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Finding Our Way: A Snapshot of Scholarly Communication Practitioners' Duties & Training

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INTRODUCTION Scholarly communication has arisen as a core academic librarianship competency, but formal training on scholarly communication topics in LIS is rare, leaving many early career practitioners underprepared for their work. **METHODS** Researchers surveyed practitioners of scholarly communication, as defined by the Association of College and Research Libraries (ACRL), regarding their attitudes toward and experiences with education in scholarly communication, job responsibilities, location within their academic libraries, and thoughts about emerging trends in scholarly communication librarianship. **RESULTS** Few scholarly communication practitioners felt well-prepared by their graduate training for the core set of primary and secondary scholarly communication responsibilities that have emerged. They deploy a range of strategies to fill the gap and would benefit from support in this area, from more robust education in graduate programs and through continued professional development. **DISCUSSION** The results of this survey support the assertion that as academic libraries and academic library work have increasingly recognized the importance of scholarly communication topics, library school curricula have not developed correspondingly. Respondents indicated a low level of formal pedagogy on scholarly communication topics and generally felt they were not well-prepared for scholarly communication work, coming at a significant opportunity cost. **CONCLUSION** Scholarly communication practitioners should create and curate open teaching and learning content on scholarly communication topics for both continuing education as well as adoption within LIS curricula, and LIS programs should develop accordingly, either through “topics” courses or by integrating scholarly communication into and across curricula as it intersects with existing courses.

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IMPLICATIONS FOR PRACTICE

1. New professionals may find they have not been adequately prepared for their scholarly communication responsibilities by their LIS education and should expect significant learning on the job.
2. Libraries may find it difficult to locate candidates for scholarly communications positions, who have undertaken formal study of the issues in this area, even as scholarly communication knowledge, skills, and experiences are ever more important.
3. As a result, academic libraries should expect to provide substantial support for ongoing education and training, particularly for new hires and among those seeking to emphasize scholarly communication topics and services.
4. Because scholarly communication training is rare and most often offered by well-resourced institutions, current hiring practices may reinforce traditional hierarchies that privilege wealthy, predominantly-white LIS applicants.
5. LIS educators should devote curricular attention to topics identified as areas of work by scholarly communication practitioners and partner with the community of practice to develop high quality, authentic, relevant pedagogical content.

INTRODUCTION

Scholarly communication (SC), defined by ACRL as “the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use” (2003), is increasingly recognized as a core competency in academic librarianship. Scholars from Finlay, Tsou, & Sugimoto (2015) to Xia & Li (2015) have demonstrated this through extensive analysis of job postings. Brantley, Bruns, & Duffin (2017) observe that “scholarly communication is increasingly being viewed as a central service that libraries can provide and in which librarians should be skilled” (p. 140) and suggest a “scholarly communication coach” role for liaison librarians, for whom, they argue, scholarly communication should be a core responsibility as part of a broad shift “from passive, library-centric, collection building toward an active, participatory, and collaborative role” (p. 143).

Despite the increasing centrality of this work to academic librarianship, students are generally not graduating from library and information science (LIS) programs ready for work in this area. While there is an important role for on-the-job training and continuing education, students would also benefit from formal training and deeper connections with practitioners in this area during their graduate education. Unfortunately, while libraries are changing rapidly, practitioner perspectives are rarely visible in LIS curricula, particularly in nascent areas (IMLS, 2017). While some programs may have elected to address scholarly

communication through boutique “topics” courses in the past (Salo, 2013a), the central nature of scholarly communication, particularly to academic librarians, suggest that these needs are likely to be ongoing and should be increasingly integrated into LIS education. As a step toward better-understanding of these issues and bringing the voices of scholarly communication practitioners into the LIS education conversation, this article reports on a national survey of academic librarians, designed to assess their perceptions of their educational preparedness for providing scholarly communication support, their methods of building and maintaining scholarly communication expertise while on the job, and their sense of emerging trends in scholarly communication work in libraries. The study is intended to garner the perspectives of scholarly communication practitioners in libraries, most of whom have LIS degrees. The target population is those librarians who either have positions primarily dedicated to scholarly communication or who routinely encounter issues and questions about scholarly communication in the regular conduct of their professional responsibilities.

LITERATURE REVIEW

Former University of Cambridge Office of Scholarly Communication Deputy Director Danny Kingsley emphasized the “failure of library schools to deliver,” in an August 15, 2017 Unlocking Research blog post, “Planning scholarly communication training in the UK”:

It is fairly universally acknowledged that it is a challenge to engage with library schools on the issue of scholarly communication, despite repositories being a staple part of research library infrastructure for well over a decade. There are a few exceptions but generally open access or other aspects of scholarly communication are completely absent from the curricula. (Note: any library school that wishes to challenge this statement, or provide information about upcoming plans are welcome to send these through to info@osc.cam.ac.uk)

