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SLIS Director's Report
## Teresa S. Welsh, Ph.D., Professor and Director

Welcome, scholars, to the spring/ summer 2019 issue of *SLIS Connecting*!

In spring, the big event was the **52nd Annual Fay B. Kaigler Children's Book Festival** with USM Medallion winner Tamora Pierce, Brian Floca, who did an author's talk at Lillie Burney STEAM Academy, and other keynotes Sophie Blackall, Margarita Engle, William Joyce, Erin Entrada Kelly, Bweela Steptoe, and Javaka Steptoe.

To highlight and commemorate the festival, SLIS created an exhibit in Cook Library Gallery, "History of the School of Library and Information Science & Art of the Fay B. Kaigler Children's Book Festival. A reception for the ALA External Review Panel was held in the gallery in February and the spring graduation reception was held there in May. (Handout design by SLIS GA Julie Gore)
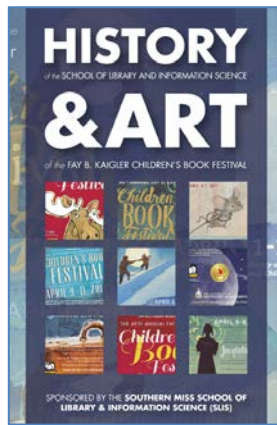
The big news this summer was ALA Accreditation:

- **SLIS awarded continuous ALA Accreditation until 2026!** The last step in the ALA-accreditation process was an interview by the ALA Committee on Accreditation of Director Welsh and Adrienne Patterson at the American Library Association Annual Conference, June 22nd.

- **American Library Association Annual Conference** (www.ala.org), June 20-25, Washington, D.C. featured a SLIS/Kaigler Children's Book Festival/University Libraries shared exhibit table as well as a reception for SLIS students, alumni, and supporters at Busboys and Poets, June 23.

- **Qualitative and Quantitative Methods in Libraries** (qqml.org), May 28 – June 1, European University Institute (EUI), Florence, Italy. The Director and several alumni presented research at this international conference.

- **British Studies LIS Class: British Libraries, Archives, and Special Collections**, June 1 – 30. The Director and GA Ashley Marshall led a class of 15 graduate students from USM and six other universities from across the U.S. and Canada. We were fortunate to have some visiting VIPs from Southern Miss (President Rodney Bennett, Provost Steve Moser, VPs Dr. Gordon Cannon, Dr. Daniel Norton, and Chad Driscoll, as well as Dr. Dave Davies, Director of British Studies) join us on our visit to the National Art Library @V&A Museum (cover image), June 13th. View the class blog https://usmbritishstudies19.blogspot.com/

- SLIS Director authors "SLIS Notes" column in the online refereed journal *Mississippi Libraries*, published quarterly by the Mississippi Library Association http://misslib.org/publications

In summer, a big move for SLIS from Cook Library to the first floor of historic Fritzsche Gibbs Hall (FGH), strategically located on the USM campus between Cook Library and McCain Library. FGH, built in 1929, was designated a Mississippi Landmark in 2016 by the Mississippi Department of Archives and History.

See the next pages for a gallery of highlights from spring/summer events.

Fay B. Kaigler Children's Book Festival, April 4, 2019
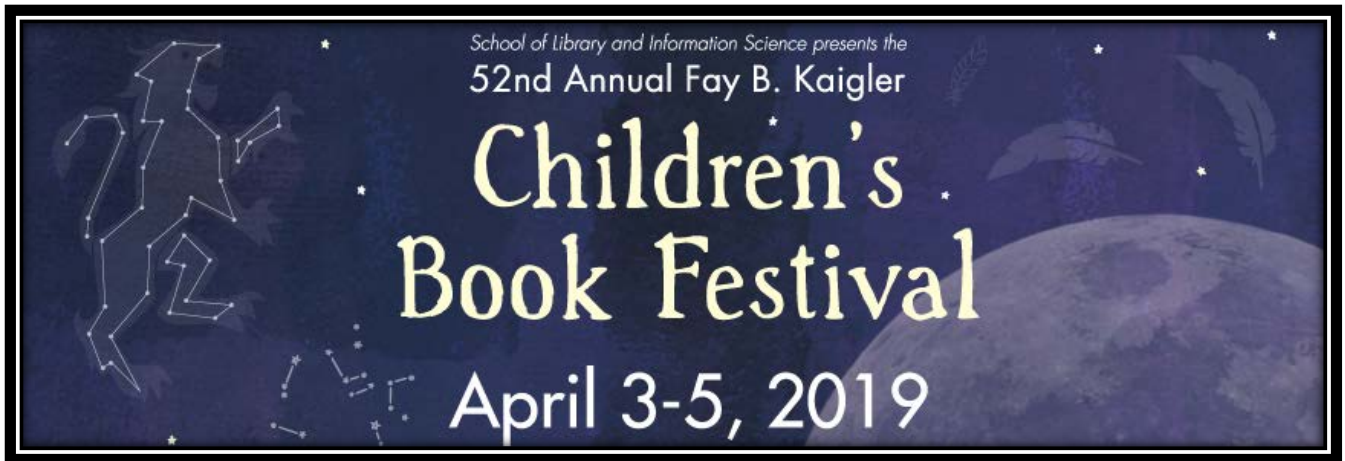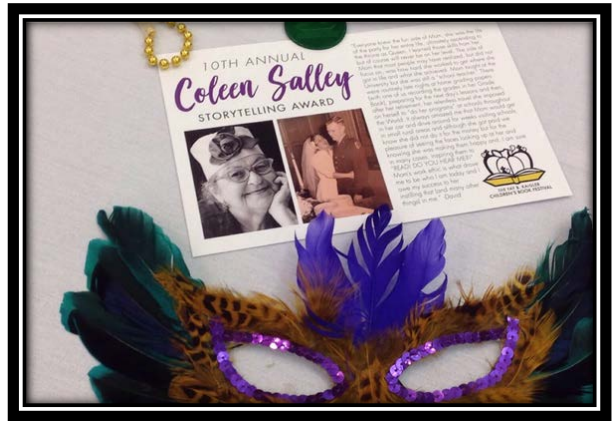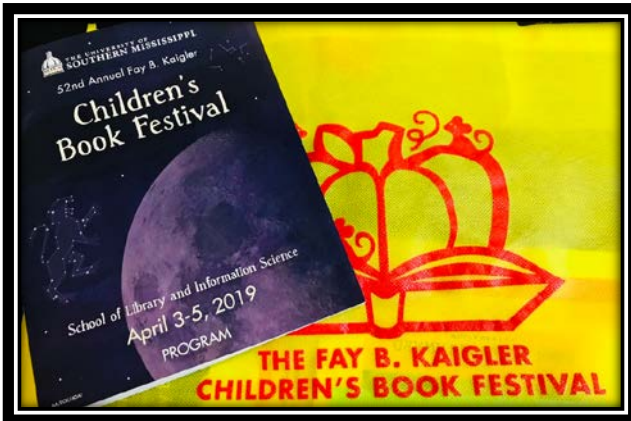
Keynote Brian Floca at STEAM Academy Book Talk, CBF Book Signing

Dr. Deborah Pope and 2019 Ezra Jack Keats Award Winners

Spring Graduation Reception, Cook Library Gallery, May 9, 2019

Scenes from QQML, Florence, Italy, May 28 – June 1

British Studies GA Ashley Marshall (top left) and British Studies LIS Class of 2019
King's Cross Station, London

British Studies LIS Class, British Museum Archives, Round Reading Room

**Scenes from SLIS Reception, ALA Annual Conference
Washington, D.C., Busboys & Poets, June 23**

Spotlight – Faculty

Dr. Jennifer Steele joined the Southern Miss SLIS School of Library and Information Science faculty after having served as the Electronic Resources Librarian for three years at Mississippi College, located in Clinton, Mississippi. She received an MLIS degree in 2013, followed in 2017 with a Ph.D. in Communication and Information Sciences, both from The University of Alabama.

Dr. Steele's research interests include the role of academic libraries in online education, information literacy skills of first-year college students, censorship and intellectual freedom, which is the focus of her dissertation, "Censorship in Public Libraries: An Analysis Using Gatekeeping Theory."

Dr. Steele is a member of Beta Phi Mu International LIS Honor Society and involved in professional organizations American Library Association (ALA), Association of College and Research Libraries (ACRL), as well as the Association of Library and Information Science Education (ALISE). She served on the ALA Resolutions Committee and Rural, Native, and Tribal Libraries of All Kinds Committee.

She currently serves as the Vice-Chair of the ACRL Standards Committee and a member of the Professional Values Committee and 2019-2020 Chair for the ALISE Connie Van Fleet Award for Research Excellence in Public Library Services to Adults Committee.

