Endnotes

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New Members Round Table

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Contents

From the Editors

After a three-year hiatus, *Endnotes* is back! Last year when the 2020-21 *Endnotes* committee officially formed, it had one primary goal in mind: revitalize *Endnotes*. Thus, the committee met routinely to brainstorm strategies to realize this goal and made several changes. First, we widened the scope of the journal to include any topic of relevance to librarians as long as articles were authored by LIS students or early-career professionals. We also made the decision to drop the NMRT membership requirement to publish in *Endnotes*, which effectively removed a financial barrier. We also launched a vigorous marketing strategy to ensure that LIS students and early-career professionals saw our call for papers. In the end, our strategies worked! We received more than twenty manuscript submissions and dozens more proposals. Ultimately, we selected three of these manuscripts to publish. In this issue of *Endnotes,* you will learn about that state of the field of mindfulness in librarianship, approaches to conducting oral histories, and implementing virtual outreach methods in an academic library.

In addition to revitalizing *Endnotes*, this year's committee sought to provide a safe and welcoming space for LIS students and early-career professionals to learn more about the scholarly publishing process. We made it a priority to work closely with our authors to help them mold their articles into the quality work you will find in this issue. Thus, we would like to take a moment to thank all of our committee members for their hard work and dedication to bringing *Endnotes* back to life. We certainly would not have been successful without their efforts. In addition, we are also indebted to the NMRT board members, who allowed us to run with our ideas.

Carrie P. Mastley & Kim Looby, co-editors

Editorial Policy

Endnotes (ISSN: 2159-0591) is the scholarly publication of the ALA New Members Round Table. The purpose of *Endnotes* is to provide support for LIS students and librarians who want or need to publish scholarly articles and to publish peer-reviewed research directed at new librarians. The *Endnotes* Committee oversees the publication of a peer-reviewed e-journal, *Endnotes: The Journal of the New Members Round Table.* The journal will be published on the ALA Web site and indexed in Library Literature. Each edition of the journal will contain at minimum two scholarly articles written by LIS students or early-career professional and/or scholarly book reviews of titles relevant to students and new librarians. The journal follows a policy of double-blind refereeing of articles in advance of publication.

For more information, please visit https://journals.ala.org/index.php/endnotes

A Bibliometric Study of LIS Literature Trends of Mindfulness within Libraries

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Abstract

This study examined the publication patterns of Library and Information Science literature related to mindfulness between 2010 and 2020. Questions answered include the number of articles published each year on this topic, the journals publishing these articles, the number of authors publishing and their countries of origin, and the specific subject of the articles. The results of this study show whether there has been a growth or decline of interest in the publication of journal articles related to this topic, how this topic has evolved, and where the interest is growing.

Article Type: Research paper

Introduction

Today's world of information is closer to the public and can be accessed faster than ever. For some, the answers to many questions are just a click away. As a result, librarians may feel pressure to rush the information seeking and reference interaction process to satiate the instant gratification needs of many patrons. Therefore, an emphasis on mindfulness – or purposeful thinking – in librarianship is crucial to counterbalance this phenomenon. According to Smalley and Winston (2010), "Mindfulness is the art of observing your physical, emotional, and mental experiences with deliberate and open curious attention" (p.11). In many areas of librarianship, professionals must focus on listening and responding to patrons' needs without judgment and with genuine interest. For these reasons, it seems that the practice of mindfulness may be a useful aid for the workplace and patrons' well-being. The following examples illustrate why some libraries may encourage the use of mindfulness in day-to-day practice.

First, Mastel and Innes (2013), outreach and public services librarians, argue that "mindful techniques [such] as breathing, meditation, and the practice of yoga and Tai Chi are powerful ways that we as librarians can begin to incorporate mindfulness in our daily lives, enabling us to provide library services with a spirit of engagement, joy, and fulfillment" (p.1). The authors found that these techniques provide specific opportunities for self-reflection when interacting with others and that engagement and reflection can foster a present and helpful relationship while providing community service.

Furthermore, Martin (2018), Associate Dean of Walker Library at Middle Tennessee State University, states, "[T]hree overarching benefits of living in the present, self-awareness and self-

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management, and mental replenishment help library leaders function better at their jobs and reduce stress” (p.1). Once his library began practicing these mindfulness strategies, he noticed that librarians and staff were better able to navigate stress, frustrations, and negativity. For example, by measuring breath, focus is brought back to the present instead of allowing overwhelming thoughts and emotions influence responses. As a result, Martin witnessed more measured and thoughtful interactions.

Finally, honing one’s mindfulness skills seems more important than ever now, especially due to the impact of COVID-19. According to a survey conducted by the Public Library Association, COVID-19 has had an overwhelming toil on librarians and library staff. The survey listed burnout as the most common experience shared in the responses (as cited in Goek, 2021, para. 1). Further, Loren Mc Clain, a certified instructor for the National Council for Behavioral Health and Mental Health First Aid USA, explains, “Social distancing has changed life as we know it…. It's natural and understandable that it will take a toll on mental health” (Freeman et al., 2020, p. 23).

Overall, it seems that some librarians have found mindfulness to be a useful strategy in coping with work-related stress. However, it is not apparent what attention has been given to this subject in current library scholarship. Thus, the current study is interested in exploring current trends in library and information science (LIS) literature to see what extent mindfulness has been studied in relation to the field.

Purpose Statement

The purpose of this bibliometric study was to look at the current trends concerning mindfulness, which have evolved over the last decade, within the library setting. While organizations like the American Library Association (2021) provide published articles on mindfulness, this study differs in that it identifies patterns surrounding mindfulness discussions and measures how the topic has progressed or evolved within the LIS community.

Problem Statement

While there is a wide range of publications about mindfulness in librarianship, there is a lack of academic studies that investigate the publication patterns of papers written on the topic. To address this gap in scholarship, this study investigates the number of articles published on this topic between 2010-2020, the journals publishing these articles, the number of authors publishing on the topic, the authors’ countries of origin, and the included articles’ subject matter. From the data garnered, the results show areas where interest in publishing on this topic has grown or declined as well as how coverage of this topic has evolved.

Research Questions

R1. How many articles have been published per year about mindfulness in libraries from 2010-2020?
R2. In which journals are the articles in this study published?
R3. How many authors have published articles about mindfulness in libraries, and where are their countries of origin?
R4. What is the subject coverage of the published articles related to mindfulness in libraries?

Literature Review

Mindfulness Literature

Even though there is a lack of research on trends in mindfulness and LIS research, there is evidence within the literature that there is a trend to be studied. Previous literature has indicated a growth in literature on mindfulness as it relates to multiple disciplines (Valerio, 2016), academic libraries (Artman, 2017), and technology (Martin, 2018). Furthermore, some researchers even postulate that literature on mindfulness and LIS will continue to grow (Mastel & Innes, 2013). Even so, a comprehensive examination of the overall growth of research on mindfulness in the LIS field could not be found in the current literature.

For instance, Valerio (2016) found a substantial increase in academic effort regarding mindfulness crossing several disciplines. He utilized a bibliometric analysis to evaluate the extent that mindfulness literature exists beyond strict Buddhist and psychotherapeutic contexts. Valerio found a substantial increase in an academic effort towards mindfulness crossing several disciplines. In addition, Artman (2017) examined mindfulness in academic libraries and saw a rise in interest on the subject and emphasized the “positive transformative potential” that being present and aware can enable (para. 1). Martin (2018) looked at other transformative potentials in specific mindfulness practices and resources including apps. His work showcased the continued interest and growth of mindfulness with the help of new technologies.

In 2013, Mastel and Innes argued that mindfulness practice helps in producing a balanced, healthy state. They discuss how rapid technological change, economic uncertainty, ever-evolving models of library services, and increasing demands exact a toll on librarians. More recently, Soares et al.’s (2020) research saw a growth in interest in mindfulness, the need for library support, and how it related to the changing times. Their study focused on literature subject themes within the psychology field in the past fifty years. The results showed that the publications on meditation and mindfulness presented the most prominent growth area for all psychotherapies.

Similar Research Methodology

In terms of bibliometric studies conducted on libraries and mindfulness, the author could find none using similar methods. Instead, bibliometric studies on other subjects were sought for reference. For example, Raj and Dominic (2013) studied and evaluated management subject journals in terms of content and coverage, growth rate and areas of research concentration in articles, the year and length distribution of publication, year distribution of Annual Research output compared to research papers, pattern through years of department distribution of publication, year, continent, and country, concentration of research, and year, subject distribution. In addition, Parks (2015) created a bibliometric analysis of LIS literature relating to academic law librarianship. Collected data included publication year, author name, author occupation, journal name, the title of the article, and leading subject terms of the article. Although these studies were written on different subjects, the current study follows similar steps, such as recording the publication year, author’s country, and leading subject coverage. Thus, the author will fill a gap in scholarship by applying these bibliometric methodologies to scholarship written on mindfulness in libraries to understand better the scholarly interest on this subject.