Raju (2019) observes a similar trend in South Africa, reporting that as “university libraries in South Africa . . . seem to be actively embracing new and emerging trends in scholarly communication, LIS schools’ curricula do not seem to be keeping pace with this development” (p. 21). While it is important to keep Kingsley’s UK context and Raju’s South African context in mind, U.S.-based scholars such as Hollister (2017) note that “the literature concerning the preparation of MLIS students is robust and decades deep, but lacking in pertinent SC discussion” (p. 4). Hollister further states “only about 15% (9 of 59) ALA-accredited programs appeared to include SC courses” at the time of his research and the authors are not aware of significant changes in the following two years. Admittedly, reviewing LIS websites to identify course offerings is an imperfect method for determining topic

coverage because it can be difficult to ascertain currency and completeness, and, perhaps more importantly, because it does not reveal course content (Raju, 2019). There may be a great deal of attention to topics in scholarly communication hidden behind titles with no apparent relevance. At the same time, due to both disciplinary inclination and market awareness, schools of information and library science are acutely aware of the information value of their web presences. The lack of attention to scholarly communication signals a corresponding lack of curricular priority.

Brantley, et al, conducted a thorough literature review of scholarship pertaining to scholarly communication as a developing core competency among practitioners in 2017 (p. 138).¹ They point to common focal areas of managing institutional repositories, author rights, open access, bibliometrics and altmetrics, data management, library publishing, research support services, and faculty engagement (p. 138). They “focus on aspects of the literature relevant to the transformation of liaison librarians into service providers of SC support, trends toward faculty engagement in library services, including assessment of faculty needs, and literature promoting SC support as a core competency.” (p. 138)

Organizations such as the Association of College and Research Libraries (ACRL), NASIG, Library Publishing Coalition (LPC), Creative Commons, Open Textbook Network (OTN), and Scholarly Publishing and Academic Resources Coalition (SPARC) are creating courses, tool kits, and competency inventories, outlining necessary knowledge and skills, but LIS programs have yet to take up scholarly communication pedagogy at any scale. This gap in formal educational programs may, at least in part, be due to the absence of strong practitioner presence in instruction in those programs. The Institute of Museum and Library Services (IMLS) *Positioning Library & Information Science Graduate Programs for 21st Century Practice Forum Report* (Sands, Toro, DeVoe, Fuller, & Wolff-Eisenberg, 2018) notes a troubling gap between LIS curricula and the rapidly-evolving needs of the field, citing a lack of communication between LIS practitioners and faculty among reasons for the gap, and even going so far as to say that “LIS programs may fail to train all graduates in necessary skills and competencies” (p. 1). Similarly, *Envisioning Our Information Future and How to Plan for It* (Abels, Howarth, & Smith, 2016) notes that full-time LIS faculty “may be years or decades away from immersion in practice.” While LIS curricula is necessarily slow to evolve (Salo, 2013a), scholarly communication offers a broad enough umbrella of topics and, after several decades, has shown itself to be enduring enough and increasingly central enough to academic librarianship that work is needed to bring this topic into graduate instruction.

¹ While there is not a perfect correlation between the scholarly communication topic areas identified by Brantley et al and those that we identify, there is enough overlap to be clear that we’re talking about the same thing, while both recognizing that scholarly communication activities evolve over time as driven by evolving needs of researchers and scholarly production/dissemination.

METHODS

The survey instrument was coded and delivered in Qualtrics survey software and was open for approximately 5 months, from early February to mid-June of 2018. It consisted of 15 questions, regarding respondents' attitudes toward and experiences with education in scholarly communication, job responsibilities, location within their academic libraries, and thoughts about emerging trends in scholarly communication librarianship. Question formats included multiple choice, multiple response checklists, and free answer/text (such as exact job title and any documented job description). Using a purposive sampling method, participants were recruited through listservs and social media venues targeting academic librarians and others in scholarly communication professions. 211 respondents elected to begin the survey, with 138 persisting to completion.

The working assumptions that informed the development of the survey questions were grounded in our combined 35 years of experience doing scholarly communication work in libraries, as well as conversations at various relevant conferences with numerous colleagues doing similar work. We expected to conclude that there is a significant unmet need, but asked questions that were open to participants having a range of experience.

RESULTS

Job Title, Duties, and Structure

I. Primary Duties

Respondents were provided with a list of areas of work generally associated with scholarly communication in academic libraries and asked to indicate whether those areas of work were part of primary job responsibilities, occasionally encountered, or outside of scope. Of these nine areas (and a tenth "other" free text field), the greatest number of respondents—66% (109)—indicated Open Access as a primary work area, with an additional 31% (49) indicating that they occasionally engage with Open Access. The next most commonly selected topic was "Copyright, Fair Use, and Licensing," with 55% (88 of 159 who answered) selecting this area as "primary" and 44% (70) sometimes engaging. Only one respondent indicated that Copyright was out of scope for their work.

