A "Silver Lining" for COVID-19: Accelerating Online **Engagement and Future Reach of Information Literacy Instruction**

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ABSTRACT

The COVID-19 pandemic significantly impacted academic library operations including delivery of information literacy instruction (ILI). In addition to transitioning ILI services online, librarians faced many challenges in evolving pedagogical practices, experimenting with and implementing new technologies, and organizing digital ILI programs including managing changes in audience and volume. This paper explores ILI data from a two-part longitudinal survey conducted with 300 academic librarians and 28 semi-structured interviews with reference and user services leaders of academic libraries to understand how libraries transitioned ILI services and the implications for librarian education. Results suggest that this was a significant and challenging shift and qualitative analysis identifies three major themes: New Services, Organization and Adaptation to ILI Delivery Platforms, and ILI Volume Changes. The changes brought on by the shift to online ILI will continue to influence librarianship into the future and the discussion suggests areas of development for curricula in library education.

ALISE RESEARCH TAXONOMY TOPICS

Education, Information Literacy, Curriculum, Online Learning, Academic Libraries

AUTHOR KEYWORDS

Information literacy instruction, online teaching, digital pedagogy, COVID-19

INTRODUCTION

In March 2020, the COVID-19 pandemic forced academic institutions of all shapes and sizes to migrate services online. Information literacy instruction (ILI) services had to quickly adapt to this change with instruction faculty and staff scrambling to construct innovative synchronous and asynchronous learning models or modify existing practices. This paper reports results regarding ILI from a large-scale research study of academic librarians who transitioned reference and user services during the COVID-19 pandemic. Through two longitudinal surveys and interviews with librarians responsible for adapting their institution's response to physical service closures and reductions, the research team sought to understand how academic librarians shifted, continued, and reengineered user services as institutions rapidly transitioned to remote learning. While the project's primarily focus was on live virtual reference chat services, the research team collected information about a broad range of service responses. Many participants provided detailed descriptions about how their library pivoted to adapt ILI practices to meet increased demand for online instruction during COVID-19.

Shifts in ILI practice were among the most dramatic transformations in academic libraries, as the pandemic swept through the U.S. and around the globe beginning in spring of 2020. While some participant's libraries already offered online ILI, these were not well-used prior to the pandemic. Many institutions quickly moved their entire instructional programs to virtual platforms such as Zoom, Webex, and Microsoft Teams, accelerating the adoption of ILI asynchronous learning strategies, such as prerecorded tutorials, research guides, and vendor-hosted information literacy tutorials.

Though many librarians were already involved in digital pedagogy and online course creation, those with primarily in-person ILI experience rushed to fill gaps in knowledge and practice under emergency conditions, and, for some, with limited information technology support during lockdown. This pandemic-driven transformation has significant implications for library education. As ILI is an essential service, educating library students to develop and participate in these services increasingly means preparing them for a hybrid instructional world. This paper reports findings focused on ILI from 300 responses over two longitudinal surveys and 28 interviews with academic librarians to help understand post-pandemic implications for pedagogy in an increasingly digital instructional environment.

LITERATURE REVIEW

As institutions moved all classes online at the onset of the COVID-19 pandemic, there was an immediate shift to online content delivery in the short term and an ongoing need to cultivate agility and ensure quality. One of the significant challenges in moving online was a gap in instructors' pedagogical content knowledge as instruction moved from emergency measures towards long-term online teaching (Hodges et al., 2020). Pedagogical content knowledge in transitioning to the digital environment includes knowledge of learners, educational contexts, and historical grounding in educational philosophies (Shulman, 1987). Rapanta et al. (2020) outline some of the broad challenges in transitioning courses designed for in-person instruction to the digital environment, namely the differences in the roles for instructors, students, content, and technologies in online learning. These differences are not superficial, but structural, and while the situation demanded an immediate transition from in-person to virtual instruction, sustainable online ILI delivery requires a more foundational approach.

Martzoukou (2020) delineates a vision for academic libraries that are actively engaged in digital pedagogy and support for digital instruction, and also highlights the differences between emergency course transitions and developing sustainable digital instruction. The instruction

skills gap in librarian education was explored by Julien and Genuis's (2011) survey of Canadian librarians which found that while many librarians engage in regular and sustained ILI practice, only 39.7% (n=313) had formal instructional education. Most librarians prepared for instruction informally, through experience on the job and engaging independently with the professional literature and professional development. Saunders (2015) addressed this gap in LIS education through a study of syllabi from American Library Association-accredited institutions and found that the majority of institutions only offered one elective instruction-focused course. Of the syllabi reviewed 65% (n=19) included some information about technology integration, but overall were focused on in-class teaching practices, without directly including program administration, organization or outreach.

RESEARCH QUESTIONS

While the initial data collection focused on virtual reference chat, new research questions were developed to investigate how librarians transitioned ILI programs online during institutional closures in the existing data. For this exploration, the following research questions were used:

- 1. How did academic librarians experience the transition of ILI programs to online during the COVID-19 pandemic?
- 2. How can we improve librarian instruction education and preparedness, through exploring implications from the pandemic-driven ILI transition?