Methodology

Data Collection and Analysis

The author, a LIS student at the University of Southern Mississippi at the time of this study, consulted two LIS databases available at her institution: *Library & Information Science Source and Library* and *Information Science & Technology Abstracts*. Both databases were searched together with the library’s *EBSCO* filter tool using the following steps and language. First, the databases were searched using "mindfulness" and "libraries" in the title and keyword fields. The search term “library” was also considered; however, there was no difference in results. The results were then limited to peer-reviewed, full-text articles published in English between 2010 and 2020. Eighteen articles were selected for analysis from this search. Data collected from each article included: publication year, journal title, article title, authors, author's country of origin, and the article's subject. The data was then recorded in an Excel spreadsheet and sorted according to which research question it addressed (please see the Appendix for the spreadsheet data). Analyzed information was illustrated through charts and tables to better display the results.

Limitations/Delimitations

This study was limited to scholarly peer-reviewed articles from academic journals published in English between 2010 and 2020. This range was selected to focus on current trends occurring in

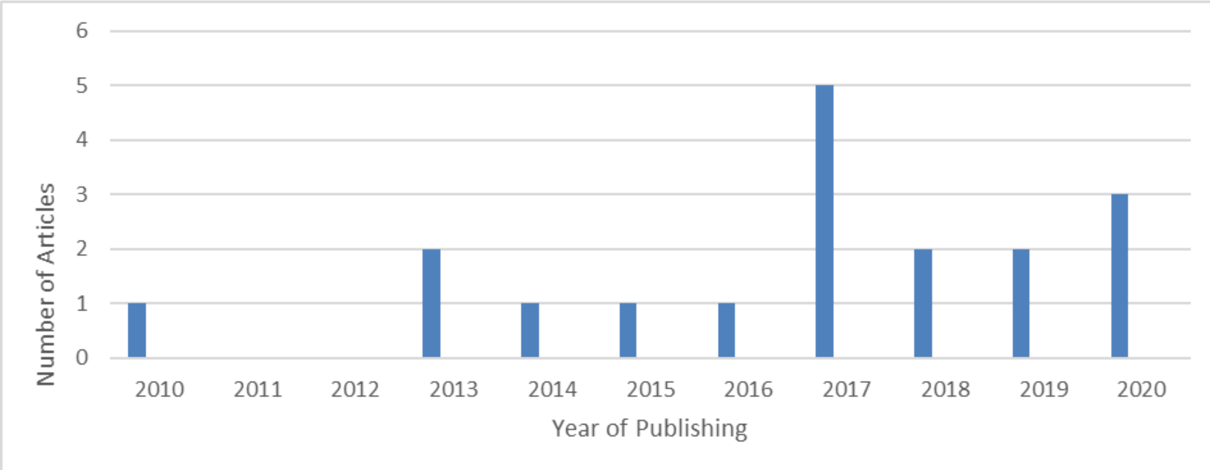


Figure 1 NUMBER OF ARTICLES PUBLISHED PER YEAR DURING THE PERIOD OF 2010-2020.

LIS literature. This study only recorded articles that included the keywords “libraries” and “mindfulness.” Thus, relevant articles using different subject coding could have been excluded. Further, the results only reflect articles found in the two aforementioned databases. Therefore, it is possible that other relevant articles exist, but are not indexed in these databases.

Assumptions

It was assumed that at the time of data collection the databases used in this study were indexed wholly and accurately so that all articles related to the selected keywords were retrieved.

Results

R1. How many articles are published per year about mindfulness in libraries?

The first research question seeks to understand the interest in this field through examination of publication rates over the course of the last decade. In conducting the research of two LIS databases, the results in Figure 1 indicate there have been eighteen articles written during the timeframe of 2010-2020 on the topic of mindfulness in library settings.

In order to illustrate the overall interest, the researcher mapped the number of articles produced by year. From these results, it can be discerned that this interest has been sporadic over the past ten years. As Figure 1 shows, during two of the years studied, 2011 and 2012, there were no peer-reviewed articles written. The least prolific periods were in 2010, 2014, 2015, and 2016 with one article written. The most prolific period was in 2017, with five articles written.

Table 1. Peer-Reviewed Journals that Published Articles on Mindfulness in Libraries

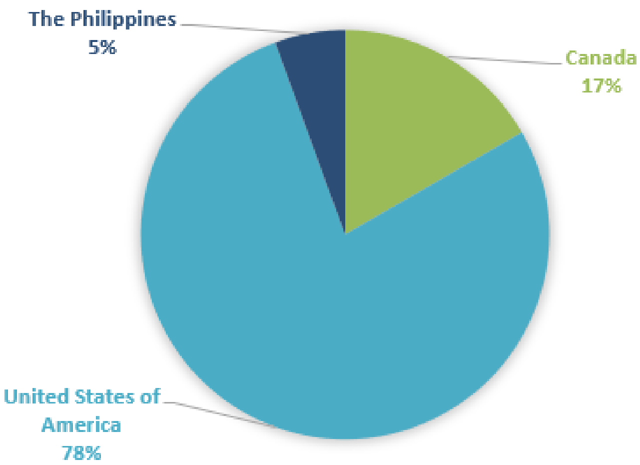
Peer-Reviewed Journals from this study	Number of published articles from this study
Journal of the Medical Library Association	3
Journal of Librarianship & Information Science	2
Children & Libraries	1
Collection Management	1
Georgia Library Quarterly	1
Journal of the Association for Information Science and Technology	1
Journal of Education for Library & Information	1
Journal of Hospital Librarianship	1
Journal of Library Administration	1
Law Library Journal	1
Library Issues	1
Library Review	1
LIBRES	1
Reference & User Services Quarterly	1
Teacher Librarian	1

R2. In which journals are the articles in this study published?

The second research question pertains to the journals in which these articles were published. As noted in Table 1, fifteen peer-reviewed journals were identified between 2010-2020 as publishing articles on mindfulness in libraries. **T**he journal with the most relevant articles was the *Journal of the Medical Library Association*, with three articles. *Journal of Librarianship & Information Science* came in second with two articles. The remaining thirteen journals only published one article each on the subject.

R3. How many authors have published articles about mindfulness in libraries, and where are their countries of origin?

The third research question seeks to understand the growing interest in publishing on this topic by examining the number of published authors as well as their countries of origin. First, thirty-four authors penned the eighteen articles reviewed in this study. The number of authors for each article ranges from one to six. No author within the current study participated in more than one study.



Second, Figure 2 illustrates the distribution of articles grouped by each author's country of origin. The three countries identified were the United States with twenty-three authors, the Philippines with six authors, and Canada with five authors. Furthermore, fourteen articles were published in the United States, three were published in Canada, and one was published in the Philippines.

R4. What is the subject coverage of the published articles related to mindfulness in libraries?

The fourth research question pertains to trends in subject coverage. As shown in Table 2, the most common subjects identified out of the eighteen articles include mindfulness with eighteen articles; libraries & archives with six articles; academic libraries, education, and health/well-being with five articles each; medical libraries with four articles; public libraries with three articles; and administration, culture, information literacy, leadership, and reference with two articles each.

Table 2. Subject Coverage of the Published Articles Related to Mindfulness in Libraries

Subject	Number of articles
Mindfulness	18
Libraries & Archives	6
Academic Libraries	5
Education	5
Health / Well-being	5
Medical Libraries	4
Public Libraries	3
Administration	2
Culture	2
Information Literacy	2
Leadership	2
Reference	2

Discussion

While this study contained a small sample, the information obtained contains several important findings and possible suggestions. Regarding the first research question, the results indicate that the frequency of the number of scholarly peer-reviewed articles published has remained sporadic between 2010-2020. The researcher predicted that the gradual increase in scholarship would be present in the early part of the decade as Mastel and Innes's (2013) research concluded. This hypothesis was not entirely supported, although there has been at least one article published each year since 2013. However, years 2017 to 2020 saw the most significant increase of publications, which may correlate with societal periods of increased stress such as the 2016 Presidential Election and the COVID-19 pandemic. The American Psychological Association supports this idea. Their survey notes that “[o]ne coping method is on the rise, with 12 percent of people using yoga or meditation to manage their stress (compared with 9 percent in 2016), the highest percentage since the survey first asked about these activities in 2008” (APA, 2017, p.6). The researcher hypothesizes that as the LIS field continues to deal with the effects and aftermath of COVID-19, it will also see an increase in mindfulness scholarship.

Pertaining to the second research question, the results indicate mixed information concerning clear core journals. Of the reviewed articles, fifteen different journals published their findings. This information could indicate the broad interest in mindfulness among the different disciplines within the Library and Information Science community. The author was most surprised that the journal with the most published articles was the *Journal of the Medical Library Association*. With Valerio’s (2016) and Artman’s (2017) articles in mind, the researcher expected the journal to be an academic library journal. Thus, these numbers might imply that, while there is not an outstanding number of publications, researchers from different sectors of LIS are taking note of this field of study and are incorporating it in their scholastic efforts.