Repositories (52%—83 of the 159 that answered) and Instruction (55%—87 of the 159 who answered) were also identified by more than half of respondents as primary duties. More than a third also indicated that their primary duties included Publishing (35%—56 of the 159 who answered) and Digital Scholarship (34%—55 of the 158 who answered). The least

commonly selected primary duty was “Research Data Management,” with only 15% (24 of 158 who answered) indicating RDM as a primary responsibility, balanced by 34% (54 of 158) who indicated that it was out of scope. It should be noted that an “out of scope” indication refers to a particular respondent’s job duties, and not that the respondent necessarily feels that research data management falls outside of scholarly communication work generally.

A small group—22, or roughly 14%—of respondents also indicated “other” responsibilities. Significantly, of those that indicated that they had other duties, the overwhelming majority (72%) indicated that those duties were a “primary” part of their job. These respondents described a diverse set of “other” duties from GIS and eScience/Reproducibility to administrative duties and “keeping the boat afloat.”

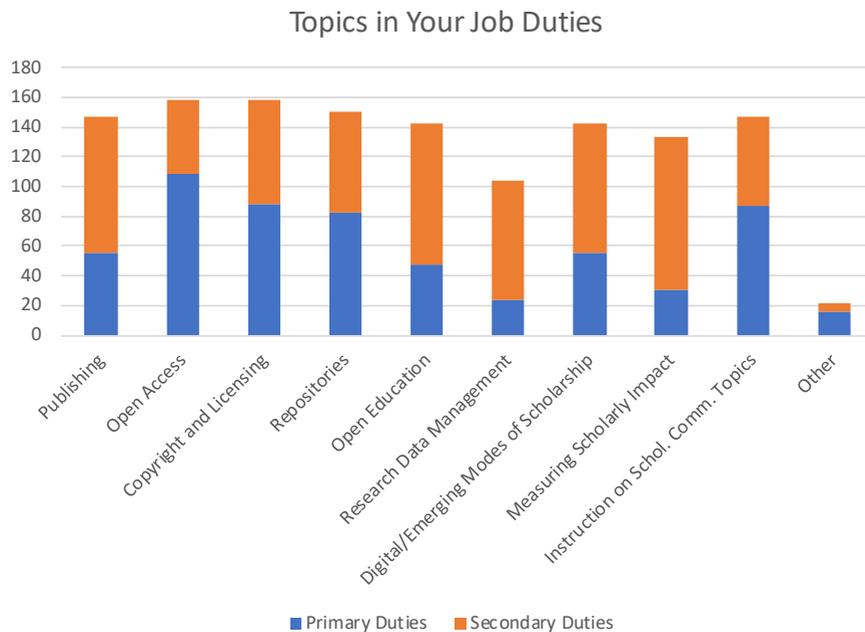


Figure 1. “Job Duties”

II. Occasional Duties

Respondents indicated their occasional duties in a way that dovetailed with their primary duties. Topics like Open Education (61%—96 of the 158 who responded), Measuring Scholarly Impact (65%—103 of the 158 who responded), and Research Data Management (51%—80 of 158 who responded) that were listed by only a few practitioners as a primary duty emerged as areas where expertise is still needed, but on an occasional basis.

III. Outside the Scope

Research Data Management stood out as the topic that a substantial number of respondents (34%–54 of 158) indicated was out of the scope of their assigned duties. Measuring Scholarly Impact (15%–24 of 158), Open Educational Resources (9.5%–15 of 158), and Digital Scholarship (9.5%–15 of 158) were the only other topics identified as out of scope by at least 10% of respondents.

IV. Organizational Structure

A substantial number of respondents (47%–73 of 155) indicated that they were parts of teams working on scholarly communication. Additionally, 16% (25 of 155) had management responsibility for a team. Thirty-one percent of the respondents (48 of 155) indicated that others at their organization had some responsibility for scholarly communication work, but not as their primary role. Only 6% (9 of 155) indicated that they were the only person at their institution with scholarly communication responsibilities.

In addition to you, are there other people at your institution whose responsibility is to frequently deal with scholarly communication?

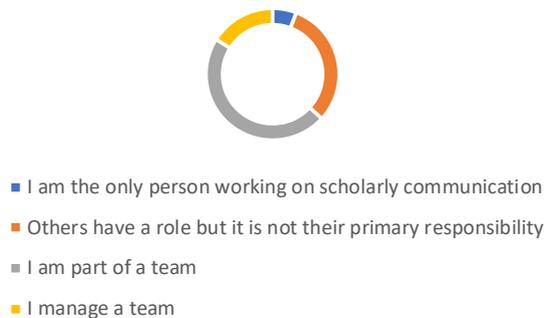


Figure 2. “Organizational Structure”

Education

Asked to list all degrees held, a solid majority of respondents reported holding an MLIS/MIS degree (80%–126 of 158 who answered), with approximately 1 in 3 (32%–50 of 158)

possessing other MA/MS degrees.² In addition, a small minority of respondents hold PhD (12%—19 of 158) or JD (11%—18 of 158) degrees. An additional 12% (19 of 158) held some other form of degree, with professional degrees like Master of Laws (LLM) and Master of Fine Arts (MFA) most commonly listed.³

Respondents indicated a wide range of years since graduation, ranging from 0 to 25+ years (mean of 12.4 years), but there was a shared experience among most (77%—122 of 158) that no course on scholarly communication was offered during their graduate education. Only 3% (6 of 158) indicated that a dedicated course was available and only 12% (19 of 158) indicated that scholarly communication was addressed in other courses. Due to the difficulty of assessing the full breadth of LIS curricula as addressed above, it is possible scholarly communication topics are addressed in courses under other titles, but our data suggest that is not the experience of respondents: less than 10% (19 of 211) reported coverage of scholarly communication topics in other courses. Just under 7% (11 of 158) relied on experience outside of the classroom, such as an assistantship or work study, during their LIS program.