METHOD

This paper reports findings from a two-part longitudinal survey conducted with 300 academic librarians and preliminary results from 28 semi-structured interviews with reference and user services leaders of academic libraries. Survey and interview questions explored ILI practice during COVID-19 and librarian observations about user behavior changes in response to service changes. Surveys included multiple-choice and open questions. Phase 1 of the survey was offered via Qualtrics from July 22-August 5, 2020 and focused on the first period of the pandemic from initial closures through summer services. The Phase 2 survey ran from December 1-23, 2020 and collected data about service responses in late summer and fall. Hour-long video interviews with each participant occurred between September and December 2020. Survey participants were recruited through academic library email lists and participation was voluntary. Interviews were recorded using the Zoom or Webex video conferencing software and were transcribed by the authors prior to coding. Interview participants were compensated with a \$30 gift card and survey participants were given the option to take part in a random drawing for one of four \$50 gift cards. Interview participants were recruited via a combination of voluntary responses from a call sent to academic library email lists and purposive recruitment to integrate institutions of different sizes.

The authors analyzed demographic and quantitative data from the survey via Qualtrics and SPSS, and coded qualitative data from the survey's open questions and interviews using the constant comparative method (Charmaz, 2014) and iterative open coding to develop themes and identify illustrative quotations. Coding for the interviews is ongoing and a coding scheme is

being developed and applied to the interview data using NVivo with plans to develop intercoder reliability as data analysis progresses. This paper reports on findings that specifically focus on ILI.

RESULTS

Survey results indicate that 42% (n=126) of participant libraries offered online ILI prior to the pandemic closures, though some participants specifically indicted in the open response section that these services were not well used before March 2020. Online ILI was the most popular service added in response to pandemic-driven institutional closures, with 49.3% (n=48) of respondents indicating that these were added after March 2020. Over time, results from the longitudinal survey indicate that participants became more confident in the virtual ILI they were providing. In Phase 1 of the survey, 22.4% (n=33) of participants listed online ILI as a service change that was going well, and in Phase 2 this increased to 35.9% (n=55). These survey results suggest trends in ILI as a result of the pandemic, while results from analysis of open survey questions and the interviews point to some of the organizational shifts and challenges that academic librarians encountered as instruction moved online.

Three major ILI-related themes were found during qualitative data analysis of both open survey questions and interviews: a) *New Services*, b) *Organization and Adaptation to ILI Delivery Platforms*, and c) *ILI Volume Changes*. Additionally, sub-themes emerged for: *Increased ILI Responsibilities, Training Lag, Outreach and Marketing*, and *Increased Need for Support*. Below these themes are described with illustrative quotations from participants.

Regarding *New Services* and *Organization and Adaptation to ILI Delivery Platforms* themes, respondents indicated that when in-person classes became impossible during the pandemic, they swiftly ramped up synchronous or asynchronous ILI instruction by adding new platforms (e.g., Springshare's LibCal, LibWizard, Webex, Zoom) and relied on LibGuides as an asynchronous delivery method. Librarians conducting ILI struggled to transition content effectively and to keep students engaged throughout the pandemic. Interview participant (IP) 8¹ said that online content takes longer to prepare, and that the LibGuides sometimes do not show up well on the screen. IP 8 explained that they were "doing what we can, that's all we can do," and they were not worried about providing "Oscar awarding performances, but we were fine."

With regard to *ILI Volume Changes*, survey participants reported that initially there was a drop in use of ILI due to classes moving online, eliminating scheduled in-person sessions, and changing usual research assignments to be "a little more pared down" (IP 8). This theme is also related to the sub-theme of *Increased ILI Responsibilities*. When prompted to respond to responsibility changes, survey participant (SP) 192 explained that they experienced a "huge increase in the responsibility for chat and online instruction coverage including building tutorials and modules for our LMS [Learning Management System]." Additionally, SP 226 revealed "I've also taught many more online ILI sessions and workshops" with the increase in ILI responsibilities as services migrated online. ILI and online instruction more broadly also required new content and formats for course materials including streaming media, e-books, and electronic

¹ To protect participant privacy, each survey participant was assigned an SP number in order of receipt and each interview participant was assigned an IP number as interviews were scheduled.

reserves materials. Across the U.S., many instructors new to virtual course delivery sought technical help from the librarians, especially in COVID-19's early days when some university support services were suddenly closed.