Further, the current study found that no author within the current study participated in more than one study. This may suggest that there is an overall disinterest in completing further forms of this research. These results may also suggest that there is a shortage of authoritative voices in the field. Unexpectedly, the authors’ countries of origin were only split between three countries, which may suggest that there is a lack of global interest in this subject. However, these results may be skewed by databases that choose to index primarily English-language publications from Western countries. Even so, the researcher hypothesizes that as the acceptance and practice of mindfulness grows in libraries, more peer-reviewed articles will be published in more journals, and there may be an increase of country of origins found in the English databases.

Lastly, the final research question’s results revealed a varied list of subject coverage. As librarians of all sectors are working with and publishing on mindfulness, the subjects reflected in this study were not unexpected. The top five subjects were mindfulness, libraries and archives, academic libraries, education, and health/well-being. Earlier expectations included areas in academia and health, however, the role of specific library sectors in practicing mindfulness is a subject that needs further review. These figures imply that there is no clear pattern of overwhelming interest in mindfulness associated with a specific subject. However, there is evidence that mindfulness is garnering interest across the board and may be associated with a broad range of scholarly work.

Conclusion

As mentioned before, the author was unable to find similar bibliometric studies conducted on the subject of mindfulness within libraries. This study attempts to fill this gap in that it reveals patterns of scholarship that previous studies have not covered. While the current study found that there is a growing interest of published works related to mindfulness within libraries between 2010-2020, it demonstrates that this growth has been sporadic. The study uncovered the journals, authors, countries, and subjects most commonly associated with this topic. Overall, the current study indicates that the intersection of mindfulness and libraries is at an up-tick in LIS scholarship.

However, while the current study may serve as a starting point for scholastic conversation, the results of the current study are not generalizable, and more comprehensive research is needed to compare and expand the results. For example, future research could utilize more databases in their methodologies or perhaps even analyze the evolution of the applications and opinions of mindfulness in the LIS field and other disciplines. Furthermore, it would be interesting to see a comparison of this study in ten years to examine trends through the lens of a (hopefully) post-pandemic world.

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Appendix

Raw Data Collected in Microsoft Excel

	Title	Publication year	Journal title	Authors
1	Improving community well-being through collaborative initiatives at a medical library.	2019	Journal of the Medical Library Association	Funaro, Melissa C.; Rojiani, Rahil; Norton, Melanie J.
2	Mindfulness Meditation in the Classroom.	2017	Journal of Education for Library & Information Science,	Hartel, Jenna; Anh Thu Nguyen; Guzik, Elysia.
3	Balance in Demand Driven Acquisitions: The Importance of Mindfulness and Moderation When Utilizing Just in Time Collection Development.	2019	Collection Management	Rachel Blume
4	Looking inside ourselves: a culture of kindness.	2018	Journal of the Medical Library Association	Julia Sollenberger
5	The Yoga Sutra of librarianship: Towards an understanding of holistic advocacy.	2020	Journal of Librarianship & Information Science	Block, Courtney M; Proctor, Christopher L.
6	Mastering Mindfulness: Fostering a Mindfulness Culture in Children.	2020	Children & Libraries	Alice Robinson
7	Readers' Services: One is the Loneliest Number.	2017	Reference & User Services Quarterly	Laurel Tarulli
8	Healing Through Creativity: Library Staff Collaboration in Arts and Writing Programs.	2017	Journal of Hospital Librarianship	Justice, Ellen M.; Wolf, Diane G.; DelFattore, Joan; Wallace, Wendy; Holveck, Leanne.
9	Creating content marketing for libraries.	2016	Journal of the Medical Library Association	Halevi, Gali; O'Hanlon, Robin
10	Becoming Both a Mapmaker and a Traveler	2018	Teacher Librarian	Tracy Poelzer
11	Zen and the Art of Multitasking: Mindfulness for Law Librarians.	2015	Law Library Journal	Filippa Anzalone
12	Humanistic perspectives in virtual reference.	2017	Library Review	Adolfo Prieto
13	Types of personal information categorization: Rigid, fuzzy, and flexible.	2017	Journal of the Association for Information Science & Technology	Kyong Oh
14	The Mindful Library Leader.	2013	Library Issues	Irene Herold
15	Linking digital literacy and online information searching strategies of Philippine university students: The moderating role of mindfulness.	2020	Journal of Librarianship & Information Science	Atoy Jr, Manny B.; Garcia, Francesca Renee O.; Cadungog, Rayanne R.; Cua, Julius Dominic O.; Mangunay, Siena C.; de Guzman, Allan B.
16	Onward and Upward: Reflections on Community College Library Leadership.	2014	Journal of Library Administration	Kenley Neufeld
17	Insights and Practical Tips on Practicing Mindful Librarianship to Manage Stress.	2013	LIBRES: Library & Information Science Research Electronic Journal	Mastel, Kristen; Innes, Genevieve
18	Mindful leadership.	2010	Georgia Library Quarterly	Lyn Hopper

Raw Data Collected in Microsoft Excel (continued)

	Country of origin	Subjects
1	USA	Medical libraries; Libraries and Archives; Psychological stress -- Prevention; Personal beauty; Communities; Interprofessional relations; Health self-care; Well-being; Mindfulness
2	Canada	Library education; Internet; Educational Support Services; Wired Telecommunications Carriers; Internet Publishing and Broadcasting and Web Search Portals; Mindfulness; Meditation; Educational psychology
3	USA	Library users; Library acquisitions; Collection development in libraries; Mindfulness; Moderation
4	usa	Medical librarianship; Corporate culture; Emotional intelligence; Patient-centered care; Mindfulness
5	USA	Library science; Libraries; Libraries and Archives; Libraries; Commercial and Institutional Building Construction; All other schools and instruction; All Other Miscellaneous Schools and Instruction; Yoga; Quality of service; Yoga instruction; Philosophy; Compassion
6	USA	Mindfulness; Culture
7	Canada	Librarians; Readers' advisory services; Library public services; Libraries and Archives; Mindfulness; Curriculum planning
8	usa	Medical libraries; Delaware; Public Finance Activities; Libraries and Archives; Art therapy; Budget; Cancer patients; Cooperativeness; Creative ability; Writing; Mindfulness
9	usa	Medical libraries; Blogs; Social media; New York (State); Other Services Related to Advertising; Outdoor Advertising; Marketing Consulting Services; Libraries and Archives; Internet Publishing and Broadcasting and Web Search Portals; Academic medical centers; Advertising; Marketing; Adult education workshops; Mindfulness
10	Canada	Library media specialists; All Other Traveler Accommodation; Travelers; Cartographers; Mindfulness; Classrooms
11	USA	Law librarians; Human multitasking; Mindfulness; Job stress; Psychological burnout
12	USA	Electronic reference services (Libraries); Other Individual and Family Services; Mindfulness; Emotional intelligence; Counseling; Interdisciplinary research
13	USA	Content analysis; Information resources management; Research methodology; Questionnaires; Research; Email; Information resources; Information literacy; United States; All Other Information Services; College teachers; Graduate students; Interviewing; Undergraduates; Mindfulness
14	usa	Librarians; Universities & colleges; Colleges, Universities, and Professional Schools; Leadership; Mindfulness; Awareness
15	The Philippines	Information literacy; Computer literacy; Electronic information resource searching; Information-seeking behavior; Philippines; College students; Help-seeking behavior; Financial literacy
16	usa	Community college libraries; Libraries & students; Community college librarians; Academic library administration; Libraries and Archives
17	usa	Library science; Library personnel; Technological innovations; Stress management; Mindfulness-based cognitive therapy
18	usa	Library administration; Library administrators; Library personnel; Commercial and Institutional Building Construction; Libraries and Archives; Libraries; Management styles; Leadership; Quality of work life; Buddhism; Thich Nhat Hanh, 1926-

Creating Workflows for Oral History Transcription and Curation: A Case Study Involving Oral Histories in Satellite Meteorology

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Abstract

This article presents a case study of the transcription and curation of a set of oral histories conducted by the American Meteorological Society (AMS) in collaboration with the Schwerdtfeger Library at the University of Wisconsin-Madison Space Science and Engineering Center. The oral histories will become part of the AMS Oral History Project and the Schwerdtfeger Library's Digital Collections. Oral history interviews were conducted with prominent figures in satellite meteorology at the AMS Joint Satellite Conference in Boston, Massachusetts in 2019. These interviews invited leading remote sensing scientists to share perspectives on their careers, the innovations in and evolution of satellite capabilities and intersections with their careers, as well as future directions of the field. They elaborated at length on subjective details of their lives and work that might otherwise not have been captured in scholarly literature or in other locations. Interview transcripts were processed to conform to the Smithsonian's Oral History Program Style Guide and were archived according to the Oral History Association's Manual of Best Practices for Archiving. This paper seeks to examine the processes involved in transcribing and preparing files for curation as a case study for other institutions considering similar projects in the sciences.