Spotlight – Alum
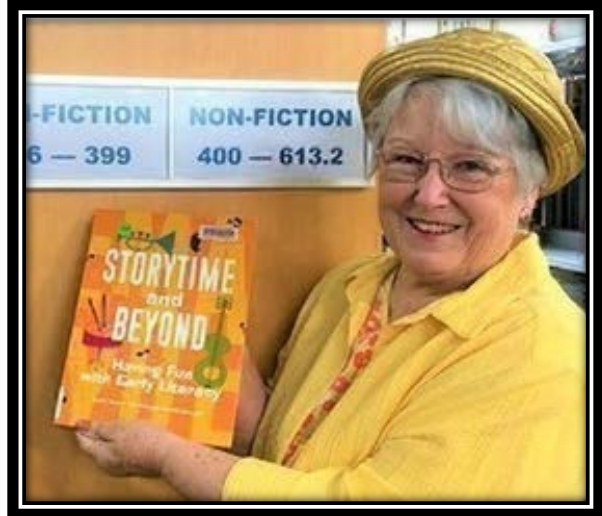
When **Kathy Barco** first began thinking of applying to the USM graduate program in Library Science, she said to her husband, "I'll be fifty years old when I get my degree!" His wise response was, "You'll be fifty whether you get your degree or not!"

Faced with that irrefutable logic, she applied, got accepted, was granted leave without pay from her paraprofessional job with the Albuquerque Public Library, attended two summer sessions in Hattiesburg, completed children's and YA lit courses via email with the late Dr. Kate Bishop, survived "Computers in Libraries" taught by Dr. M.J. Norton (who was also her advisor), wrote a master's research project on Curious George using primary sources in the De Grummond Collection, and received her MLIS in 1997.

Her career included postings at several branches of the Albuquerque Public Library (APL) as a children's librarian. Those bookended five years (2002-2006) as youth services coordinator at the New Mexico State Library in Santa Fe.

At the time of retirement, Kathy was literacy coordinator for APL and was conducting workshops for staff and the public based on ALA's *Every Child Ready to Read @ Your Library*. Curious George was her sidekick at storytimes and presentations – he's a perfect literacy advocate.

As a library consultant, she did presentations on early literacy, plus summer reading program workshops for the Kansas State Library and the Colorado State Library. In 2006, she received the New Mexico Library Association Leadership award and in 2018 received the Mountain Plains Library Association Distinguished Service Award.

Kathy is the author, co-author, or co-editor of five books. The most recent one came out in the fall of 2018. *Storytime and Beyond – Having Fun with Early Literacy* was published by Libraries Unlimited/ABC-CLIO. She worked on three chapters in the book via presentations at the Fay B. Kaigler Children's Book Festival and utilized the De Grummond Collection for elusive alphabet books. In a "circle of life" moment, she was able to convince Dr. Norton to write a blurb for the book. The book has been chosen as the textbook for Dr. Stacy Creel's spring 2020 "Storytimes and Literacy" course.


Spotlight—Course

LIS 492 H002/LIS 692 H002
Storytimes & Early Literacy

Early literacy development in children is closely tied to stories and reading. Effective storytimes with babies and young children increase vocabulary and reading readiness. The goal of this class is to prepare students to deliver storytime programs with an intentional focus on early literacy concepts and storytimes that incorporate activities that emphasize early literacy and build a foundation of reading.

The class will include readings on the research of early literacy and reading to children, development of age-appropriate storytimes based on themes, intro to infant lap sits, Mother Goose on the Loose, Every

Child Ready to Read, Supercharged Storytimes, the tools of Valuable Initiatives in Early Learning that Work Successfully, creation and use of materials for use in early literacy storytimes. Students will receive a special packet of materials to use in the creation of videos and activities for children.
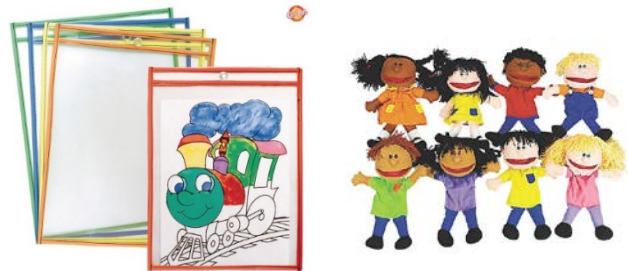
Special guest lecturers include author and literacy coordinator Kathy Barco and Dr. Alicia Westbrook, Director, Mississippi Early Childhood Inclusion Center.

LIS 492 H003
PR & Marketing in Libraries

"What is marketing, and how do you define the concept as it relates to libraries? The business world defines marketing as 'the process of planning and executing conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives'" (Bennett, 1995). Translated to the library world, marketing is much like any other service organization, and can be defined in the same terms; simply change the words "individual and organizational objectives" to "user and library objectives". In essence, marketing is "the link between the user's needs, and the library's resources and services." --Lowe-Wincentsen, D (2014). *Skills to Make a Librarian: Transferable Skills Inside and Outside the Library*. Amsterdam: Chandos Publishing.

Marketing and promoting the library is an essential skill that librarians need in today's competitive market. This course uses online self-guided webinars to give students an understanding of how to use data in marketing, PR and marketing through social media, effective marketing, and more. Readings on current marketing trends and techniques are included for discussion. Students create memes, flyers, PR announcements, and videos.

From the GA's
Bailey, Leah, LISSA Advisor Ms. Jessica Whipple

LIS Student **Bailey Conn, GA Leah Peters,** and LISSA Faculty Advisor **Ms. Jessica Whipple** at the Fay B. Kaigler Book Festival LISSA exhibit table. Not pictured are GAs **Ashley Marshall, Ariel Jordan, Julie Gore, and Rachel McMullen.**

Congratulations SLIS Students
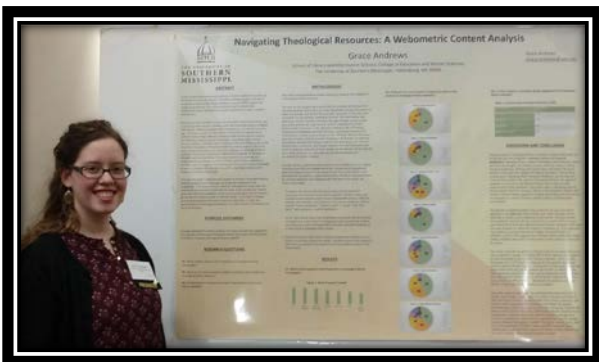
Grace Andrews presented "Navigating Theological Resources: A Webometric Content Analysis" (research poster), USM Susan A. Siltanen Graduate Research Symposium, April 11, 2019.

Congratulations SLIS Alums

Colleen Baldwin (MLIS, Archival Certificate, 2012) is Health and Historical Records Research Specialist, Department of Medicine, University of Wisconsin, Madison, WI.

Shelby Carmichael (MLIS, 2019) is Collections Management Librarian, Blue Mountain College, Blue Mountain, MS.

Lynn Cowles (MLIS, Archival Certificate, 2019) is Assistant Professor and Archivist, Nicholls State University, Thibodaux, LA, and she has been appointed to the Society of American Archivists Committee on Public Awareness as the Early-Career Member.

Ginger Dressler (MLIS, 2010) is Information Processing Librarian, State Law Library, Jackson, MS.

Elizabeth Halberstadt (MLIS with licensure emphasis, 2019) is Teacher/Librarian, Stono Point Elementary School, Charleston, SC.

Laura Hinman (MLIS, Archival Certificate, 2018), is Head Librarian, Midland University, Fremont, NE.

Sarah Mangrum (MLIS, 2011), Southern Miss Access Services Librarian, earned an Ed.D. in Higher Education Administration, University of Southern Mississippi, May 2019, and is an Adjunct Professor at the Southern Miss School of Library and Information Science.

Tamie O'Berry Martin (MLIS, 2010) is Director, East Baton Rouge Public Library, Port Allen, LA.

Erica McCaleb (MLIS, Youth Services Certificate, 2015) is Yelm Library Manager, Yelm, WA.

Sasha Chaudron Mangipano (MLIS, Archival Certificate, 2016) is Librarian, Singing River Academy, Gautier, MS.

Tiwari McClain (MLIS, 2008, MS Instructional Technology, 2016), School Test Coordinator/Assistant Athletic Coordinator, Yazoo City Municipal School District, earned a Specialist Degree in Educational Leadership, Belhaven University, Jackson, MS, May 2019.

Rachel McMullen (MLIS, 2019) is Reference Librarian, Waukegan Public Library, Waukegan, IL.

Nathan Morris (MLIS, 2017) is Reference and Instruction Librarian, Central Georgia Technical College, Warner Robins, GA.

Tamara M. Nelson (MLIS, 2009) is Associate Professor, Senior Research & Learning Services Librarian, University of Tennessee Health Science Center, Memphis.

State Law Librarian Stephen Parks, J.D. (MLIS, 2013) presented "The State Law Library: Its Origins, Leaders, & Role in State Government" April 10, National Library Week, Old Capitol Museum, Jackson.

Bonnie Pinkston (MLIS, Archival Certificate, 2018) is Reference Librarian, Benjamin L. Hooks Central Library, Memphis, TN.

Judy Reedy (MLIS, 2009) is Branch Librarian, U.S. Court of Appeals Library for the Fifth Circuit, Jackson Satellite Library, MS.

Jennifer Nabzdyk Todd (MLIS, 2014) Circulation Librarian, Hinds Community College McLendon Library, Raymond, MS, earned AA Degrees in Cyber Security Technology & Computer Network Technology, Hinds Community College.