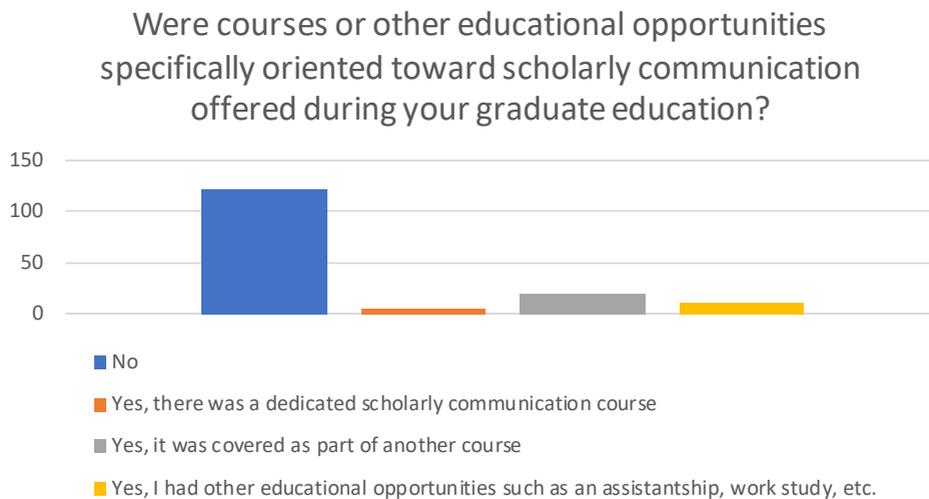


Figure 3. “Scholarly Communication Topics in the LIS Program”

²Four of the fifty responses indicating possession of an MA/MS other than library science listed library science or similar degrees (“MA Library & Information Science,” “Library Science,” “Information Science,” and “Information and Library Science”).

³Three of the nineteen responses provided in response to “Other (please list)” listed library science or similar degrees (“MLIS in progress,” “MLS,” and “BA+MLIS in progress”). Adjusting for this and footnote 2 above, 133 of 158 respondents to this question possess or are pursuing some form of library degree, increasing the percentage slightly to 84% of the number of respondents.

Copyright, Fair Use, and Licensing (12% –19 of 154) was the only suggested topic that more than one in ten felt “very well prepared” to address, and even that topic was identified by the majority (53%–83 of 154) of responding practitioners as one for which they were “not very well prepared.” An even larger percentage (66%–102 of 153) indicated they were not very well prepared to discuss Open Access, and more than 70% indicated they were not very well prepared for every other topic on the list.

Continuing Education

In order to address the above outlined scholarly communication topic gaps in their LIS education, respondents reported recourse to a variety of sources. While scholarly communication-related conferences and staying abreast of published relevant articles and book chapters were frequently cited, the most common method was informal—following scholarly communication experts on social media and email lists such as the ACRL Scholarly Communication Discussion List. Fewer than 10% of participants also indicated that they were pursuing additional education through a formal degree or certificate.

What types of resources have you used to continue your education?

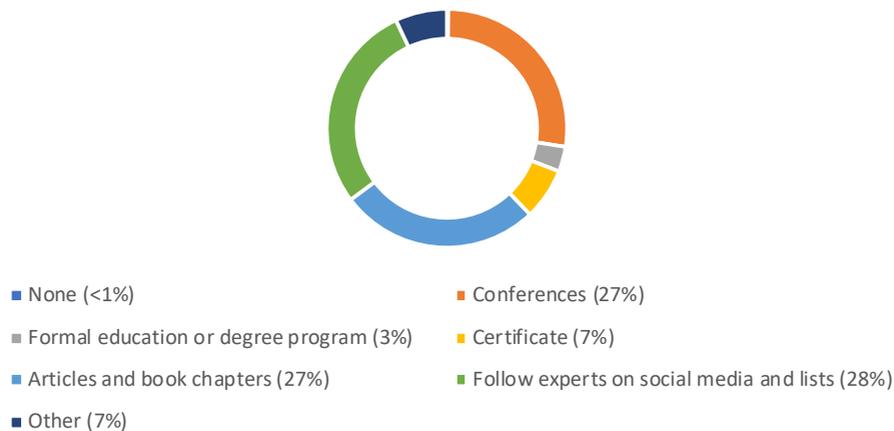


Figure 4. “Continuing Education”

Through a free text “Other” field, respondents offered a wide variety of additional approaches to continuing education, including committee work, online education, cultivating mentors, and informal discussions with colleagues. When asked what kind of resources they would prefer to consume in the future, respondents selected a similarly diverse set of practices and approaches from a multiple response checklist. Professional

reading in journals, conference workshops, and informal discussions and networking led the pack, with blog posts and webinars not far behind.