Article Type: Case study

Introduction

This article describes an oral history project undertaken as a joint effort between the American Meteorological Society and the University of Wisconsin-Madison Schwerdtfeger Library. Senior librarians brought experience conducting oral history interviews to the project,

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having undertaken similar projects in the past for their respective organizations. The lead author, new to the field, did not have prior experience in oral history work, but was tasked with developing a workflow for the subsequent transcription and audit-editing of interviews within this environment. As such, this article offers a perspective on conducting oral history work by librarians with a range of prior experience doing so—from limited prior experience to greater experience—with guidance from a body of literature and established methods.

This article describes the methodologies for oral history production used and developed within this particular project and was written to serve as a potential model for other organizations interested in undertaking oral history projects, as a way to provide further context, guidance, and practical considerations. It examines the technical aspects of oral history production, with a focus on transcription processing. Specifically, it breaks down observed processing needs for transcripts and how they were addressed systematically within this project. Furthermore, it presents how conventions can be created and structured while drawing from recommended best practices according to a chosen style guide.

The oral history project described in this article was conducted for the scientific field of satellite meteorology. As such, this article also represents a perspective on conducting oral history work within science by providing direction on transcribing field-specific jargon or acronyms. The article touches on the subjective nature of oral history and, consequently, the additional viewpoint it contributes to research.

Literature Review

Oral History as a Methodology

There is considerable literature on oral history as a methodology. Some notable guides include Donald A. Ritchie's *Doing Oral History* (2003) and Nancy McKay's *Curating Oral Histories: From Interview to Archive* (2016). McKay presents oral history interviewing as a historical methodology in which an interviewer poses questions for a narrator, who then provides and controls the content of the interview and in doing so serves as its primary creator. This is a collaborative process that involves dialogue throughout, which is one aspect that makes oral history interviews different from many types of static historical documents produced by individuals (Abrams, 2016). In addition, oral history interviews typically seek to elicit more subjective and unfiltered accounts in contrast to many types of officially published works that are deliberately presented in more depersonalized and abbreviated forms (Weiner, 1998). Rather than merely providing depersonalized facts, oral history interviews allow for the exploration of an individual's own experiences as well as insight into their thoughts and motivations (Abrams, 2016).

Oral history interviews have been conducted in a wide range of contexts. Many oral histories have been conducted to capture historical records in sociological or anthropological contexts, where, as noted by Abrams (2016), they often serve as a way to present voices that may not have been heard or preserved otherwise. Oral histories have also been conducted to capture historical accounts of science, but these, in contrast, often come from individuals who have already left large paper trails of articles or books, given speeches, or left a large volume of personal records or correspondences, as noted by Weiner (1998). Despite this, oral histories of science can bring out other types of historical information which may not be typically captured or well-represented in those other places or formats. For instance, oral history as a mode has the ability to reveal more of the institutional or ideological factors behind the contributions of particular scientists, or more about how details of their personal lives drove or affected their work (Weiner, 1988).

This project aimed to capture oral histories for the scientific field of satellite meteorology and the literature was searched for accounts of similar oral history projects for the history of science. The search uncovered similar oral history work with major figures in the field of planetary science as well as larger scale oral history collection within the American Institute of

Physics (Sears, 2012) and the Lamont-Doherty Earth Observatory (Levin & Doel, 2000).

Oral History Creation and Processing

Oral histories are unique relative to other types of content in terms of how they are produced and curated. As described by Powers (2005) and others, modern oral history creation typically involves the recording of the audio content of an interview as well as the subsequent production of a transcript based on that audio. In modern oral history, the interview audio recording is considered the primary document (McKay, 2016), while the derived transcript is considered a distinct type of work. In this sense, the production of a derived transcript is, to an extent, an act of creation on its own. Furthermore, the process of creating the transcript requires some considerations and stages of work that are outside of typical workflows for other types of content.

The preparation of a transcript typically involves several successive processes. First, the verbal content of an interview must be transcribed in order to produce a verbatim transcript. A first draft can be achieved with voice recognition software; however, past attempts with available software, such as those described by Yaco (2007) and Ciota (2019), have been found to result in relatively incomplete and inaccurate transcripts, necessitating completion by a human listener. Audit-editing then involves replaying a recording while monitoring the transcript in order to assess consistent correspondence and correct inaccuracies (Ritchie, 2003). Processing of audio into verbatim transcripts involves further decisions about what to include as words versus non-words, decisions about punctuation, and decisions about how the transcript is represented for overall consistency, and in that sense is a non-agnostic form of editing. Furthermore, there is routinely a trade-off available between preserving consistency with the original audio versus making further edits which would improve readability or grammatical correctness but at the cost of that consistency (Powers, 2005). Transcription can also involve the insertion of additional notation to convey meaning, such as indications of laughter—laughter in particular is a paralinguistic feature that is often well-represented in interview transcripts (Myers & Lampropolou, 2015).

Another facet of oral history transcription is the role of memory and attention to detail in the process. Researchers in the field of psychology have done considerable exploration of the concepts of attention as well as working memory. The latter has been conceptualized as a system for the temporary storage and manipulation of information held in mind that has a limited capacity (Baddeley, 2010). Transcribing and audit-editing transcripts are activities which place significant loads on attention and demands on working memory; when listening to an audio segment in order to produce and edit its transcript, there are a number of pieces and types of auditory information coming across in succession or simultaneously as well as a number of rules that the transcriber is aiming to apply to process those pieces. Because attentional and working memory capacities are so limited, it is challenging to maintain awareness and monitoring in order to “catch” all of the relevant types of content so that they can be accurately represented in the final transcript.

Oral History Work in Libraries and Archives

In the literature, there are a handful of published case studies of libraries and archives conducting oral history programs. These accounts touch on various aspects of the entire oral history production and curation process, including some initial interview considerations, basic aspects of transcription, as well as some post-production considerations such as metadata and content hosting.

In terms of transcription, previous case studies presented several relevant themes. First, transcribing and editing is time- and labor-intensive, and this time is extended by processing steps such as researching proper names (McKay, 2016). This aspect was commonly mentioned in case studies (e.g., Boutin-Cooper, 2019). There are outsourcing options in the form of professional transcription or editing services, but they are often cost-prohibitive (Hurford & Read, 2008). For this reason, organizations creating transcripts in-house commonly hire student hourly workers to transcribe recordings (e.g., Wright, 2011). As for specific issues in transcription, accidental misinterpretation of homophones can be an issue, but beyond that, transcribers are sometimes unfamiliar with certain references made by interviewees (e.g., Ciota, 2019). Additionally, Humphries (2015) mentions how speech naturally contains many fragments and trailing sentences, which necessitates decisions surrounding their treatment. As for editorial consistency and standardization, clear reference to the use of external style guides or internally developed standards was somewhat limited in the literature. The Middletown Digital Oral History Project's case study (Hurford & Read, 2008) mentioned the use of an external style guide from the Baylor University Institute for Oral History, as one example. However, some other relevant case studies did not elaborate on editorial standards, and it was not always clear which, or whether, an external style guide was adopted or followed. Generally speaking, existing case studies from libraries and archives touched on, but didn't go into significantly greater depth on, the transcription portion of oral history production. This paper will emphasize the transcription portion of oral history production in order to further contribute to the available literature.

Aims of this Project

Background

The Schwerdtfeger Library is a special library that is embedded within the Space Science and Engineering Center (SSEC) at the University of Wisconsin-Madison. Its mission is to support research, teaching, and learning needs of SSEC, affiliated researchers, the University's atmospheric and oceanic sciences department, as well as the broader campus and community. Important within this context, the library curates and hosts special collections in multiple formats, including print and digital, related to the fields of atmospheric science and satellite meteorology. The American Meteorological Society (AMS) is a professional organization devoted to the sharing of information within the atmospheric and related sciences (American Meteorological Society, 2021), including archiving and preserving materials relevant to these areas of science and associated technologies.

In 2019, the AMS hosted a joint conference with NOAA (the National Ocean and Atmospheric Administration) and EUMETSAT (the European Organisation for the Exploitation of Meteorological Satellites; American Meteorological Society, 2019) that brought together international scientists and researchers in the field of satellite meteorology.

This particular conference was held two months ahead of the 100th anniversary of the AMS, providing a rich opportunity to reflect back on the history and growth of the field of satellite meteorology. At just over 50 years old, the field is relatively young, to the extent that a number of those in attendance at this conference were pioneers in their own right, having led or collaborated on many of the advances in the field over the past four to five decades, including through leading key organizations. However, the conference also came in an era of major improvements in satellite technology and computing infrastructure, so it provided an opportunity to look forward to upcoming developments and the future of the field.

Librarians from the AMS and the Schwerdtfeger Library took the opportunity of this collective conference to conduct oral history interviews with notable attendees who had spent their careers in this field. These interviews explored past developments as well as current trends and emerging opportunities in satellite meteorology. They also provided an opportunity for interviewees to elaborate on their lives, perspectives, and experiences.