Laura Smith (MLIS with Licensure Emphasis, 2019) is School Librarian/Media Specialist, Mt. Carmel Elementary School, Huntsville, AL.

Cynthia Sturgis-Landrum (MLIS, 2006; Doctoral Candidate, Simmons University School of Library and Information Science) is Deputy Director, Office of Library Services, Institute of Museum and Library Services (IMLS), Washington, D.C., where she oversees the Grants to States program, the primary source of federal funding for U.S. library services, and the agency's discretionary grant programs, including

National Leadership Grants for Libraries and the Laura Bush 21st Century Librarian program.

Elaine Walker (MLIS, Archival Certificate, 2019) is Graduate Studies Librarian/Assistant Professor, Mississippi University for Women, Columbus, MS.

Daniel Wilson (MLIS, 2012), Director of Library and Learning Services, American Intercontinental University, earned a Ph.D. in Leadership with a specialization in Higher Education Student Personnel Services, University of the Cumberlands, May 2019.

Alum Publications, Presentations

Stephen Parks, J.D. (MLIS, 2013), State Law Librarian, was the featured speaker, Special Libraries Section, Mississippi Library Association, Meridian, October 18, 2018. Stephen also serves as editor of *Letters from the Library: Newsletter of the State Law Library of Mississippi.*
https://courts.ms.gov/research/statelibrary/Newsletter/Newsletter_archive.php

SLIS Faculty/Staff Publications, Presentations

Dr. Matthew R. Griffis, "Meeting Users Where They are: Reinventing Information Provision through Roving Models of Service." *Advances in Library Administration and Organization*, 39(1), 35-65.

Dr. Teresa Welsh, "SLIS Notes: Professionalism, Basic Competencies, Specialized Competencies, Children's Book Festival 2019, Cook Library Gallery Exhibit," *Mississippi Libraries,* Spring, 82(1), 18-20.

Dr. Teresa Welsh, "SLIS Notes: Origins and Power of Storytelling, Why Storytelling is Important, Categories of Stories, Art of Storytelling, Free Storytelling Resources, Storytelling Class, ALA Annual Conference," *Mississippi Libraries*, Summer, 82(2), 30-33.

Southern Miss School of Library and Information Science
www.usm.edu/slis

Julie Gore, President
Leah Peters, Vice-President
Ashley Marshall, Secretary/Treasurer
Mrs. Jessica Whipple, Faculty Advisor

LISSA broadcasts its meetings online and meeting dates and links are announced via the SLIS listserv. You are invited to join our Facebook page: www.facebook.com/southernmisslissa

To join LISSA, complete the form at https://goo.gl/forms/tTK04iCt1fBaLXs73 or email jessica.whipple@usm.edu.

ALA Student-to-Staff
By Whitney Baswell

This past June, I was selected to participate in the American Library Association's Student2Staff program at the annual conference in Washington, D.C. Taking part in the program meant working four hours per day to help with the conference, while also having time to explore the exhibit halls and attend sessions. This was not my first time in Washington, D.C. but it was my first experience at ALA annual. I met students from other parts of the country (and Canada), and spent time networking and learning about everyone's experience in their programs and their plans.

We were split up to assist various departments within the ALA conference, and I was assigned to the **International Relations Office**. My work consisted of working the registration table to check attendees in and giving them credentials for the conference. I was also involved in the orientation for our international guests and participated in the reception for international librarians at the **Library of Congress.**

This experience was memorable for me because I was able to attend great sessions on topics such as diversity, inclusion, digital collections, technology, and crowdsourcing projects. I networked with other students in LIS programs, as well as professionals in the field all over the world.

The exhibit hall was daunting, but I was able to get a lot of info about vendors and technology companies, and I snagged a couple of pre-print books. I stood in line to meet the Librarian of Congress, Dr. Carla Hayden, as well, which was amazing!

Being in Washington, D.C. was a great opportunity. I was able to go to the Summer Solstice event at the National Museum of African American History and Culture, walk around the national mall, and have dinner at some great restaurants. The conference had shuttles to the Library of Congress, so I was able to visit the exhibits and reading rooms while there.

The trip overall was wonderful. I met so many great colleagues and students across the country, I have a list of great resources to point patrons to, and I was able to immerse myself in many facets of the library world. I would encourage anyone to go to the ALA conference if they are able.
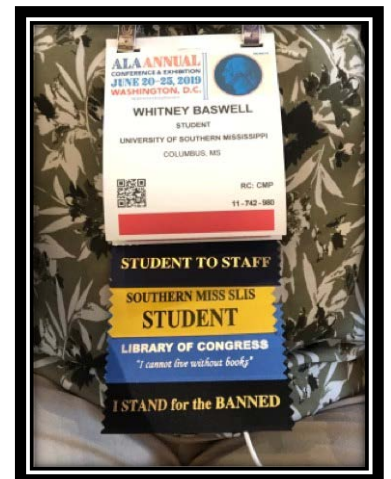
**Southern Miss Student Archivists (SMSA)
Spring/Summer 2019**

Ariel Jordan, President
Lauren Clark Hill, Webmaster
Roxanne Mack, Secretary
Dr. Cindy Yu, Faculty Advisor

Two students earning a Graduate Certificate in Archives and Special Collections were chosen to participate in USM 2019 Student Curated Exhibits program in spring 2019.

SLIS graduate students **Karlie Herndon, Ariel Jordan,** and **Eunice Joseph** were members of the 2019 British Studies LIS class led by **Dr. Welsh** and Graduate Teaching Assistant **Ashley Marshall**. British Studies faculty and students stayed at the University of Westminster dorm Marylebone Hall in Central London with day trips to Oxford, Stratford-upon-Avon, and Bletchley Park, and site visits to the National Art Library, British Library, British Museum Archives, Blythe House, Barbican Library, King's College Maughan Library and Special Collections, Middle Temple Law Library, Royal Geographical Society Library and Archive, and Royal Maritime Museum Library and Archive at Greenwich.

John Carter, MLIS and archival certificate student, curated "Creating Little Imperialists: Nationalism and 'Otherness' in British Historical Children's Literature," which examined how children's literature instilled national pride in the British Empire, featured a diverse array of late-19th and early-20th-century novels, textbooks, picture books, and periodicals from the University Libraries de Grummond Children's Literature Collection.

Karlie Herndon, an English Lit Ph.D. student also earning an archival certificate, curated "The Magical Umbrella of Children's Literature," which examined ways in which everyday umbrellas become something special in children's books. The exhibit featured books, manuscripts, and illustrated cards by in the USM de Grummond Children's Literature Collection.

British Studies LIS Class of 2019

QQML and British Studies
By SMSA President Ariel Jordan

QQML
QQML (Qualitative and Quantitative Methods in Libraries International Conference) is a 5-day conference hosted in universities in some amazing cities such as Limerick, London, Istanbul, Chania, Athens, and Rome.

In May 2019, the conference was held at the European University Institute (EUI) in Florence, Italy. SLIS alum Marilyn Brissett, a reference librarian at the University of Virgin Islands who was previously a school librarian, led a workshop, "Writing for Wellness: Healing After Natural Disasters," on how a Virgin Islands school library got back up and running after a disaster. One thing that touched me was the account of students' writings based on how they felt before, during, and after the disaster. I really enjoyed that her session was interactive and participatory.

**Ariel, Dr. Vandy, Marilyn Brissett,
Florence, Italy**

SLIS alum, Dr. Vandy Pacetti-Donelson, Library Director/Archivist, U.S. Sports Academy, presented "Identification of the Nature of Scientific Specialties in Conference Proceedings," at a QQML session on bibliometric research chaired by Dr. Welsh. The great thing about QQML is that you can meet people from all over the world, network, and make friendships to last a lifetime.

British Studies
British Studies is an annual month-long study abroad program during the month of June in London, England. Many classes go including Library and Information Science, Business, Literature, History, Journalism, Creativity, Psychology, Theatre, and Oceanography. The classes stay at the University of Westminster dorm across from Bakers Street Tube Station and Madame Tussauds in central London.

The LIS class visited a variety of libraries, archives, and museums in London and Oxford. Favorite places in London included Kings Cross Platform 9 ¾, the Harry Potter Shop in Kings Cross, and Madame Tussauds Wax Museum.

Much is learned through British Studies that is not just in the classes. Living away from home for a month teaches a young adult how to be independent and get better at money management. It also helps to teach young adults how to connect with other cultures. The best thing about British Studies is the friends and connections you make and being able to travel to places on the other side of the world.

Barbican Library

Council on Community Literacy and Reading
Dr. Catharine Bomhold, Director

The mission of the CCLR is to provide books for children to own, and to educate parents on the importance of reading out loud to young children. To this end, we look for opportunities where we can talk to parents and caregivers about the benefits of reading aloud to children, provide literacy activities for children, and give them new high-quality books to take home. Since 2015, CCLR has given away more than 10,000 new books to children in Hattiesburg and South Central Mississippi.

Book Sale Fundraiser: A book sale to raise money for the CCLR, which resulted in $1,000 to purchase new books for giveaways, was held during the 2019 Fay B. Kaigler Children's Book Festival, April.