Emerging Trends

Finally, practitioners were prompted to identify emerging trends in scholarly communication in the coming years. The areas most often identified as important were research data, open education, alternative publishing models, and repositories (next generation, evolution of, better ways to support).

Job Titles

Unsurprisingly, a majority of respondent job titles contain words and/or phrases overlapping with the list of topics that we identified as scholarly communication topics. However, a significant minority of respondents' titles don't include those words or phrases, or in some cases those phrases are combined with other areas such as collections, instruction, user services, and various disciplinary liaisons, demonstrating that the intersections of scholarly communication with other areas of academic librarianship are both widespread and various, or even core to many areas of librarianship. Titles also indicate a span of rank of individuals who self-selected to take our survey, from so-called paraprofessional and faculty positions (specialist, coordinator, librarian) to middle management (director, head) and upper administrative leadership positions (dean, assistant or associate dean, assistant or associate university librarian). Job titles alone suggest the importance of scholarly communication to our libraries, both horizontally as well as vertically.

DISCUSSION

As outlined above, the majority of our scholarly communication practitioner respondents work in libraries, and a solid majority (80%) have some form of library graduate degree. They work under a wide variety of job titles and position descriptions. This variety suggests several interesting conclusions. First, it further affirms Thomas' (2013) observation that scholarly communication work is a moving target, evidencing/displaying a high degree of dynamism. This is not a claim to exceptionalism, but a recognition that while scholarly communication is core per Finlay, Tsou, & Sugimoto (2015), it is still in the process of self-definition rather than a strictly static and well-defined set of practices. Given the dynamic and rapidly evolving nature of the scholarly communication landscape, it is perhaps unsurprising that LIS faculty are challenged to keep current on topics such as Open Access, possibly exacerbating their hesitancy to include such topics in their curricula. Our data on competencies also align with Kingsley and Sewell's 2017 findings from a survey of UK-

based scholarly communication practitioners. As a self-conscious response to a dynamic field, scholarly communication librarianship must be correspondingly dynamic.

The academic library field, of course, bears significant responsibility for maintaining and expanding professional development in this and many other areas through symposia, workshops, preconferences, and so on. Practitioners in the field are often in the best position to provide flexible support for evolving skill and knowledge needs. This activity has been and will continue to be aggressively supported in a wide variety of forms, including efforts to define core competencies (NASIG, 2017), create toolkits (ACRL, n.d.) and define elements of curricula (Educopia & LPC, 2018), signaling the community sense of continuing need for collective articulation and documentation of the work of scholarly communication in librarianship.

Recognition that the field bears responsibility does not relieve library schools of the obligation to evolve alongside the fields it populates with new graduates, nor the obligation to provide those graduates with the best preparation possible. It is heartening, and speaks well of their professional education, that LIS professionals are so well-versed in strategies for supplementing their formal education and addressing gaps in their knowledge. There is an exciting opportunity for practitioners to partner with LIS programs, to help bridge the gap between practitioners and those who prepare them, and to mutually support new librarians in the process. Our primary stakeholder groups (library schools, library students, and librarians) are ultimately inseparable, even if there has grown a distance between us. Given the intensity and length of time that practicing academic librarians have been providing and pursuing scholarly communication professional development opportunities and growth, it is evident that the field alone is insufficient to address evolving needs. Leaving responsibility to the field alone entails significant opportunity cost. Yes; we manage at various levels of success. But without raising awareness and knowledge at the source of new professionals (LIS programs), field-based professional development opportunities have and will skew towards the best resourced institutions (R1s) and reinforce power and privilege among those who already possess it, as the authors have seen—and benefitted from—first hand.

Failure to respond to these developments may have consequences. It is no surprise that a patchwork of some good and some not so good efforts and results have emerged, or that people working on scholarly communication initiatives may feel isolated, frustrated, or otherwise scuttled (Salo, 2013b). Additionally, as Finlay and Bull note, “Any program training new professionals to enter a field, which ignores a core competency of that profession, might be risking their own relevancy,” (2017). Of course, library schools struggle under the weight of their own limitations and competing pressures, too. Enrollment, the need to train for all librarianship (including fields other than academic libraries), and accreditation

standards may constrain the agility and adaptability of LIS curricula. While real and not insignificant, these barriers are surmountable. Library schools already manage to teach to all areas of librarianship alongside narrower curricular offerings. Students will enroll in growth areas if they are made aware of employment potential. See Hollister's 2017 finding that students surveyed "indicated a significant interest in SC subject matter and high degrees of topical relevance to their educational and career desires."