Interviews were recorded, and through the joint effort of the AMS and Schwerdtfeger Library, they were subsequently transcribed. They were then curated for archival use within both the American Meteorological Society's Archive and the Schwerdtfeger Library's Digital Collections. The audio contents of these interviews and their associated transcripts will be preserved and made publicly available by these two organizations in order to provide broad access to these important historical resources.

Implementation and Workflows

Preparation and Interviewing. In consultation with senior leadership at SSEC, interviewers arrived at a list of 22 leaders in the field of satellite meteorology who could be invited to sit for an interview, many of whom had been working in the field for up to 45 years. These initial conversations also included perspectives on roles and contributions of each candidate. Of the 22, 14 were planning to attend the conference and were available for a 30- to 40-minute interview. Additional background preparation included: 1) requesting a curriculum vitae from each candidate to gain a sense of the scope of their careers, 2) reading relevant peer-reviewed articles, 3) reading other articles about the candidates published by their organizations or media outlets, and 4) developing questions.

Prior to the interview, candidates were provided with a set of general expectations for what the interview would entail. Interviewees were invited to specifically speak on a) their decision to become a meteorologist and why they decided to pursue that as a career, b) a professor or mentor who made a difference in their undergraduate or graduate education, c) the evolution of satellite capabilities and its intersection with their career, and d) their perspective as a remote sensing or satellite scientist and where future systems are headed. They were invited to share stories about their education, career, research, or any other facet of their experiences as a meteorologist and were informed that their perspectives on their career and innovations in the prior decades would come to serve as a vital primary resource for the history of meteorology.

During the interviews, participants were very open and eager to share stories about their early experiences, working relationships, and career directions. The process allowed for individual and personal stories and perspectives to emerge. For instance, as a route into meteorology, several interviewees had flown as pilots, which also gave them perspectives on how different groups communicate and produce tools that are useful for each other. Many other interviewees talked about public engagement with the science of meteorology, as well as the continued benefits of widespread data sharing. Interviewees touched on changing fields, working across disciplines, and dynamics of organizational and international cooperation.

The ability to share stories in this setting also gave way to some particularly interesting and humanizing personal anecdotes. For example, one participant (who years later went on to become the Director-General of Europe’s EUMETSAT) mentioned flipping a coin when deciding which field to pursue. Another participant mentioned talking with a future collaborator on a long train ride early in his career. Others mentioned situations wherein they and others had to regroup and persevere after instrument and launch failures, and the trials, emotions, and ultimate pride associated with these events.

Transcription and Processing. From a technological standpoint, interviews were recorded with a bi-directional microphone using Audacity, an open-source and cross-platform audio software application. The files were saved in the preferred Waveform Audio File Format (.wav). Audio segments were initially converted to text using voice recognition software, in this case Dragon software, but this step was insufficient to produce complete and accurate transcripts. Initial outputs were missing numerous words, and many words were transcribed incorrectly. In addition, the software was unable to transcribe acronyms and certain instances of technical vocabulary. Additional processing was required to bring transcripts into conformity with selected standards.

In manual transcription of the interviews, a logical workflow had to be developed. Following review of some existing guides, we adopted the Smithsonian’s Oral History Program Style Guide. It was helpful in providing an underlying framework for consistency within and between transcripts. By adopting a specific style, many processing conventions could be effectively planned at the outset. Nevertheless, other issues arose and were solved based on needs and experience working with the transcripts.

Given the demands of transcription on attention, breaking down or separating different aspects of processing can be an effective strategy in transcribing and editing and was found to be an effective approach within this particular project. For example, a transcriber can: a) listen for a selective set of aspects during a pass and b) in separate batches, handle well-defined aspects of the transcript that do not need concurrent audio play-back to complete. Additionally, a transcriber can: c) process a separate subset of defined aspects during distinct listening if there is time available to do so, which was done to an extent in this project. These divisions were initially planned by taking the plain text of the selected style guide and sorting it into rough categories based on the type of processing required. Many requirements and rule-based actions could be quickly sorted into groups based on those that required audio-playback versus those that could be completed without audio. They were then grouped into sets of similar actions that could be completed in batches. This approach expedited subsequent processing of the transcripts.

During each processing stage, conventions from the chosen style guide were applied at the relevant point. For instance, formatting conventions such as font, margins, and justification could be established at the outset, and bracketed notation for interruptions or inaudible segments could be included as encountered during listening. In the case of this project, initial transcription focused on capturing the words of the interview fully and accurately along with their associated sentence structures, including false start fragments as set off with em dashes and some other issues, such as adopting unambiguous punctuation and consistent notations of laughter. After initial listening, a handful of short steps to further refine the transcript were developed and undertaken separately. Representations of special cases such as spoken numbers, fractions, percentages, units of measurement, times, dates, and years were standardized to conform to the chosen style guide. Locations and titles were likewise systematically represented.

Acronyms and field-specific jargon were then searched and verified based on relevant websites or publications. Again, in accordance with the chosen style guide, acronyms were expanded with bracketed comments, a practice helpful for later listeners. In a similar fashion, names mentioned in the interviews were also searched independently in a batch to verify their spelling, often using websites or co-authorship on publications for verification. As a final step—and before sharing with each interviewee—other members of the group read the transcripts for spelling, punctuation, or other errors. These later processing actions could be accomplished, to some extent, independent of audio playback—though listening was necessary in certain cases. Furthermore, separating processing steps in this systematic way allowed the transcriber to focus on a smaller, more manageable number of concerns during initial listening and at each subsequent stage.

As for the most common issues encountered: Transcripts were intended to be a verbatim representation of the audio file as opposed to being further edited for grammatical correctness in ways that might diverge from the original audio. An ever-present challenge was proper sentence construction while respecting and working within the constraints of the original speech, which often was not as polished as edited, written language and can vary with the speaking style of individual participants. Overall, there was very low prevalence of problematic non-words such as “um,” but false starts of sentences were very common. Fillers and repetitions were commonplace but were largely retained in the transcript in order to remain faithful to the audio. Excessive background and low-volume affirmatives were predominantly left out in transcription, and this was an important choice because it allowed narratives to be presented with their full poignancy rather than being excessively disrupted on the page. Lastly, some small portions of the interviews remained inaudible because of participants coughing or speakers trailing off and remained marked as such.

Because of the technical nature of this particular set of interviews (on satellite meteorology and some related topics such as physics or data science), technical vocabulary and acronyms were commonplace. Researching and verifying acronyms was a significant part of this project. Carefully checking them with context allowed for the correction of residual mistakes in immediate transcription—for example, the acronym CYGNSS (Cyclone Global Navigation Satellite System) was initially written as Cygnus, another specific name from elsewhere in the domain. Most technical references were, however, readily accessible to search, which made the process of finding and verifying them unproblematic. Additionally, many terms were mentioned across a number of interviews, so familiarity with them from transcribing initial interviews allowed for recognition as they re-occurred in subsequent interviews. As for personal names, some could not be immediately found online, but those that were likewise allowed correction of some names that would have been unwittingly transcribed incorrectly otherwise—for example, the last name “Bohren,” initially written as “Borin” or “Velden,” written as “Felden.”

After being prepared within the organization, but prior to publication, transcripts were shared with original interview participants. This was done out of respect and ethical consideration for the interviewees, and it also gave participants the chance to provide their input as to the spellings or meanings of any particular reference that may have been transcribed incorrectly.

Interviews will be included among the digital collections of the Schwerdtfeger Library and hosted separately by the AMS. In addition, the transcripts will be saved as searchable PDFs, allowing for full text searching of the documents.

Conclusions and Discussion

This oral history project builds on previous oral histories undertaken by the AMS and the Schwerdtfeger Library. Senior librarians brought prior experience with the oral history life cycle including recruiting participants and conducting interviews. Given this background along with the prominence of the AMS and UW-Madison in the field of satellite meteorology, the candidates trusted the process and provided rich accounts of their lives and work. This mode of interviewing successfully gave attendees an opportunity to share subjective experiences and impressions of work in the field of satellite meteorology as well as tangentially related topics, pieces of which likely have not been captured in more official publications or in other places such as shorter-form interviews. They embraced the occasion, and their accounts gave rise to a number of interesting insights and anecdotes about their respective paths. Overall, the interviews resulted in rich personal perspectives on satellite meteorology and the lives of these individuals within it. They will join a larger body of research resources for future listeners, including historians, researchers, and others.

Within this context, the transcription portion was planned and undertaken by the lead author without prior experience in similar projects. Transcription presented some issues due to the nature of spoken word and the technical complexity of these particular interviews. However, these challenges largely occurred as some common types which could be readily recognized and treated categorically. Issues in interviews (such as false starts, filler words, etc.) tended to follow a small number of common patterns which could be approached similarly. These recurring issues were able to be addressed by developing a process to systematically segment, or categorize, aspects of the transcripts and process them accordingly. In transcription of oral histories from other fields, transcribers may encounter different processing needs depending on the technical complexity of the area. Given this, any processing stage related to verifying and elaborating on jargon may be a greater or lesser consideration than it was during this project. However, this is a crucial concern for oral histories of science in order to make them readily accessible to future audiences.