Little Free Libraries and The Library of Hattiesburg, Petal, and Forrest County: CCLR is the steward for three Little Free Libraries in downtown Hattiesburg. Hundreds of children's and young adult books were distributed throughout Hattiesburg through donations to the Little Free Libraries as well as to the Hattiesburg Public Library.

Book distributions: Hundreds of new books were distributed to local children during March 2019 at the Read Across America event in Chain Park.

Read Across America, March 2
Chain Park, Hattiesburg

Only $1 will buy a book for a child; $80 will sponsor a book walk with 2 deconstructed books.

If you would like to help, send a check made out to USM SLIS to:
CCLR/ Dr. Catharine Bomhold
118 College Drive, #5146
The University of Southern Miss
Hattiesburg, MS 39406

Hashtag Marbled Monday:
A Webometric Analysis of Academic Special Collections Outreach on Instagram
By Carla Fulgham

Masters Research Project
May 2018
Readers: Dr. Teresa Welsh
Dr. Matthew Griffis

Introduction

Increasingly, scholarly communication in the field of libraries and special collections evaluates the use of social media platforms to promote resources and collections. Most studies involving special collections and social media have been published in the last ten years, with more publications occurring in 2016 and 2017 than in past years. Many reports reflect the importance of social media as a platform to create broader online visibility for special collections and access to their collections. Much attention has been given to blogs, Facebook, Tumblr, and especially Twitter. However, relatively little research has been conducted on the use of Instagram as a social media platform for academic or other special collections. Instagram engages a younger, more diverse audience than other social media platforms (Salomon, 2013), making it an ideal candidate for academic special collections looking to engage their institution's student body.

This study used webometric analysis to assess the most successful strategies for engaging Instagram users in academic special collections. Data were collected from five academic special collections Instagram accounts to analyze their activity during the month of April 2018. Data considered in the study include average number of likes per post, average number of hashtags per post, and most common hashtags and content. The results of this analysis may serve as a recommendation for best practices for academic special collections interested in, or already using Instagram as a platform, to engage students and other Instagram users in their collections.

Purpose Statement

The purpose of this webometric analysis is to identify successful academic special collections' Instagram outreach strategies by analyzing content and follower engagement.

Research Questions

R1. Which academic special collections' Instagram accounts have the most followers?

R2 On what day of the week do these special collections post content?

R3. Of these special collections, what types of visual content are most common?

R4. Of these special collections, what types of hashtags are most common?

R5. What Instagram activity, including number of posts and hashtags, generate the most likes?

Definitions

Instagram: "the brand name of a photo-sharing and social media software application, launched in 2010" (Dictionary.com, 2019).

Quantitative Methods: Babbie (2010) and Muijs (2010) explain that "Quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data through collected polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques. Quantitative research focuses on gathering numerical data and generalizing across groups of people to explain a particular phenomenon" (USC Libraries, 2017).

Social Media: "websites and other online means of communication that are used by large groups of people to share information and to develop social and professional contacts" (Dictionary.com, 2019).

Delimitations of the Study

The study analyzed Instagram activity of selected academic special collections in April 2018. The study does not attempt to determine whether Instagram is the best choice of social media platform for academic special collections, nor does it argue the benefits of social media platforms in general. The value of creating an Instagram account should be at the discretion of individual special collections. Furthermore, the study was limited to the Instagram platform. Sharing of special collections Instagram content on other social media platforms, or the use of "regram" applications, were not considered.

Assumptions

It is assumed that number of followers and average number of likes per post can be accurately determined and is a fairly reliable indicator of degree of success.

Importance of the Study

Among the articles found during the research process for this study using *Library & Information Science Source* and *Library, Information Science & Technology Abstracts* databases, no previous study of special collections Instagram activity was located. While a few studies mention Instagram as a potential social media platform for special collections, none of these measure successful strategies for sharing special collections content on Instagram. This study builds on previous literature that points to the benefits of social media platforms for special collections and aims to provide a model for best practices for other academic special collections seeking to engage online users through Instagram.

Literature Review

Scholarly literature in the last decade has examined the role of social media platforms in increasing the visibility of libraries and special collections. Many of these publications focus on Facebook and Twitter, with some others considering Tumblr and Flickr as useful platforms for libraries and special collections. Augustyniak and Orzechowski (2017) report on the Othmer Library's participation in various social media platforms. The authors emphasize the importance of social media platforms contributing directly to the institution's mission statement. Furthermore, it is important that special collections select social media platforms that best serve that institution's user demographics, as well as provide the best platform for the institution's content. According to the authors, "Each platform and its user community have specific expectations and standards when it comes to posts" (para. 12). Length of text and visual components in posts should vary according to the platform being used.

Salomon (2013) examines the usefulness of Instagram as a platform for engaging students in library resources. Salomon reports that the UCLA Powell Library chose Instagram as a social media platform "because it reaches a young, urban, and diverse demographic" (para. 1). Unlike other platforms, which rely more heavily on text content, Instagram posts should be foremost visually engaging (Augustyniak & Orzechowski, 2017; Salomon, 2013). Relying primarily on a post's visual appeal, Instagram content should also make use of brief textual components to engage students by encouraging their input (Salomon, 2013). Instagram is an ideal platform for engaging young, diverse audiences and for displaying visual content.

Review of Published Research

Recent case studies in the field of special collections report on the use of social media to promote collections.

Garner, Goldberg, and Pou (2016) published a case study detailing a collaborative social media campaign by the New York Academy of Medicine Library. The campaign #ColorOurCollections was launched using platforms Twitter, Facebook, Instagram, and Pinterest. Responding to the popularity of adult coloring books, the Library engaged social media users by inviting them to print, color, and share digital images from the collection. Using Twitter Analytics, Facebook Insights, Hashtracking, and WordPress Analytics, Special Collections analyzed the campaign and found that some of the most important factors in the success of the campaign were timing, early recruitment of participating institutions, ease of participation, and interactivity (Garner, Goldberg, & Pou, 2016).

Lawrimore (2017) reported on a similar case study that examined efforts at the University of South Carolina at Greensboro's Special Collections to engage students on social media platforms Twitter, Tumblr, and Facebook. Twitter was identified as an ideal platform because of the young age demographic of its users, and because the University had a Twitter presence. Through carefully planned implementation, and with the cooperation of the University's social media specialists, Special Collections successfully used these platforms to engage a broader community of users.

Lawrimore (2017) reported that Special Collections found social media to be "an essential resource if archives and special collections wish to reach and grow our audience and our audience's understanding of the valuable work we do" (p. 16). Both Garner, Goldberg, and Pou (2016) and Lawrimore (2017) case studies reported on the key role social media played in engaging students and online users in their special collections.

Empirical research reports also indicate the importance of a social media presence for special collections. Griffin and Taylor (2013) conducted a study in May 2012 that analyzed publicly available data from the social media profiles of 125 special collections units of American Research Libraries member libraries. Platforms analyzed in the study were blogs, Flickr, Facebook, Twitter, YouTube, iTunes U, Google+, Pinterest, and HistoryPin. The authors calculated the success of ARL special collections by calculating Return on Investment (ROI) and found that moderate success was achieved in advertising events and collections, but that special collections had little success using social media to engage external users (Griffin & Tomaro, 2013).

More recently, Anderson (2015) conducted a quantitative analysis to discover how United States libraries and special collections are using Tumblr. Rather than weighing the benefits of Tumblr as a platform, the study collected data at three points during a one-year period on library type, start date, number of posts, average posts per day, type of post, and other descriptive information. The findings of the study showed a growing presence of all types of libraries and special collections on Tumblr (Anderson, 2015).

This study takes a similar approach to collecting quantitative data concerning special collections' use of Instagram. Like Anderson's study, this study does not seek to make recommendations on the usefulness of adopting social media platforms but rather investigates how special collections engage Instagram users with posts, hashtags, and other activity. Apart from Salomon's 2013 news article, which reports on the benefits of adopting Instagram to engage a younger, more diverse group of online users, no articles or studies focusing solely on Instagram were found in the literature. Furthermore, those articles and studies that do mention Instagram as a possible social media platform did not investigate the most successful strategies special collections can implement in using Instagram as a platform for their collections.

Building on Salomon's (2013) recommendation of Instagram as a successful platform for a student demographic, and adopting similar methods used by some studies to analyze other social media platforms, this study analyses successful Instagram activity by academic special collections. The results of the study may be used by other special collections who are currently using or interested in using Instagram as a platform to engage students and other Instagram users.

Methodology

The study used webometric analysis of selected academic special collections Instagram accounts. Data collected includes average number of likes per post, average number of hashtags per post, and most common hashtags and content. The results of the study indicate successful strategies for academic special collections seeking to engage Instagram users in their collections.

Data Collection

An initial search was conducted using the Instagram Application Programming Interface (API) with search terms "special collections" and, separately, "archives." Results showing profile accounts, not hashtags, were selected for consideration. Results were further refined to include only those profiles that linked to their academic special collections home page, or that could be verified as an extension of an academic special collection using an online search.