As the expansion of scholarly communication throughout our institutions might suggest, scholarly communication is a team sport. As discussed above, only 6% of respondents reported being the only person working on scholarly communication issues. Sixty-three percent indicated that they either manage a scholarly communication team (16% - 25 of 155 respondents) or are part of that team (47%, 73 of 155 respondents). Another 31% (48) suggested that their colleagues have some role in scholarly communication, but that it is not their primary responsibility. Our hope in pushing for greater scholarly communication topic instruction in LIS programs is that new peers come into the profession better-prepared to participate.

CONCLUSION

Despite the growth of scholarly communication as a library field and in terms of the number of people engaged in its support, it's very clear that respondents do not feel they were prepared by their education. Of the 509 people that completed Kingsley & Sewell's 2017 survey, 71% held or were working toward post-graduate degrees in LIS education. Twenty-one percent of their respondents held "a library and information science qualification at a level other than postgraduate, with the majority of being at bachelor level." In keeping with our findings, of that latter group, "only 17% felt that their studies equipped them with appropriate knowledge of scholarly communication."

This study is further evidence supporting the assertion that as academic libraries and academic library work has increasingly recognized the importance of scholarly communication topics, library school curricula have not developed correspondingly. To the extent that scholarly communication practitioners obtain degrees other than MLIS or equivalent, more support is needed for those programs as well. Respondents to this survey indicated a low level of formal pedagogy on scholarly communication topics, both in terms of dedicated courses as well as distributed across curricula through intersections with other academic library areas, of which there are many. As such, it should come as no surprise that most practitioners felt they were not well-prepared for any of the scholarly communication topics listed in this survey. This comes at a significant opportunity cost, and suggests that librarians in these roles may need to devote considerable resources to catching up on the job, even

as concern about “burnout” grows and there are calls for “slow scholarship” (Ettarh, 2018; Mountz, 2015). Practitioners also labor under significant pressures and restrictions.

A well-informed and intentioned reader might point out that scholarly communication work in libraries has expanded and intensified despite the lack of education. A thriving field, in fact, exists. Perhaps the lack of LIS instruction has not been a block to the growth of the field up to this point, but our experience suggests that it has been a barrier of variable height depending on the power and privilege of those navigating it. Scholarly communication is central to the functioning of academic libraries. We would be hard-pressed to name a single significant academic library function or role that does not intersect with the topics we have identified as those of scholarly communication. We therefore believe that it is time to treat scholarly communication with the instructional attention it deserves. We are not arguing that everyone should be a scholarly communication librarian, but that scholarly communication is important enough that all emerging academic librarians require basic literacy, if not fluency, in at least some of the topics, regardless of their areas of work if we hope to fulfill our collective mission.

Anyone familiar with conversations about curricular development in LIS education will be aware that there is a longstanding tension between “education” and “training”—preparing for a career that will entail lifelong learning vs. skills needed to be successful on the market, and on the job. Certainly, there is a limit to what can be accomplished in a 36-40 hour master’s program. As a consequence, some faculty may resist what they see as “special pleading” on the part of one or another segment of the profession.

We understand that LIS programs cannot be all things to all people. At the same time, we argue there is a significant opportunity space here for those programs that do train academic and research librarians, and those programs seeking to develop in this direction. Programs preparing academic librarians must be aware of the shifting and larger context of academic librarianship and of expectations about scholarly communication librarianship. The ALA Standards for Accreditation of Master’s Programs in Library and Information Studies includes Standard II.4: “Design of general and specialized curricula takes into account the statements of knowledge and competencies developed by relevant professional organizations.” Moreover, the ALA Standards acknowledge that schools may have “individual programmatic differences”, but also “encourage programs to take an active role in and concern for future developments and growth in the field.”

There is also a significant opportunity for meaningful collaboration between practitioners and educators in scoping this developing area of practice and articulating mutual responsibility for education and training. The present authors have collectively engaged in more

than 30 years of practice in the work of libraries and scholarly communication and a decade as LIS educators. One of the authors currently directs a leading library and information science masters program. Three years of investigation, conversation, and other forms of collaboration have realized some of the rich possibilities of sharing our perspectives and expertise, possibilities that we hope to inspire other educators and practitioners to pursue.

NEXT STEPS

The results of this study complement a growing body of literature and practice that compels us to consider interventions that address the gaps between LIS instruction and the needs of academic librarians. As we have argued above, all academic librarians are in some way engaged in scholarly communication.

In order to kickstart the necessary expansion of scholarly communication topics in LIS instruction and further support the existing efforts of academic librarianship, we are working on three fronts:⁴

First, we have piloted workshops that encourage practitioners to create and openly license discrete learning objects that share knowledge, skills, and practices that may be used in formal LIS instruction environments as well as in field-based continued professional development. As a community of practice, we are collectively sitting on a wealth of such content and could be more consistent in openly-licensing it and making it available and discoverable.

Second, the creation of an openly-licensed and introductory-level textbook that may serve as a cornerstone of formal LIS scholarly communication topic instruction and onboarding and orientation for new academic librarians, providing overviews of relevant topic areas, theories and practices, and directed further reading and engagement.