In this project, it was also helpful to outline conventions for transcription as much as possible at the outset, working from the Smithsonian’s Oral History Program Style Guide. A fundamental recommendation is to select an oral history program style guide and use its conventions consistently throughout the life cycle of an oral history project. Organizations are encouraged to examine available style guides and choose the one that is best suited to their needs. Secondly, it was helpful to break up transcript processing into some well-defined discrete pieces. It is recommended that other libraries and library workers undertaking oral history programs for the first time approach them in a similar manner. Lastly, it is recommended that other libraries and archives create the opportunity to undertake oral history projects. Our organizations are rich with history, stories, perspectives, and personalities that are not necessarily represented in the peer-reviewed literature but are important to creating a fuller picture of a field at a given time, and oral history provides both an excellent window into that history and a representative way of preserving it for the future.

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Rework the Network: Implementing Virtual Outreach Methods in the COVID Era

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Abstract

The COVID-19 pandemic forced academic libraries to be innovative and efficient in shifting to support online learning. While there has been much discussion of online teaching resources and tools among librarians and educators, there has been less of a focus on online outreach and virtual networking. This article presents a case study describing how a new liaison librarian used virtual outreach to build relationships in her liaison subject area, leading to opportunities for research assistance and instruction despite the challenges of starting as a new librarian in the midst of a global pandemic.

Article Type: Case study

Introduction

The COVID-19 pandemic completely transformed the global landscape. Universities and academic libraries were already increasing their focus on online learning, but COVID forced a quick transition to teaching and learning in an online environment. The pandemic expedited and necessitated innovation and technological advancement in academic libraries as services pivoted to hybrid and online models to protect the safety of students, faculty, and staff. While there has been a lot of focus on online teaching and learning among librarians and educators, there has been less of a focus on online outreach and virtual networking. Outreach and relationship building are the foundation of the work academic liaison librarians do as they lead to opportunities to support teaching and learning in liaison subject areas. Because of the COVID-19 pandemic, traditional networking and outreach had to be reworked for the online environment.

The author started a new position as the Business Research & Teaching Librarian at the University of Louisville in the midst of the COVID-19 global pandemic. This article is a case study based on the author's exploratory research of how to build relationships in her liaison subject area while working remotely. In this exploratory study, the author discusses three virtual outreach methods she created: Virtual Power Hour, Chat Technocrat, and Pitch Switch. This article begins to fill the gap in the literature about online outreach and virtual networking. It highlights the importance of proactive, adaptable, and innovative outreach in academic libraries.

Literature Review

Distance learning became the norm during the COVID-19 pandemic, but distance learning is not a new concept in librarianship. The Association of College & Research Libraries (ACRL) first established guidelines for distance learning in

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1963. These guidelines became the Standards for Distance Learning Library Services in 2008. While the standards state that "distance learning and online learning are not synonymous," there was a conflation of the two when the COVID-19 pandemic shut down dormitories and forced students, faculty, and staff to disperse, socially distance, and meet online. The ACRL Standards for Distance Learning Library Services make it clear that "the library has primary responsibility for making its resources, services, and personnel available to its users regardless of their physical location" (ACRL, 2016). This responsibility is impacted not only by the physical location of users but by the physical location of librarians. Historically, reference and liaison librarians sat behind a public-facing reference desk and "performed the role of connecting people to the information they needed in a visible way." (Johnson, 2019, p. 91). As technology has advanced over the past half-century, library reference and engagement models have shifted in response. Because of "the decentralization of physical resources and the expansion of the Internet," libraries "have been transforming their user service models over the past three decades" (Weeks et al., 2020, p. 44). There is now a "continuum of librarian visibility" that has rendered outreach a central component of academic librarianship (LaRue, 2010, p. 10).

The Reference User and Services Association (RUSA) first named outreach as a core component of liaison librarianship in 2001 (Borrego et al., 2020). The outreach model has evolved over the past twenty years. Traditionally, outreach provides "an opportunity to include and educate library users, campus as well as community residents, on various subjects as well as demonstrate the library's value to the academy" (Blummer & Kenton, 2019, p. 180). There have been varying degrees of resistance to this model, including that "some faculty members are reluctant to receive instruction from librarians" (Reeves et al., 2003, p. 61). The traditional outreach model has been shifting towards a "curiosity-as-outreach" approach in which academic liaison librarians move away from the "'look what we can do for you'" model of outreach and instead venture outside of the library to visit "people, places, and services on campus" to ask "what do you do, how do you do it, and why do you do it?" (Borrego et al., 2020, para. 3). By asking different questions and conducting outreach to educate themselves rather than offering a one-size fits all approach to library services, academic liaison librarians are able to create a "more organic and extended interaction" to "build social capital that shares the traditional objectives of outreach" (Borrego et al., 2020, para. 10). Through building these relationships and social capital, librarians maintain their visibility and become "essential partners in knowledge creation" who "must be visible" and "must be at the table" for their "long-term survival" (Case, 2008, p. 145).

To conduct effective outreach, "getting the librarians out of the library and mingling with the rest of the college community" is essential (Reeves et al., 2003, p. 63). There are examples in the literature of "waiting in line at a Thanksgiving potluck" and speaking with "faculty members about courses they are teaching and preparing, their research interests, and books they would like the library to purchase" (Reeves et al., 2003, p. 63). The literature discusses how "newer virtual reference services are transforming the ways in which librarians reach out to their patrons" (Whatley, 2009, p. 30). However, the literature is lacking in how liaison librarians can utilize virtual services to conduct outreach in the online environment. There is little guidance on what a conversation with faculty in line at the Thanksgiving potluck can look like virtually. This case study aims to demonstrate how academic liaison librarians can build and maintain relationships in their liaison subject areas in the virtual environment.

Background

The University of Louisville is a public research university located in Kentucky's largest metropolitan area. The University serves over 22,000 undergraduate, graduate, and doctoral students. The University Libraries span two campuses. Ekstrom Library houses the Research Assistance and Instruction (RAI) department where liaison librarians work with a variety of subject areas on the University's central academic campus.

In response to the COVID-19 pandemic, the University of Louisville and University Libraries pivoted to a hybrid model of teaching and learning. The majority of courses and services were offered online. The University Libraries had a number of virtual services and tools in place before the pandemic that were expanded and saw an increase in use in response to COVID-19. Microsoft Teams, which was available pre-pandemic but under-utilized, became the main communication hub for departments across the University Libraries. The Dean of Libraries held weekly town hall meetings to foster virtual opportunities for connection and communication during an unprecedented time.

The author began her new role as the Business Research & Teaching Librarian at the University of Louisville in October 2020. The RAI department was operating almost entirely online, offering virtual instruction, research appointments, and reference.

Approach and Methods

A major challenge for a new liaison librarian who started during the midst of a global pandemic was building relationships with faculty and students when there were no opportunities for in-person engagement. The author had to develop virtual outreach methods to engage faculty and students in her liaison subject area, the College of Business. This virtual outreach set the groundwork for instruction sessions and research appointments as well as faculty research support and community consultations. The methods also served a more strategic purpose: to rework for the online environment those informal networking opportunities that happen at in-person events and often lead to serendipitous collaboration.

The Head of RAI initiated virtual networking opportunities for the author as a part of her orientation. Meetings were scheduled with representatives from various departments across the University Libraries. These pre-planned meetings offered an excellent introduction to the services offered by the University Libraries and an opportunity to meet colleagues despite working from home. Beyond the first three weeks of orientation, there were less opportunities for these informal virtual conversations. While the author had a better understanding of the libraries, it was essential as the Business Librarian to build relationships with the students, faculty, and staff in the College of Business. The author developed three virtual outreach methods to build these connections: Virtual Power Hour, Chat Technocrat, and Pitch Switch.

Virtual Power Hour

The idea of a “virtual power hour” is to replicate the informal networking opportunities provided by speaking with faculty at an event or a student coming by the reference desk. Virtual Power Hours can be one-shot or recurring events that do not require registration or have formal agendas. Hosting a Virtual Meet and Greet for College of Business faculty and Virtual Office Hours for students was the primary focus of the author’s virtual outreach in her first semester as the Business Librarian.

The author held a Virtual Meet and Greet for the College of Business one month after she started working at the University of Louisville. The meet and greet was intended to be an informal, drop-in event with no set activity or agenda. It was an opportunity for College of Business faculty to meet the new Business Librarian. The planning and outreach for the event was simple. The Business Librarian decided to hold the meet and greet on a Friday afternoon and created a Microsoft Teams meeting for the event. Good advertising is essential for marketing outreach events. The author created a flyer using the free web tool Canva (Figure 1). The flyer included an embedded Microsoft Teams link for the event.

