, "Streamlining User Experiences with ScienceDirect Prepaid Articles," *Serials Review* 48, nos. 3–4 (2022): 238–42, https://doi.org/10.1080/00987913.2022.2132132.
- 22. Julie A. Murphy and Chad E. Buckley, "Document Delivery as a Supplement or Replacement for Serial Subscriptions," *Serials Review* 44, no. 3 (2018): 241–46, https://doi.org/10.1080/00987913.2018.1525238.
- 23. Alice L. Daugherty and Lindsey Lowry, "Three Product Implementations for Improving "Just-In-Time" Delivery of Library Resources," *Technical Services Quarterly* 39, no. 4 (2022): 351–68, https://doi.org/10.1080/07317 131,2022,2125675.
- 24. Marc-Andre Simard et al., "How Much Does an Interlibrary Loan Request Cost? A Review of the Literature," arXiv:2009.04281 (2020), https://doi.org/10.48550/arXiv.2009.04281.
- 25. Francisco Segado-Boj et al., "Jumping Over the Paywall: Strategies and Motivations for Scholarly Piracy and Other Alternatives," *Information Development* (forthcoming), https://doi.org/10.1177/02666669221144429; Carol Tenopir et al., "No Scholar is an Island: The Impact of Sharing in the Work Life of Scholars," *Learned Publishing* 30, no. 1 (2017): 5–17, https://doi.org/10.1002/leap.1090; Walters, "Beg, Borrow, and Steal."
 - 26. Walters, "Beg, Borrow, and Steal."
- 27. Mikael Laakso et al., "Research Output Availability on Academic Social Networks: Implications for Stakeholders in Academic Publishing," *Electronic Markets* 27 (2017): 125–33, https://doi.org/10.1108/EL-02-2014-0040.
- 28. Carolyn Caffrey and Gabriel J. Gardner, "Fast and Furious (at Publishers): the Motivations Behind Crowdsourced Research Sharing," *College & Research Libraries* 78, no. 2 (2017): 131–49, https://doi.org/10.5860/crl.78.2.131.
- 29. John Bohannon, Who's Downloading Pirated Papers? Everyone," *Science* 352, no. 6285 (2016): 508–12, https://doi.org/10.1126/science.352.6285.508; Bastian Greshake, "Looking into Pandora's Box: The content of Sci-Hub and its usage," *F1000Research* 6 (2017), https://doi.org/10.12688%2Ff1000research.11366.1; Emad Behboudi et al., "The Black Crow of Science and Its Impact: Analyzing Sci-Hub Use with Google Trends," *Library Hi Tech* 39, no. 4 (2021): 970–83, https://doi.org/10.1108/LHT-04-2020-0105.
 - 30. Blankstein, "Ithaka S+R US Faculty Survey 2021," 22.
 - 31. Tenopir et al., "No Scholar is an Island," 6.
 - 32. Segado-Boj et al., "Jumping Over the Paywall."
- 33. Jack Meadows, "The Immediacy Effect Then and Now," *Journal of Documentation*, 60, no. 6 (2004): 601–08, https://doi.org/10.1108/00220410410568115.
- 34. Diane Harley et al., Assessing the Future of Landscape of Scholarly Communication: An Exploration of Faculty Values and Needs in Seven Disciplines (The Center for Studies in Higher Education, 2010).
- 35. Joseph A. Maxwell, Qualitative Research Design: An Interactive Approach (Sage, 2013), 96-7; Richard J. Light et al., By Design: Planning Research on Higher Education. (Harvard University Press, 1990), 53.
 - 36. Yvonna S. Lincoln and Egon G. Guba, Naturalistic Inquiry (Beverly Hills: SAGE, 1985), 11.
- 37. Ole R. Holsti quotes the statistician John Tukey who quips: "Far better an approximate answer to the right question, which is often vague, than an exact answer to the wrong question, which can always be made precise." Content Analysis for the Social Sciences and Humanities (Addison-Wesley, 1969), 12.
- 38. There is an extensive literature on validity in qualitative research, and whether generalizability is or should be the goal of qualitative studies. See Joseph Maxwell, "Understanding and Validity in Qualitative Research," *Harvard Educational Review* 62, no. 3 (1992): 279–301.
- 39. John W. Creswell and Dana L. Miller, "Determining Validity in Qualitative Inquiry," *Theory into Practice* 39, no. 3 (2000): 129.
- 40. See Sarah Elsie Baker and Rosalind Edwards, "How Many Qualitative Interviews Is Enough? Expert Voices and Early Career Reflections on Sampling and Cases in Qualitative Research," *National Centre for Research Methods Review Paper* (2012), https://cris.brighton.ac.uk/ws/portalfiles/portal/301922/how_many_interviews.pdf); Theodore T. Bartholomew et al., "A Choir or Cacophony? Sample Sizes and Quality of Conveying Participants' Voices in Phenomenological Research," *Methodological Innovations* 14, no. 2 (May 2021): 1–14, https://doi.org/10.1177/20597991211040063.
- 41. Chad E. Buckley, Rachel E. Scott, Anne Shelley, Cassie Thayer-Styes, and Julie A. Murphy, "Disciplinary Differences and Scholarly Literature: Discovery, Browsing, and Formats," portal: Libraries & the Academy 24, no. 4 (2024): 737-763. https://doi.org/10.1353/pla.2024.a938741; Rachel E. Scott, Julie Murphy, Cassie Thayer-

Styes, Chad E. Buckley, and Anne Shelley. "Exploring faculty perspectives on open access at a medium-sized, American doctoral university." Insights 36, no. 14 (2023). https://doi.org/10.1629/uksg.620; Rachel E. Scott, Anne Shelley, Chad Buckley, Cassie Thayer-Styes, and Julie Murphy, "Academic Publishing is a Business Interest": Reconciling Faculty Serials Needs and Economic Realities at a Carnegie R2 University, Journal of Librarianship and Scholarly Communication 12, no. 1 (2024). https://doi.org/10.31274/jlsc.16232.

- 42. Unpaywall is a browser extension that identifies freely available full text articles.
- 43. Milner Library currently supports DOI searching through its Primo VE interface and LibKey.io.
- 44. This topic was treated in higher education news venues shortly before the interviews were conducted. See, for example, Susan D'Agostino, "Why Some Professors Don't Post PDFs by Marginalized Scholars," *Inside Higher Ed* (September 18, 2022): https://www.insidehighered.com/news/2022/09/19/why-dont-some-post-pdfs-marginalized-scholars-altmetrics.
- 45. Theodore C. Bergstrom et al., "Evaluating Big Deal Journal Bundles," *Proceedings of the National Academy of Sciences* 111, no. 26 (2014): 9425-9430, https://doi.org/10.1073/pnas.1403006111.
- 46. Rob Ross, "Open Access as the Napster of Scholarly Communication," *Serials Review*, 48, nos. 3-4 (2022): 208–12, https://doi.org/10.1080/00987913.2022.2106815.
- 47. Segado-Boj et al., "Jumping Over the Paywall"; Sci-Hub, "Stats," https://sci-hub.ru/stats; Brian Owens, "Sci-Hub Downloads Show Countries Where Pirate Paper Site is Most Used," Nature News, February 25, 2022, https://www.nature.com/articles/d41586-022-00556-y.
 - 48. Knowlton et al., "Spilling Out of the Funnel," 11.
- 49. OpenAthens, "Wayfinder Organizational Discovery Service," https://www.openathens.net/publishers/wayfinder/.