Of the profiles located using search terms "special collections" and "archives," twenty-five were verifiable as belonging to academic special collections. Five accounts were selected from these results as having the highest number of followers. These accounts were @fitspecialcollections of the Fashion Institute of Technology Special Collections and College Archives; @uispeccoll of University of Iowa Special Collections at the Main Library; @um_spec_coll of University of Miami Special Collections at Merrick Library; @unlvspeccoll of University of Nevada, Las Vegas Special Collections and Archives at Lied

Library; and @jeffarchives of Thomas Jefferson University Archives and Special Collections at Scott Memorial Library. Data were collected from these five accounts measuring activity for the month of April 2018. Average number of likes per post, average number of hashtags per post, and common hashtags and content were collected for analysis.

Data Analysis

The five special collections' Instagram accounts were analyzed to determine Instagram activity over a one-month period. Data produced by the special collections during April 2018 were collected on May 6, 2018, to allow time for Instagram users to find posts using hashtag searches and to like posts. Collecting data on each post as it was published would have yielded much lower numbers. Average number of likes per post for each account was measured and compared to each account's average number of hashtags per post and total number of posts. Data were also collected to discover the most common hashtags, content, and days of the week to post among all five special collections accounts. The content of each post was analyzed based on two categories: visual content and type of post.

Visual content was further described using the following categories: bookbindings (cover, spine, fore-edge, endpapers, and fold-outs); ephemera covers; event photos; event posters (digital and photos of posters); illustrations (sketches and print); maps; manuscripts; archival photographs; and snapshots of people (special collections professionals and visitors).

Type of post was described using the following categories: collections; event or exhibit; holiday (holidays, days in history, national calendar days); reposts; professional spotlights (library professionals, students, and visitors); university archives; and posts featuring weekday-themed hashtags. Categories within visual content and type of post were not mutually exclusive. For example, a post might feature an ephemera cover with a print illustration. Likewise, holidays and weekday posts were used to highlight items from collections.

Limitations

The study was limited to the search capabilities of the Instagram API and search terms "special collections" and "archives." Some academic special collections, repositories, or archives may not use the terms "special collections" or "archives" in their Instagram profiles and therefore were not retrieved for this study. Other factors that may have impacted the study are how long a special collection has had an Instagram account and the size of an institutions' repositories and student bodies. Those institutions with longstanding Instagram accounts and large repositories and student bodies may have more followers than smaller institutions or those with newer Instagram accounts. Furthermore, the results of this study are contingent on when data were collected. Over the course of only a day or two, an already popular Instagram account will likely grow in followers and its older posts receive more likes.

Results

R1. Which academic special collections' Instagram accounts have the most followers?

The Fashion Institute of Technology (FIT) Special Collections and College Archives' @fitspecialcollections had the highest number of followers at 13,400 with a total of eighteen posts and average number of hashtags per post of 12.67. The University of Iowa (UI) Special Collection's @uispeccoll had 9,537 followers with a total of twenty-two posts and average number of hashtags per post of 12.67. The University of Miami (UM) Special Collections' @um_spec_coll had 3,461 followers with a total of ten posts and average number of hashtags per post of eleven. The University of Nevada, Las Vegas (UNLV) Special Collections' @unlvspeccoll had 3,346 followers with a total of nine posts and average of 7.18 hashtags per post. Thomas Jefferson University (TJU) Archives and Special Collections' @jeffarchives had 3,317 followers with an average of 7.4 hashtags per post.

FIT Special Collections and College Archives had the highest average of likes per post at three percent of total followers. The remaining four special collections' accounts each had an average of likes per post of two percent of total followers.

R2. On what day of the week do these special collections post content?

Among all five accounts, Monday through Thursday were the most popular days for posting content, Monday holding the highest number of posts at thirteen (Figure 1).

Figure 1. Number of Posts per Weekday
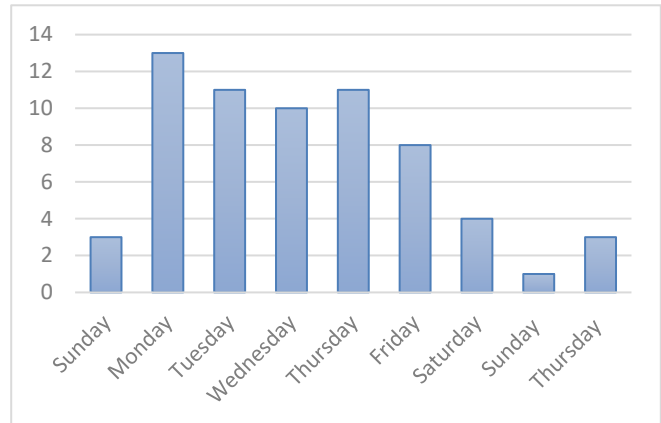
R3. Of these special collections, what types of visual content are most common?

The most popular visual content (Figure 2) among all five special collections accounts were illustrations at thirty-one percent, followed by bookbinding and archival photographs at nineteen percent each.

Figure 2. Types of Visual Content

R4. Of these special collections, what types of hashtags are most common?
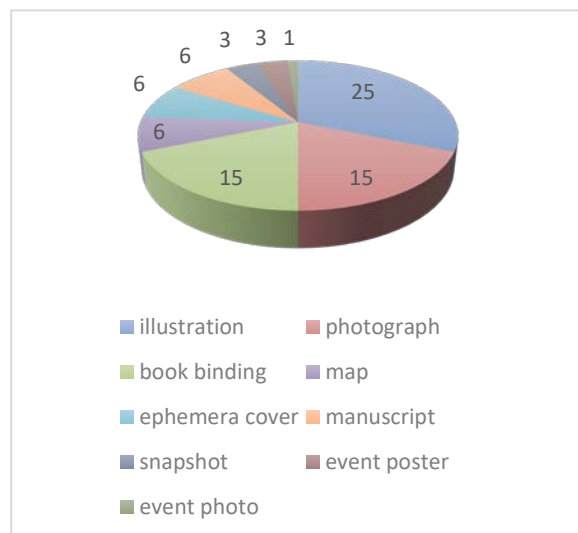
The most popular types of posts (Figure 3) were those featuring collections items at fifty-four percent and posts featuring weekday hashtags at fifteen percent.

Weekday hashtags included #marbledmonday; #maniculemonday; #manuscriptmonday; #miniaturemonday; #typetuesday; #worldofwednesday; #publishersbindingthursday; #foldoutfriday; #foreedgefriday; #sundayfunday; and #endoftheweekpapers. Only #marbledmonday occurred more than once among all five archives with a total of four hashtags. The most popular hashtags among all five accounts were #specialcollections totaling fifty-four hashtags, #iglibraries totaling twenty-nine hashtags, and #librariesofinstagram totaling twenty-two hashtags.

Figure 3. Types of Posts
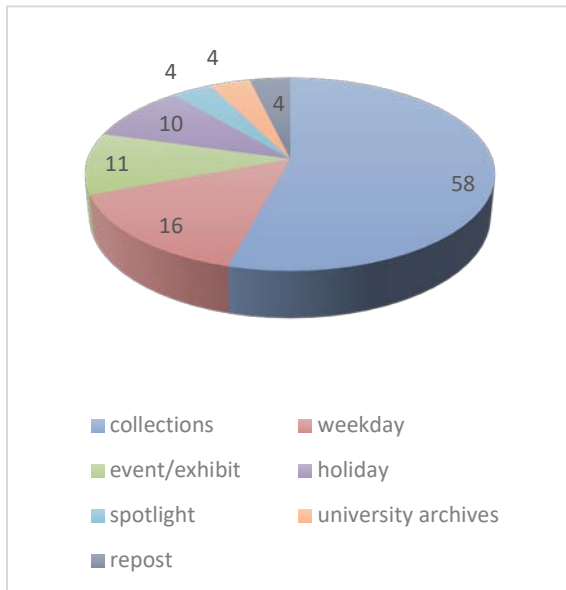
R5. What Instagram activity, including number of posts and hashtags, generate the most likes?

As indicated in Table 1, the greatest number of posts is not related to the greatest percentage of likes. Sites with the lowest number of posts generated the same or greater percentage of likes than sites with the highest number of posts.

Table 1. Number of Posts and Percent Likes

Account name	Total # posts	% likes
uispeccoll	22	2%
fitspecialcollections	18	2%
um_spec_coll	10	2%
unlvspeccoll	9	3%
jeffarchives	5	2%

As indicated in Table 2, the greatest number of hashtags is related to the greatest percent of likes. Sites with the highest number of hashtags generated the highest percent of likes.

Table 2. Number of Hashtags and Percent Likes

Account name	Ave. #hashtags	% likes
unlvspeccoll	13.56	3%
fitspecialcollections	12.67	2%
um_spec_coll	11	2%
jeffarchives	7.4	2%
uispeccoll	7.18	2%

Discussion and Conclusion

Instagram was designed for photo sharing, so it has a stronger visual element than other social media platforms that incorporate more textual content. Its visual nature makes Instagram an ideal platform for special collections to showcase attractive items in their collections. Illustrations, book bindings, and archival photographs comprised sixty-nine percent of total visual content analyzed in the study. These posts are eye-catching and likely to attract an audience who may not already be familiar with a special collections repository.

"Snapshot" posts featuring photos of special collections professionals and visitors received only four posts among all five special collections accounts and an average of 42.75 likes, relatively few compared to the overall average of 143.33 likes per post.