To advertise the event, the author emailed the flyer to the Dean of the College of Business. This was a great way to introduce herself to the Dean and reach the entire College of Business. The Dean forwarded the introduction email and flyer to the faculty listserv for the College of Business. He encouraged everyone to attend and promoted the Business Librarian as an important resource. This advertising strategy had its advantages and disadvantages. The author received a robust response to the email. Several faculty and staff emailed to introduce themselves and welcome the Business Librarian to the University of Louisville. Some faculty emailed to say they could not make the time of the event and asked to schedule individual meetings. The event was an hour long, and three faculty members attended. Nobody showed up for the first thirty minutes. Two people showed up almost simultaneously from different departments in the College of Business. With five minutes left in the event, another faculty individually called the librarian on Microsoft Teams, rather than joining the event itself, and asked if anyone else would be joining. This illustrates some of the disadvantages to how the Business Librarian promoted the event. Because of varying degrees of digital literacy, the embedded Microsoft Teams link in the flyer may have been unclear to some faculty. The day before the event, the author wanted to send a follow up email to the Dean's email reminding faculty of the meet and greet the following day. However, the author did not have permission to email the listserv. A better option for advertising the event would have been to share the Outlook calendar event with the Dean, attaching the flyer and a clear link to join the meeting. If the Dean had shared the calendar event, this would have placed the event on the faculty members' calendars which could have served as an additional reminder and may have resulted in higher attendance.

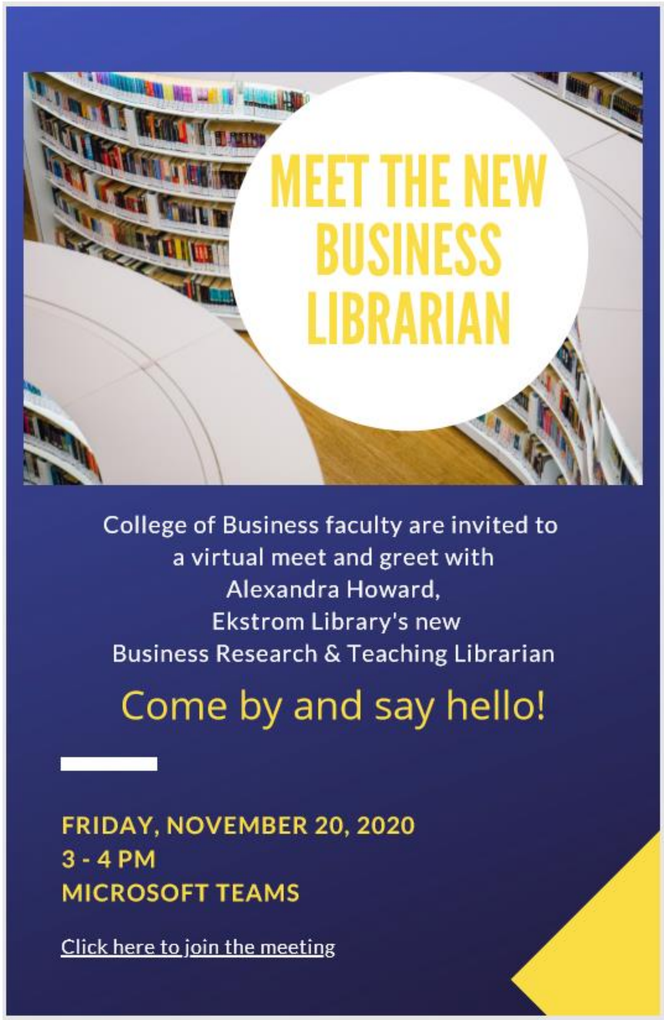

Figure 1 VIRTUAL MEET AND GREET FLYER.

After the Virtual Meet and Greet, the author followed up with the Dean of the College of Business to see if she could be added to the listserv. After navigating the College of Business administration, the Business Librarian was ultimately not granted access to the listserv. However, other virtual outreach opportunities were presented that the author did not anticipate. The Business Librarian was invited to a College of Business townhall and also given the opportunity to submit announcements to the College of Business's weekly newsletter.

Ultimately, the Virtual Meet and Greet was a success despite a low number of attendees at the event itself. The purpose of the event was for the Business Librarian to start making connections and building relationships in her liaison subject area. By simply hosting and advertising the event, the Business Librarian gained visibility in the College of Business and was able to make connections through emails, individual Microsoft Teams meetings, and the Virtual Meet and Greet itself. Furthermore, the event provided additional virtual outreach opportunities the Business Librarian would not have otherwise known about. Because of the Virtual Meet and Greet, the Business Librarian was invited to teach library instruction sessions across different departments in the College of Business, asked to provide faculty research support, and asked to hold a consultation with a potential community partner.

The second "virtual power hour" the author instituted was Virtual Office Hours. The Virtual

Office Hours were planned for the following Spring 2021 semester, and the promotion and outreach began during the fall semester. The Virtual Office Hours were intended to be an informal, easily accessible, low-barrier way for students to ask questions and receive research assistance. Because of COVID, there was no in-person reference desk or in-person interactions with students inside or outside of the library. Virtual Office Hours took the impetus off the students to send an email or schedule a research appointment. Students could just click a link to join a Microsoft Teams meeting at a designated time and ask the Business Librarian any questions.

Figure 2 VIRTUAL OFFICE HOURS FLYER.

The Business Librarian discussed the Virtual Office Hours with faculty she connected with from the Virtual Meet and Greet. The faculty responded enthusiastically and several asked to put the Business Librarian's virtual office hours and contact information on their syllabi. This was an unintended outcome that not only increased the Business Librarian's outreach to students but also served to deepen the Business Librarian's engagement and relationship building with faculty. To determine the times of her weekly virtual office hours, the Business Librarian analyzed the course schedule for Spring 2021. It was important to ensure that the office hours did not conflict with the timing of the courses that promoted them. The next step was deciding how to advertise the Virtual Office Hours beyond inclusion on the syllabi for certain classes.

The author created a recurring event on her Microsoft Outlook calendar to generate a Microsoft Teams link. Because the Virtual Office Hours would be held weekly, it was important to have the same link for each occurrence. The Business Librarian then used Canva to create a flyer advertising the Virtual Office Hours (Figure 2).

The author emailed the flyer to her faculty contacts in the College of Business. She also used her newly discovered virtual outreach tool, the College of Business's weekly newsletter, to advertise the Virtual Office Hours. The author worked with the University Libraries' Head of Web Technology to incorporate a link to the Virtual Office Hours in the Business Librarian's library profile. After sharing the idea of holding Virtual Office Hours in a RAI department meeting, the other librarians in the department decided they would also hold Virtual Office Hours in the spring semester. This helped increase the visibility and accessibility of the Virtual Office Hours. One of the concerns about the Virtual Office Hours was what would happen if someone needed to cancel their hours. To address this, a Virtual Office Hours libguide was created using Springshare software. Every librarian had a page in the guide under their name. The time and link to each librarian's Virtual Office Hours were listed on their page. Each librarian had access to the guide and could edit their page if they needed to change or cancel their office hours. Virtual Office Hours links were added to all of the librarians in the department's profiles. These links went to each librarian's individual page in the Virtual Office Hours libguide.

The Business Librarian held her Virtual Office Hours consistently throughout the Spring 2021 semester. Unfortunately, no students attended the office hours. A faculty member who had the office hours listed on her syllabus did drop in to office hours once to ask a question. The other librarians in the department had similar results with their office hours, ranging from zero to one student in attendance all semester. Virtual Office Hours were instituted by other libraries during the pandemic, like the Medical Library at Tampa General Hospital (Castek & Novak, 2020). Rather than a liaison model with each librarian having their own office hours link, the Medical Library at Tampa General Hospital held general office hours with only one associated Teams link used by all the librarians. Librarians had scheduled shifts to monitor the office hours throughout the week. In their promotion of the Virtual Office Hours, Castek and Novak (2020) encouraged hospital employees to visit the office hours "to learn about the resources and services the library has to offer and to ask questions about how to access databases and utilize features like filters" (p. 369). While this was the intention behind holding Virtual Office Hours for students at the University of Louisville, it highlights an important component missing from the author's promotion of Virtual Office Hours at her institution. As librarians and academics, it is easy to use professional vocabulary without providing context. Students may not understand what "office hours" mean, especially in the library context. If the RAI Department at the University of Louisville Libraries decides to continue holding virtual office hours in the future, it will be important to contextualize what this means and how this time can be utilized.

Chat Technocrat

Chat Technocrat is a virtual outreach method developed by the author that involves effectively navigating the chat feature during virtual events. Because there are no longer the networking opportunities that happen before or after in-person events, it is important to be strategic in how liaison librarians can utilize virtual event chats as an outreach tool. Virtual events can include speaker series, lectures by invited guests, forums, town halls, and other programming adapted to the online environment. The chat is a tool librarians can use during these virtual events to increase their visibility and support information needs. However, there is a balance between engaging in the chat as an active participant and dominating the chat and potentially distracting from the event itself. Successfully navigating a virtual event chat is a skill, and it should be done with intention. Chat Technocrat is a simple method that provides guidance on how librarians can utilize the virtual event chat as an outreach tool.