Related to the ILI Volume Changes theme, the sub-theme of Outreach and Marketing emerged in interviews and surveys. When sudden shifts were made to online learning platforms, there was a need to get the word out, amid severe disruptions in normal communication channels. Several participants indicated that they embarked on new engagement channels and found that there was a greater need to engage directly with students and instructors in virtual course spaces. As in the survey, some interview participants indicated that instructors cancelled in-person sessions rather than transitioning to online ILI. Interviewees indicated that they planned to reach out directly to instructors that had previously scheduled in-person ILI to market virtual sessions. IP 1 reported that the library has increased outreach for online instruction including building modules in LibWizard. Pre-pandemic, IP 1 described in-library instruction as the primary delivery model. ILI was required in introductory courses, with 317 instruction sessions in the last full year before the pandemic. IP 1 explained that one of the changes has been to migrate all those courses online. One "silver lining" to COVID-19 for IP 1 was a vindication of the efforts libraries have been making towards open educational resources (OER). IP 1 indicated that as a result of COVID-19, now there's a bigger push for online education and greater awareness of the issues around open access for educational content within their institution.

Outreach and Marketing improved during the fall of 2020, IP 8 indicating that "Instructors know that we are willing to zoom into a class if necessary." IP 14 said that instructors were pleased that they could get online ILI, and loved the recordings, as the whole class could attend, but librarians were worried about demand for ILI instruction dropping over time if faculty reused recordings for future semesters.

With the sudden move to virtual services, *Training Lag* was another subtheme for interview and survey participants who reported that it was difficult to translate existing ILI curricula and competencies to the online environment. Participants were also obliged to develop on the spot expertise in the newly ubiquitous video conferencing realm. IP 14 explained:

Librarians who had never taught online had to teach ourselves, so we taught ourselves how to use Webex, [and] worked with each other to understand how screensharing works...we are faculty members, we taught ourselves what to do and we did what we did. Nobody died or screwed up too badly.

Several interviewees discussed efforts in their units to learn new technologies and to develop online content and skills through self-study. While some survey respondents indicated that ILI was offered online prior to the pandemic, insights from the interviews indicate that these efforts were not widespread within institutions. Rolling out virtual ILI as a core service presented many challenges, even for those libraries with pre-existing offerings.

Regarding the *Increased Need for Support* theme, librarians were also deeply engaged in supporting instruction across the university through significant content transitions and new integration strategies to reach often panicked students and novice online instructors via virtual spaces. IP 8 said that in some cases, "Classes turn into group therapy." Additional collegial support was also needed for librarians, staff, and instructors amid increased ambiguity, contingency planning, and health concerns through the months of the pandemic.

DISCUSSION AND IMPLICATIONS FOR LIBRARY EDUCATION

These results indicate that while many academic libraries had some virtual ILI services in place, developing a comprehensive strategy for producing, integrating, and marketing online, ILI was one of the most central efforts during this swift, high-pressured, and dramatic transition. Survey and interview participants agreed that training in digital platforms for ILI delivery was lacking or insufficient prior to the pandemic. This situation created much stress as new systems and practices were being launched on the fly, with little time for a learning curve and no margin for error. The interviewees indicated that these efforts primarily involved self-study, mutual support, trial and error, and ongoing assessment.

Transitioning all instructional programs was a challenge for librarians working independently in remote environments, largely without formal training in managing and administering instructional programs beyond individual ILI. Developing programs that address instructional program management and assessment will be important as librarian instruction education courses continue to evolve in post-pandemic curricula.

This study revealed a learning curve associated with adapting educational practices to the web-based environment which could be addressed through education that goes beyond the basic Information Literacy course to include ILI planning with integrated digital pedagogical practices. Transitioning from emergency ILI strategies to true digital pedagogies presents significant challenges that might also be addressed through hybrid educational strategies in librarian education. While institutions are gradually resuming in-person instruction, the barrier to entry for more robust online instructional programs is much lower than it was before the pandemic. One implication of these results suggests that professors and instructors who previously used onground ILI, having made the shift online, may continue to demand hybrid ILI with asynchronous and synchronous options. Practicing librarians found that their skills needed updating and that library support staff were woefully unprepared to switch to remote work environments, often from home. These findings reveal that crisis planning and management strategies need greater emphasis in master's degree curricula for librarians. Cross-training for nimble pivots is another critical component for library management and leadership education.

LIMITATIONS

Combining surveys and individual interviews ameliorates some limitations of each method by providing triangulated data (Connaway & Radford, 2021). In the Phase 1 survey, smaller organizations and community colleges were more prominently represented. Recruitment for Phase 2 and interviews achieved a better mix of organizational sizes and types. All survey and interview participants were self-selected, so no claims for generalizability can be made. Additionally, participants were able to take both surveys and could also volunteer to be interviewed, so some voices may have been amplified.

CONCLUSION

Results from this research indicate that the pandemic's impact on academic libraries and instruction programs was instantaneously transformational. Many lessons were learned, some the

hard way, with some false starts or flops, but also with many successes. While there was a significant degree of difficulty in transitioning in-person ILI programs to the digital environment, there was also clear evidence of innovation, tenacity, creativity, and resilience in academic librarians. With updated curricula in library education, the next generation of professionals will be well-prepared to be agile in the face of unforeseen, but inevitable, crises to come. How many of the new ILI service innovations will continue in the long-tail of COVID-19 recovery remains to be seen.

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