Third, the creation of a digital environment to host open scholarly communication teaching and learning content, which we are preliminarily calling the Scholarly Communication Notebook (SCN), loosely based on the Open Pedagogy Notebook by DeRosa and Jhangiani. The SCN will serve as a clearinghouse where practitioners, instructors, AND students will be able to find open learning content designed to expand knowledge and expertise in scholarly communication topics, and to actively contribute to the corpus of content as well.

⁴ For more information on these projects, see <https://lisoer.wordpress.ncsu.edu/>. Workshops materials from ACRL 2019 & Charleston 2018 are available under the Scholarship tab, Presentations. Information on the open textbook is under the Book tab. The SCN is described under the Notebook tab.

We hope such an environment may be a hub connecting these stakeholders together as a community of learners, increase the diversity of perspectives, experience, and backgrounds in LIS instruction and scholarly communication practitioners, and evolve and grow along with the fast-moving target of scholarly communication, thereby ensuring the continued relevance of content.

In combination, we hope these efforts spur more instruction in this vibrant and growing area, not for its own end, but to better prepare early career librarians for the changing landscape they will encounter as they move from the classroom into the field. Additionally, we recognize that the same resources that may result in more formal instruction as described above may similarly benefit the necessary continuing education and professional development of librarians looking to reskill, whether through individual study, institutional initiatives, or field-based programs.

FUTURE RESEARCH

Myriad directions for future research to fill gaps left in this and other existing literature remain. An exhaustive, granular, and rigorous examination of LIS curricular offerings, including aspects of it that are hidden or less obvious, and if and how scholarly communication is embedded in other courses would be very useful for better understanding the presence or lack thereof of scholarly communication topics in LIS programs. A systematic review and examination of the ways employing institutions have gone about supporting the growth of scholarly communication skills and knowledge, as well as assessment of those programs would help refine existing efforts and identify gaps in continuing professional development. It would be interesting to examine when scholarly communication topics and skills began appearing in job adverts and how that relates to calls for more LIS curricular coverage, such as ours. Perhaps most crucially, what are the characteristics and personality traits of scholarly communication practitioners, and what would a more complete review of their education and coursework reveal about their aptitude and preparation for scholarly communication work?

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REFERENCES

Abels, E.G., Howarth, L.C., & Smith, L.C. (2016). Envisioning Our Information Future and How to Educate for it. *Journal of Education for Library & Information Science*, 57(2), 84–93. <https://doi.org/10.3138/jelis.57.2.84>

ACRL (2003). Principles and strategies for the reform of scholarly communication. Available at: <http://www.ala.org/acrl/publications/whitepapers/principlesstrategies>

ACRL. (n.d.). Scholarly communication toolkit. Association of College & Research Libraries. Retrieved from <https://acrl.libguides.com/scholcomm/toolkit>

ALA. (2015). Standards for Accreditation of Master's Programs in Library and Information Studies. Adopted February 2, 2015 by Committee on Accreditation of the American Library Association. Retrieved from http://www.ala.org/educationcareers/sites/ala.org.educationcareers/files/content/standards/Standards_2015_adopted_02-02-15.pdf

Brantley, S., Bruns, T.A., & Duffin K.I. (2017). Librarians in transition: Scholarly communication support as a developing core competency. *Journal of Electronic Resources Librarianship*, 29(3), 137–150. <https://doi.org/10.1080/1941126X.2017.1340718>

Educopia & LPC. (2018). Library Publishing Curriculum. The Educopia Institute and Library Publishing Coalition. Retrieved from <https://educopia.org/library-publishing-curriculum/>

Finlay, C. & Bull, J. (2017). Scholarly Communication Education in ALA-Accredited Library and Information Science Programs: A Brief Communication of Results. In *ULA Notes* 29(2), 17–20. <http://hdl.handle.net/2022/23330>

Finlay, C., Tsou, A. & Sugimoto, C. (2015). Scholarly communication as a core competency: prevalence, activities, and concepts of scholarly communication librarianship as shown through job advertisements. *Journal of Librarianship and Scholarly Communication*, 3(1), p.eP1236. <https://doi.org/10.7710/2162-3309.1236>

Ettarh, F. (2018). Vocational awe and librarianship: The lies we tell ourselves. *In the Library with the Lead Pipe*. Retrieved from <http://www.inthelibrarywiththeleadpipe.org/2018/vocational-awe/>

Hollister, C. (2017). Perceptions of scholarly communication among library and information studies students. *Journal of Librarianship and Scholarly Communication*, 5(1), p.eP2180. <http://doi.org/10.7710/2162-3309.2180>

Kingsley, D. (2017, August 15). Planning scholarly communication training in the UK [blog post]. Retrieved from <https://unlockingresearch-blog.lib.cam.ac.uk/?p=1517>

Mountz, A., et al. (2015). For slow scholarship: A feminist politics of resistance through collective action in the neoliberal university. *ACME: An International Journal for Critical Geographies* 14(4), 1235–59. <https://acme-journal.org/index.php/acme/article/view/1058>