Through observation and experience over the past year of the COVID-19 pandemic, the author generated best practices for navigating virtual event chats as a librarian. There are virtual events where it is appropriate to contribute to the conversation with an introduction, comment, or question. There are virtual events where it does not seem appropriate to utilize the chat unless asked to do so. The first step of Chat Technocrat is to do an environmental scan of the event. Have the presenters or moderators asked for attendees to introduce themselves? What direction has been given around asking questions or participating in the chat? If asked to do so or deemed appropriate after an environmental scan, the librarian should introduce themselves in the chat with their name and job title. This provides visibility among the attendees at the event and also contextualizes the librarian's engagement in the chat for the remainder of the event.

The next step of Chat Technocrat is to carefully monitor the conversation and support the information needs of the event. If someone mentions a report or a book for example, the librarian can do a search to identify that report and share the link in the chat. Chat Technocrat requires accuracy and efficiency. It is important to share the correct link for a resource and to do so quickly to keep up with the conversation. If it takes too long to find the resource, then the librarian should not share it, but remain engaged in the conversation and be prepared to respond to the next information need that may arise. The environmental scan should continue throughout the virtual event. It is important that the visibility gained through the Chat Technocrat method is positive rather than negative attention. There may be a moderator already providing links in the chat, and the librarian also doing this could become repetitive and confusing. The speaker may mention multiple resources, and if the librarian attempts to provide links to every resource this could become distracting. By monitoring the conversation happening on screen and in the chat, the librarian can use their best judgment as to when providing links to resources is most appropriate and useful in meeting the information needs of the event.

The Chat Technocrat outreach method serves several purposes during virtual events. It illustrates and reinforces the role of librarians as information professionals. It supports the speaker's communication of information and attendees' access to information. It increases the librarian's visibility. Every time the author has engaged in the chat this way or observed another person doing so, the information sharer has been acknowledged by the speaker or the moderator for the event. This makes the librarian an active and engaged participant in the event. An example of this is when the author used the Chat Technocrat method during a virtual talk given by the University of Louisville's new provost. During the question and answer session, the provost highly recommended a particular book. The author knew this was the perfect moment to utilize her role as librarian to provide access to this information. The author did a quick Google search for the book, found the publisher link for the book, and provided this link in the chat. Because she did this, the author was mentioned by name by the moderator of the event and thanked by the provost for sharing this information. The event was recorded, making the Business Librarian's name and the purpose librarians can serve a part of the permanent record of this event.

Pitch Switch

The final virtual outreach method is one the author is still developing and yet to fully implement. The idea behind this virtual outreach method, which the author named "Pitch Switch," is for librarians to create targeted pitches of their services for different audiences using short, engaging videos. The idea for this outreach method is based on the author's work with business students. While the business world has several different types of pitches—business, elevator, entrepreneurial, venture—the most relevant to librarians using the pitch as an outreach tool is the elevator pitch. The elevator pitch is defined as "a ubiquitous, time-tested tool to create a strong first impression" that should generally last between six and sixty seconds (Sabaj et al., 2020, p. 57). It is important for liaison librarians to establish their own pitches that can quickly communicate their services in a compelling way to generate interest and buy-in from the different target groups in their liaison subject areas. The author defined three target groups: students in the College of Business, faculty and staff in the College of Business, and researchers in other academic disciplines. These different audiences have unique needs and communication styles, so the services the librarian presents and the way in which the librarian communicates these services will differ between the groups. The idea of Pitch Switch is that the librarians create pitches unique to their different target groups rather than using one standardized pitch. In order to most effectively communicate their value in under a minute, it is essential that the librarian identifies which services will be most useful for each target group and only focuses on those. The means of communication will also differ between the three target groups. Engaging students may take a more informal and fun approach while engaging faculty may have a more formal tone. Engaging non-business disciplines will take creativity and different vocabulary to describe business research and why it may be useful to non-business academic disciplines.

Delivering these pitches can take many different forms. The pitch can be given during a meeting with faculty or during a student orientation. The author's idea was to make pitch videos that could be disseminated online to her different target groups. There are a variety of online tools that can be used to create pitch videos. These range from screencast software where the librarian can provide narration over a shared screen to animation software where the librarian can create a video using animated characters. A free screencast software that can be used is Screencast-o-matic. The screencast software used by the RAI department is Camtasia. Two popular cloud-based animation software are Powtoon and MySimpleShow. Powtoon can be used to create animated videos in color using a number of professional templates. MySimpleShow can be used to create black and white animated videos. It is important to understand the different online tools available to assess what method will be best to engage each target group. The author decided to use Powtoon to create her pitch video for students. Creating the pitch video in Powtoon allowed the Business Librarian to introduce herself and her services to students in a fun and engaging way. The animation gave the video a more informal and lighthearted tone. In the video the Business Librarian introduced herself, listed types of research students may be doing (as seen in Figure 3), and highlighted the different ways students could meet with the librarian and contact her.

Figure 3 SCREENSHOT OF PITCH SWITCH VIDEO FOR STUDENTS.

While the author made the pitch video for students, there were several edits that needed to be made before the video could be published and shared. The pitch video was made with a music track and no narration. This presents issues for accessibility and ADA-compliance. The video is also longer than one minute which is not a best practice for pitches. In her first year, the author decided to focus on other virtual outreach methods. She plans to update the student pitch video and disseminate it at the beginning of the Fall 2021 semester. Her plan is to send the pitch video to student orientation organizers, academic advisors, and faculty in the College of Business. She also hopes the video will be shared on both the library and the College of Business's social media pages.

Outcomes and Reflections

Online teaching and learning is here to stay. As students, faculty, and staff continue to meet in the online environment, it is imperative to rework the traditional idea of networking. In a presentation at the BRASS Fall 2020 Online Symposium, the author polled the 75 people in attendance to ask how the attendees were reaching students and networking with faculty in the online environment. The most popular answer by an overwhelming majority was e-mail. This helps demonstrate the library profession's lack of resources and tools for virtual outreach. The online environment necessitates innovation. Universities and libraries have demonstrated incredible innovation and resilience in responding to the COVID-19 pandemic. As vaccines become widespread and universities plan to return to in-person instruction in Fall 2021, it is imperative that libraries decide which changes and innovations to carry with them into the future. Networking and relationship building in the virtual environment will remain necessary. Some libraries, like Tampa General Hospital's Medical Library, saw an estimated 220% increase in their post-meet and greet survey responses in the digital environment of 2020 compared to the paper and email responses of previous years (Costek & Novak, 2020, p. 372). This clear and significant increase in engagement proved to Costek and Novak that their digital adaptations as part of the library's COVID-19 response were successful and will continue.

Unlike Tampa General Hospital's Medical Library, the University of Louisville's Research Assistance and Instruction department did not see an increase in engagement because of the virtual outreach methods utilized by the Business

Librarian. However, this does not necessarily mean the virtual outreach methods were not successful. While the library profession has assessment methods for different components of librarianship, there is no defined methodology for assessing outreach. German and LeMire (2018) argue that it is important to assess outreach “in order to measure the success of the outreach activity, identify areas for iterative improvement, and demonstrate the value of the outreach activity to stakeholders”; however, “connecting assessment to outreach in an intentional and goal-oriented manner has yet to emerge as a common practice” in libraries (p. 66). German and LeMire (2018) advocate a multi-faceted approach to outreach assessment that requires “consciously considering an outreach event’s purpose, goals, and outcomes” and developing predetermined assessment strategies that will be able to reflect whether or not those goals were met (p. 68). While this will be an important methodology to utilize moving forward, it is possible to retrospectively consider the goals of the virtual outreach methods used by the author and whether or not these were met.

The author’s intention was to build relationships with faculty and students in her liaison subject area. The goal of building these relationships was to provide research assistance and instruction. In Spring 2021, the Business Librarian was asked to teach 20 instruction sessions. Between Fall 2020 and Spring 2021, the Business Librarian held 21 research appointments with students, answered 60 reference questions, and offered varying degrees of research support to 15 faculty members. While it is hard to directly correlate these numbers to specific virtual outreach methods, the overall goal of the virtual outreach has been met. The Business Librarian was able to provide research assistance and instruction in her first year at the University of Louisville, during the COVID-19 pandemic despite not having any opportunities for in-person engagement.

Moving forward, there are opportunities to expand upon the virtual outreach methods discussed. A new librarian’s outreach methods or focus may be different than an established librarian. However, it is important to continue to build and manage relationships in liaison librarian subject areas beyond a librarian’s first year of service. Future research should test these outreach methods in different contexts and continue to build upon them. Another avenue for future research is to create better evaluation tools and methodologies for assessing outreach.

As Costek and Novak (2020) demonstrate, “Providing higher visibility and new forms of communication has helped to ensure that the library remains relevant... throughout this history–making pandemic” (p. 375). It is important that liaison librarians and university libraries continue to innovate new forms of communication and increase their visibility beyond the COVID-19 pandemic to ensure that libraries remain relevant in an increasingly technologically advanced and information-saturated world.

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