On one hand, keeping these posts to a minimum may sustain the interest of followers who are not affiliated with special collections. However, none of the four snapshots included current students.

The University of Iowa Special Collections' @uispeccoll published a "spotlight" post on April 19th celebrating a student worker's thesis defense but the post did not include a photo of the student. Photos of students might encourage them to follow special collections' Instagram accounts and engage with special collections in general. Still, there is something to be said for aesthetics. Like it or not, an illuminated manuscript or vintage photograph will draw more attention than a snapshot of a librarian at work.

Consistency of aesthetic is something FIT Special Collections, UNLV Special Collections and Archives, and TJU Archives and Special Collections share. FIT Special Collections' @fitspecialcollections featured strictly vintage fashion photographs, design sketches, and catalog advertisements. UNLV Special Collections and Archives' @unlvspeccoll featured mainly vintage materials related to Las Vegas travel and entertainment. TJU Archives and Special Collections, traditionally a medical university although it now offers some other academic programs, posted only vintage and antique items from their university medical collections. While many special collections may not own illuminated manuscripts or vintage Christian Dior, frequently highlighting certain collections may boost visibility.

The findings of this study suggest that using a variety of hashtags, thoughtfully selecting visual content, and engaging in hashtag trends may be some of the most useful strategies special collections can employ when using Instagram as a social media platform. The study found no correlation between higher numbers of total posts and average likes per post (Table 1). However, the average number of hashtags per post seems to be related to the average number of likes per post since UNLV Special Collections had both the highest average number of hashtags per post (13.56) and the highest average of likes per post based on total number of followers (Table 2).

Popular hashtags #specialcollections, #iglibraries, and #librariesofinstagram may be widely used among many libraries and special collections on Instagram so using these hashtags alone may not help posts stand out in Instagram searches. Since hashtags function as metadata, assigning a variety of hashtags to every post makes posts more findable using Instagram's API search capabilities. The five special collections Instagram accounts analyzed in this study used a range of hashtags that not only described posts as special collections or library content, but also used hashtags with a variety of information such as regional themes, holidays, and institutional names to make their content discoverable to Instagram users who may not be searching specifically for special collections.

Using hashtags and content with calendar day and weekday themes was another common strategy among the five special collections accounts analyzed in the study. Calendar days featured in their April posts included Easter, national pet day, national siblings day, and the anniversary of Abraham Lincoln's assassination. Each of these "holidays" was hashtagged accordingly: #easterbonnet; #easterbunnies; #retroeaster; #abrahamlincolnassassination; #nationalpetday; and #nationalsiblingsday. The visual content of these posts, of course, fit the occasion. For example, UNLV Special Collections and Archives' @unlvspeccoll published an April 2nd post of a cover of Fabulous Las Vegas from 1954 featuring an illustration of two "bunnies."

While holiday hashtags did not comprise a significant percentage of the five accounts' total posts, weekday hashtags made up fifteen percent of total posts and combined, calendar day and weekday hashtags made up nineteen percent of total posts. Hashtag #marbledmonday was tagged by each of the special collections accounts except for @fitspecialcollections.

Tagging #marbledmonday allows special collections an opportunity to showcase old and rare books with attractive marbled endpapers or fore-edges. Like most of the weekday hashtags used by the five special collections, #marbledmonday is specific to special collections.

Other weekday hashtags specific to special collections included hashtags like #endoftheweekpapers which featured attractive endpapers. The only weekday hashtag that was not specific to special collections was @um_spec_coll's #worldofwednesday which had no apparent relationship to the post, a ca. 1850 map of the Franklin Expedition. However, using weekday hashtags that are not specific to special collections may draw new followers.

Apart from weekday hashtags, another trending hashtag was #mapsinthelibrary, occurring a total of seven times. Hashtag #mapsinthelibrary is a trending Instagram "challenge" associated with #librariesofinstagram. Following current trends in library and special collections' hashtags is an excellent strategy for special collections looking to increase the visibility of their Instagram content. Capitalizing on visually engaging collections and utilizing the power of hashtags as metadata are strategies that all five of the successful special collections Instagram accounts took advantage of effectively.

All five special collections accounts follow one another on Instagram. Following other special collections on Instagram encourages interaction, sharing followers, and helps archives keep abreast of the latest trending special collections hashtags and activity. Connecting with other special collections on Instagram creates an online community with similar interests and goals and makes reaching Instagram users more achievable.

Future studies in special collections on Instagram might explore how smaller special collections are connecting and reaching their student bodies and other Instagram users. Smaller institutions might also shed light on how special collections divide social media responsibilities among staff and manage time devoted to posting on social media. The larger institutions evaluated in this study may have fewer challenges in these areas because of larger budgets and staff resources. Nevertheless, their content and hashtagging may offer a model for special collections of any size interested in

using Instagram as a platform for outreach.

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Finding Government Resources Online:
A Webometric Study of Selective Federal Depository Library Websites
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Masters Research Project
May 2019
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Introduction

Over eleven hundred libraries across the United States and its territories participate in the Federal Depository Library Program (FDLP) by providing public access to free government resources. In the last decade, there has been a significant shift as many government publications are being published only electronically. At the same time, several older physical collections are being digitized and made available online. This shift has caused many FDLP libraries to weed their older physical government document collections and increase their electronic holdings.

These changes have also resulted in updates to the requirements for libraries in the FDLP. According to the legal requirements of the FDLP, libraries in the program must identify their FDLP status on their websites. One rule states that a "depository of Federal government information may be visible through cataloging, information on Web pages, or other promotional efforts" (FDLP, 2018, p. 6)

The reduced size of physical government document collections in FDLP libraries often result in government document librarians taking on other duties, while the smaller collections become less visible to the public. At the same time, the massive amounts of electronic resources produced by the government are becoming harder to navigate as this information grows (Chun & Warner, 2010; Bertot, Gorham, Jaeger, Sarin, & Choi, 2014). The electronic government document records produced by the Government Publishing Office (GPO) increased from 10,580 in 2017 to 13,666 in 2018, a growth rate of twenty-three percent (GPO.gov, 2019).

The increasing electronic government publications can make researching these resources difficult without research guides and knowledgeable reference assistance. It is now more important than ever to provide access and online reference for these collections which are becoming more intangible every year.

Purpose Statement

This study examines how Federal depository libraries in the United States provide information about their government document collections and other government resources on their websites.

Research Questions

R1. How many Federal depository libraries in this study have government resource pages linked directly to the library's homepage?

R2. How many Federal depository libraries in this study offer subject or research guides about their own government document collection?

R3. How many Federal depository libraries in this study offer information about, recommendations for, or links to government websites or external resources?

R4. How many libraries in this study have some other form of online reference services devoted to government resources on the library website?

Definitions

Federal Depository Library Program (FDLP):
"Established by Congress as part of the Printing Act of 1895 to assure access for the American public to government information, the FDLP authorizes the U.S. Government Printing Office (GPO) and

contractors to distribute without charge copies of federal government documents to designated depository libraries in the United States (and its territories) that agree to provide unrestricted access and professional assistance at no charge to the user." (Reitz, 2017).

LibGuide: "An easy-to-use content management system deployed at thousands of libraries worldwide. Librarians use it to curate knowledge and share information, organize class and subject-specific resources, and to create and manage websites" (Springshare, 2018).

Regional Federal Depository library: "A depository library designated by Congress to receive and retain permanently in its collections one copy of each government publication distributed free of charge in any format through the Federal Depository Library Program (FDLP). Regional libraries are also responsible for serving other depository libraries in their region by providing copies of government documents as needed and by assisting in the fulfillment of depository regulations" (Reitz, 2017).

Selective Federal Depository Library: "A depository library in the Federal Depository Library Program (FDLP) that receives only item numbers that fulfill the primary needs of users within the geographic area it is designated to serve, usually based on its stated mission. Most depository libraries are selective, receiving only a percentage of the total number of government publications available free of charge from the U.S. Government Printing Office (GPO)" (Reitz, 2017).

Webometrics also called *cybermetrics:* "Description and evaluation of the impact of the Internet as a scholarly communication tool, primarily by means of quantitative analysis of Web-based scholarly and scientific communications" (Reitz, 2017).

Delimitations
This study is limited to information provided on the websites of the Federal depository libraries selected for the sample. Any on-site promotion, (e.g., printed guides, flyers, or displays) are not included in this

study. Social media promotion (e.g., Facebook announcements, podcasts, or Pinterest pages) are also excluded from this study. This study does not address the quality or efficacy of the information and resources found on the library websites.

Assumptions
It is assumed that the libraries chosen for this study are active members of the FDLP program at the time the information is gathered. It is assumed that the websites visited for this study are up-to-date and complete.

Importance of the Study
This study is important in that it provides information on current trends in FDLP libraries' online access to government resources as well as reference guides and services to help researchers locate the government resources they need. The results of this study could help librarians learn more about what kinds of government information services are being provided by FDLP libraries and give them ideas for ways to improve their own services. This study may also provide important information to the administrators of the FDLP program by determining areas where FDLP libraries are lacking sufficient reference services or may be in need of more instruction or support. Finally, researchers using government information could find this study useful because it will make them more aware of the types of government information and reference services available on library websites.