NASIG. (2017). NASIG core competencies for scholarly communication librarians. NASIG. Retrieved from https://s3.amazonaws.com/amo_hub_content/Association92/files/CompetenciesforScholCommLibrarians_final_ver_2017-08-12.pdf

Raju, J. (2019). Embracing new trends in scholarly communication: From competency requirements in the workplace to LIS curriculum presence. *Journal of Librarianship and Scholarly Communication*, 7(1). <https://doi.org/10.7710/2162-3309.2291>

Sands, A.E., Toro, S., DeVoe, T., Fuller, S., & Wolff-Eisenberg, C. (2018). Positioning library and information science graduate programs for 21st century practice. Washington, D.C.: Institute of Museum and Library Services. <https://www.imls.gov/publications/positioning-library-and-information-science-graduate-programs-21st-century-practice>

Salo, D. (2013a, July 25). Going where the jobs are: For the future of library education, watch today's "topics" courses. *Library Journal*, <https://www.libraryjournal.com/?detailStory=going-where-the-jobs-are-peer-to-peer-review>

Salo, D. (2013b). How to scuttle a scholarly communication initiative. *Journal of Librarianship and Scholarly Communication*, 1(4), p.eP1075. <https://doi.org/10.7710/2162-3309.1075>

Sewell, C., & Kingsley, D. (2017). Developing the 21st century academic librarian: The research support ambassador programme. *New Review of Academic Librarianship*, 23:2–3, 148–158. <https://doi.org/10.1080/13614533.2017.1323766>

Thomas, J. (2013). The structure of scholarly communications within academic libraries. *Serials Review*, 39(3), 167–171. <https://doi.org/10.1080/00987913.2013.10766387>

Xia, J., & Li, Y. (2015). Changed responsibilities in scholarly communication services: An analysis of job descriptions. *Serials Review*, 41(1), 15–22. <https://doi.org/10.1080/00987913.2014.998980>

**APPENDIX A:
Survey Questions**

1. In what type of institution do you currently work?

- Library
- Nonprofit (SPARC, OTN, ARL)
- Publishing
- Other (please list)

2. What is your job title?

3. We are interested in learning more about the range of job duties in scholarly communication job descriptions. If you are willing or able to provide a link to your job description or upload the text, please do so here. If unwilling or unable, please skip to the next question.

4. Are the following topics included in your primary job duties, topics you occasionally engage with, or mostly outside the scope of your work? (Mark as “Primary job duty,” “Occasionally engage with,” or “Outside the scope.”)

- Publishing
- Open access
- Copyright, fair use, licensing
- Repositories
- Open educational resources
- Research data management
- Digital scholarship/emerging modes of scholarship
- Measuring scholarly impact
- Instruction on scholarly communication topics
- Other (please list)

5. In addition to you, are there other people at your institution whose responsibility is to frequently deal with scholarly communication?

- No, I am the only person working on scholarly communication issues

- No, others have some role in scholarly communication but it is not their primary responsibility
- Yes, I am part of a team
- Yes, I have management responsibility for a team

6. What type(s) of degree do you have? (check all that apply)

- MLIS/MIS
- MA/MS (other, please list)
- PhD
- JD
- Other (please list)

7. How many years has it been since you've completed your most recent degree?

8. Were courses or other educational opportunities specifically oriented toward scholarly communication offered during your graduate education?

- No
- Yes, there was a dedicated scholarly communication course.
- Yes, it was covered as part of another course.
- Yes, I had other educational opportunities such as an assistantship, work study, etc.

9. How well did your formal education prepare you to support the following types of scholarly communication work? (Mark "Very well," "Moderately well," or "Not very well").

- Publishing
- Open access
- Copyright, fair use, licensing
- Repositories
- Open educational resources
- Research data management

- Digital scholarship/emerging modes of scholarship
- Measuring scholarly impact
- Instruction on scholarly communication topics
- Other (please list)

10. What types of resources have you used to continue your scholarly communication education since your last formal degree? (check all that apply)

- None
- I have attended conferences related to scholarly communication.
- I have pursued or am currently pursuing formal continuing education or additional degree programs.
- I earned a certificate or am currently pursuing in a specific area.
- I regularly read scholarly communication articles and book chapters.
- I follow scholarly communication experts online via social media, on scholarly communication lists, etc.
- Other: (please list)

11. Of the types resources listed above in Q10, what specific examples of these types of resources (conferences, workshops, etc.) do you find most useful?

12. In the future, how would you prefer to learn about topics in scholarly communication? (Check all that apply.)

- Formal course
- Webinar
- Conference workshop
- Professional reading in a journal
- Professional reading in a book
- Blog posts
- Social media, i.e., Facebook, Twitter, etc.
- Informal discussion and networking
- Other (please list)

13. What topics do you see emerging as trends in scholarly communication in the coming years?
14. Do you have anything else to say about your preparation for doing scholarly communication work?
15. If you would be interested in participating in a follow-up interview or participating in a project to develop resources for teaching scholarly communication, please enter your email address below.