Literature Review
Promotion of and access to government documents is increasingly vital to researchers as the nature of government document collections are in a state of transition. The FDLP program is undergoing significant changes as more government documents become available in electronic form. This is causing reductions in the physical collections of selective FDLP libraries, which also decreases the workload of government document librarians. Recently, government document librarians are adding additional duties to their job descriptions or they have a new job title, limiting their role and time spent in government document management.

The importance of libraries providing government information, guides, reference services, and links to resources is echoed in Duvall's 2010 article on searching for government information. The author offers some insight into the problems of searching through massive amounts of government data and explains the benefits of useful subject guides and reference help with finding useful government information (Duvall, 2010). Without online guides and reference services to provide assistance looking for government information, the researchers might choose incorrect sources, or give up on their searches altogether.

FDLP Libraries

In the last decade, researchers have published studies documenting changes in FDLP libraries. In Mack and Prescod's 2009 study, the authors looked at how the new emphasis on electronic government documents has affected depository libraries in three key areas: collections, government document librarian duties, and public service. They found that the job advertisements for government document librarians had decreased significantly between 1997 and 2007. Over this same period, the authors described trends of decreasing physical government document collections or storing them off-site and merging government reference services with traditional reference. The purpose of their study was to discover some solutions to providing information literacy and reference services for government documents in FDLP libraries (Mack & Prescod, 2009).

A study conducted by Burroughs (2009) to analyze the preferences of library users seeking government information offered a survey in both print and electronic formats to faculty, staff, and students at the University of Montana. The survey gathered information about service and format preferences, awareness and usage of government resources, and use of government reference or instruction. The survey's results showed a wide variety of preferred instruction methods, but clearly indicated a preference for electronic government materials, and an increased need for more web-based services and instruction for government document researchers (Burroughs, 2009).

Website Analysis

Ratha, Joshi, and Naidu (2012) published a webometric study of Indian Institute of Technology (ITT) libraries. In this study, the authors analyzed the total number of links, inactive links, web pages, and PDF and DOC file links are on each ITT library website. The authors also gathered quantifiable information about each websites' user supporting services and information services, as well as whether or not the websites offered a Hindi language version. They noted several areas where these websites could be improved and offered suggestions to enhance the user experience (Ratha, Joshi, & Naidu, 2012).

Another study conducted by Wilson (2015) analyzed the design and content of academic libraries in the state of Alabama by looking at 32 different factors. This study evaluated the location and availability of library catalogs, social media links, databases, services, and library and information guides. The author concluded that academic library websites in Alabama needed more accessibility to services and better web design (Wilson, 2015).

In 2018, Faulkner published a website analysis of the largest public libraries around the United States that focused on the entrepreneurship resources provided on these websites. The author first evaluated the websites using a timed, qualitative technique, followed by a second evaluation using a checklist developed for the study. Faulkner discovered that although library catalogs were very helpful in providing entrepreneur resources, the library websites were often lacking in information and resources (Faulkner, 2018).

A key study related to this study was conducted by Johnston (2011) in which the author analyzed the websites of certain FDLP libraries in order to obtain information about their online government guides and resources. Johnston's research suggested that most libraries included in the study provide government information subject guides both on government information pages and within the general subject guides for the libraries (p. 25). The study was limited to 32 regional depository libraries and 45 selective depository libraries, all of which

were located in large academic institutions. If this study had looked at a broader selection of selective depository libraries, the results may have been very different since they include public and community college libraries, which often have fewer staff and resources to provide online reference guides and finding aids.

Many of the studies focusing on FDLP library websites were published nearly a decade ago. Of these articles, only Johnston (2011) addresses similar questions to those posed in this study, although the scope of the author's study was limited to academic regional depository libraries and a limited number of large academic selective libraries. This study differs in that it examines a broader group of FDLP libraries while excluding the regional libraries that are already required to provide a higher level of government reference services to researchers. This study provides a comparison with earlier studies to see how or if the website resources of FDLP libraries have changed in recent years.

Methodology

The webometric study gathered information from the websites of selective Federal depository libraries to answer the research questions proposed.

Data Collection and Analysis

The libraries included in this study were selected from the 2018 FDLP Library Directory (https://catalog.gpo.gov/fdlpdir/FDLPdir.jsp). The directory listed 1,081 selective depository libraries in the FDLP. To find a sample large enough to represent the whole of FDLP libraries, one-third of these libraries were selected, every third library from the total list of selective FDLP libraries on a spreadsheet organized by alphabetically by state. The total sample included 361 libraries. This selection process ensured that libraries from across the country would be included. It also ensured the inclusion of different types (i.e., academic, public, special) and different sizes of libraries in the sample. Most libraries in this directory include a link to a webpage listing the library's depository status. The data for each library website were recorded on an Excel spreadsheet.

Each research question produced either a 'yes' or 'no' answer. To clarify the first research question, a note was also included listing the number of clicks it took to get to a government page if it was not available from the library's homepage. These data were then analyzed to determine the types and amounts of libraries with recorded positive or negative answers. The results are illustrated in a series of charts.

Limitations

For the purpose of this study, only the websites of selective Federal depository libraries were used. Regional Federal depository libraries were not included in this study because they are subject to stricter rules. It is expected that Regional libraries have more government information and reference services on the libraries' websites because they are responsible for larger collections and for overseeing all the selective FDLP libraries within the region.

The websites of the libraries included in this study were visited within a three-week period of March and April of 2019, but this window might have caught some website updates and missed others depending on when the website was viewed. This sample might also include a larger number of a particular size or type of library, due to the random selection process, which may have an effect on how accurately the sample represents the total number of selective FDLP libraries.

Results

During the research phase, seven libraries were removed from the sample because their websites could either not be accessed or did not have enough public information available to answer the research questions. This reduced the total sample to 354 selective FDLP libraries. Table 1 *(Appendix)* lists the number of each type of library included in the study, broken down by the size of the institution according to criteria used by the program (FDLP, 2008).
An analysis of the library type distribution in the sample compared to the overall amount of selective FDLP libraries found the variation was two percent or less for each library type, as shown in table 2.

Table 2. Comparison of Library Type between Sample and Total FDLP Libraries

Library Type	# Selective Libraries	% Selective Libraries	# Libraries in Sample	% Libraries in Sample
Academic libraries, general	587	54.3%	196	55.4%
Academic community college libraries	53	4.9%	18	5.1%
Academic law libraries	143	13.2%	39	11.0%
Federal agency libraries	34	3.1%	5	1.4%
Federal court libraries	10	0.9%	3	0.8%
Highest state court libraries	35	3.2%	16	4.5%
Public Libraries	174	16.1%	59	16.7%
Service Academies	4	0.4%	1	0.3%
Special Libraries	14	1.3%	11	3.1%
State libraries	27	2.5%	6	1.7%
TOTAL	1081		354	

R1. How many Federal depository libraries in this study have government resource pages linked to the library's homepage?

This first question focused on the accessibility of government information on selective FDLP library websites. To be considered linked directly to the homepage in this study, a link must appear either in the webpage content, attached to an FDLP logo, or listed in a drop-down menu that appears when a mouse hovers over it. A drop-down menu that requires a mouse click to open it is considered as one click.

The largest portion of the sample, 218 libraries (61.6%), did not have government resource pages linked directly to their homepages. The other 136 libraries (38.4%) do have pages accessible from the libraries' homepages. As shown in Figure 1, most of the libraries' government resource pages that are not available directly from the homepage are only one click away.

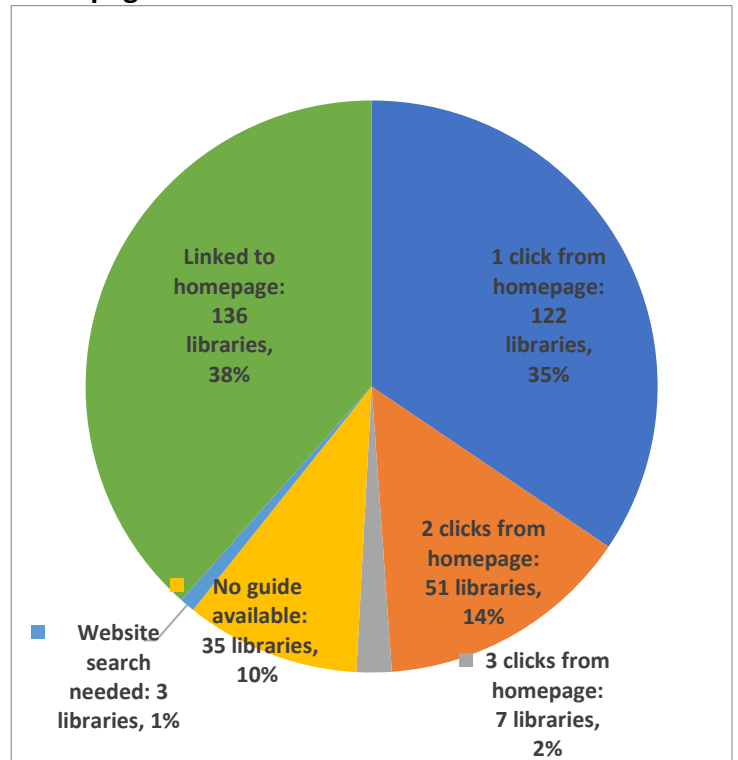**Figure 1. # Clicks of Government Info from Homepage**

Figure 2 shows the results broken down by library type. The library type that had the most direct homepage links to government resource pages were the highest state court libraries at sixty-three percent, followed by six state libraries (55%), two Federal agency libraries (40%), and seventy-seven general academic libraries (39%). Only one of the six special libraries (17%) had direct links to government resource pages. The remaining four types of libraries landed in the middle, with direct links on thirty-three to thirty-six percent of their homepages.

Figure 2. # FDLP Libraries with Homepage Links to Government Resources
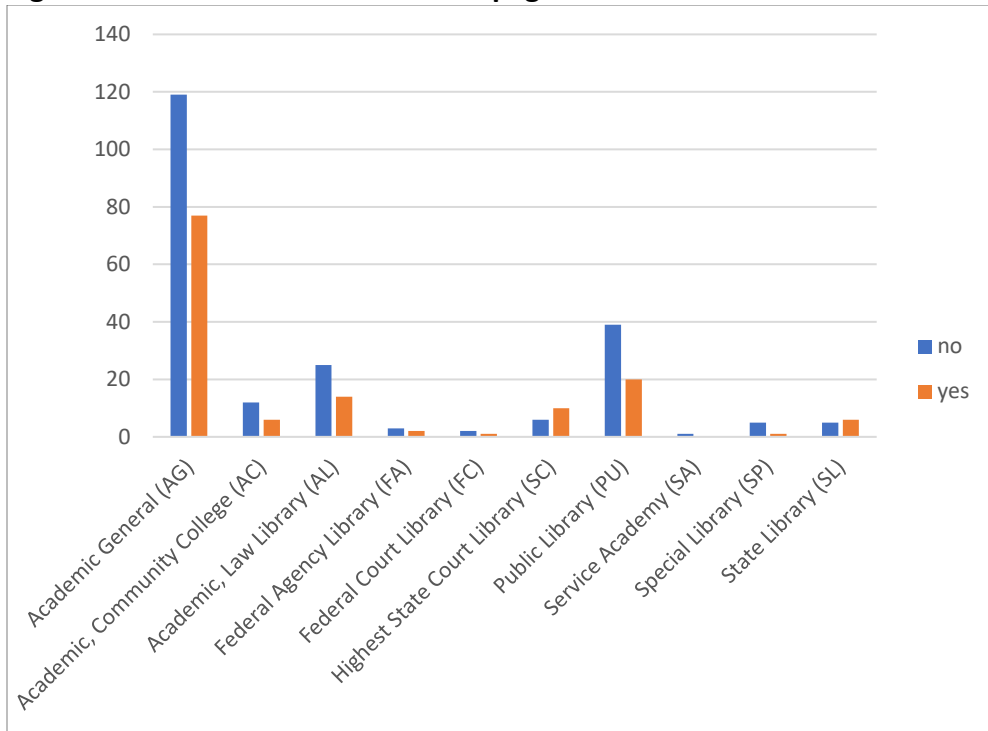
Figure 3. # FDLP Libraries with Guides
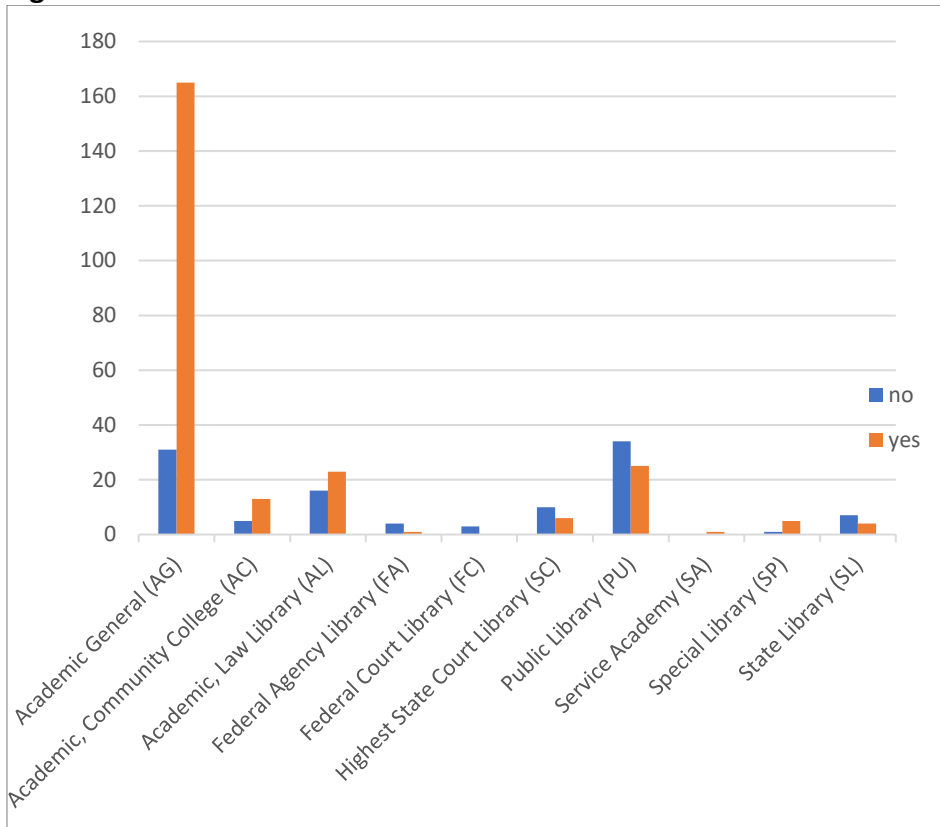
R2. How many Federal depository libraries in this study offer subject or research guides about their own government document collection?

A positive answer to this question required the library to offer some information regarding the library's government document collection areas, information about how to locate physical or electronic documents in the library, or information about the library's history and status in the FDLP. As illustrated below in Figure 3, 165 out of 196 general academic libraries (84%) had the most guides about their own collections, followed by five special libraries (83%), thirteen academic community college libraries (72%), and twenty-three academic law libraries (59%). The three Federal court libraries had no government collection guides. The other library types offering the fewest guides were Federal agency libraries (20%) four state libraries (36%), and highest state court libraries (37%). Public libraries were in the middle with forty-two percent. Many of the libraries registered with negative answers to this question had guides that only listed outside government resources.

R3. How many Federal depository libraries in this study offer information about, recommendations for, or links to government websites or external resources?

Figure 4 shows the results for this question below. The Federal agency, Federal court, and special libraries all had links to government websites or external resources listed on the webpages. Academic law libraries came in next with 188 of the 196 libraries (97%). Only thirteen of the sixteen highest state court libraries (81%) had links to external government resources, lowest among the FDLP libraries.

Nine state libraries (82%) were the next lowest, followed by fifty-one public libraries (86%). General academic and community college libraries were in the middle with ninety-six and ninety-four percent, respectively. Most of these libraries had government website links listed on government resource pages, but some were also incorporated into legal guides or database lists.

Figure 4. FDLP Libraries with Info/Links to Government Resources
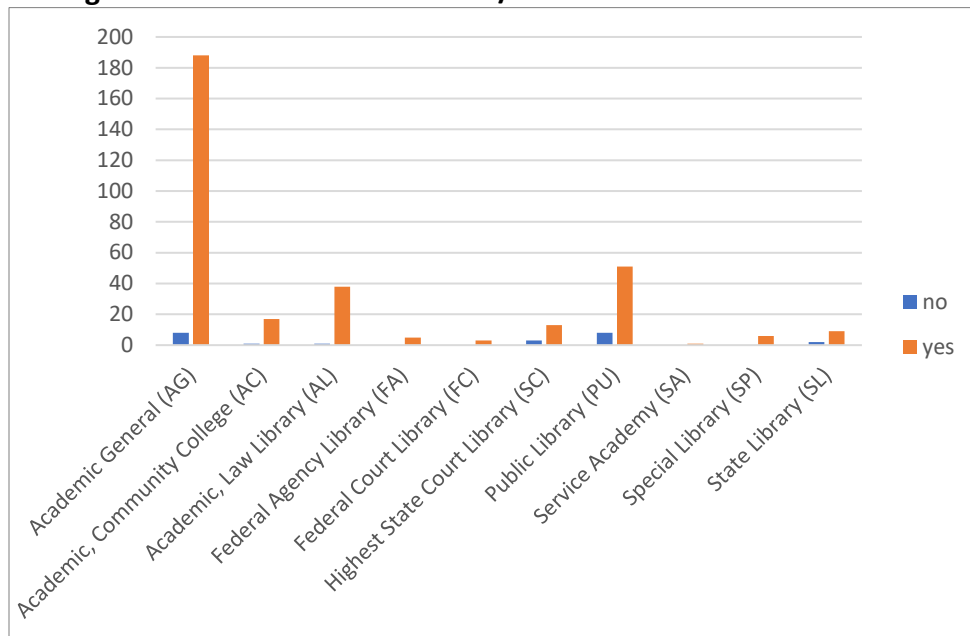
Figure 5: FDLP Libraries with Additional Forms of Reference Services
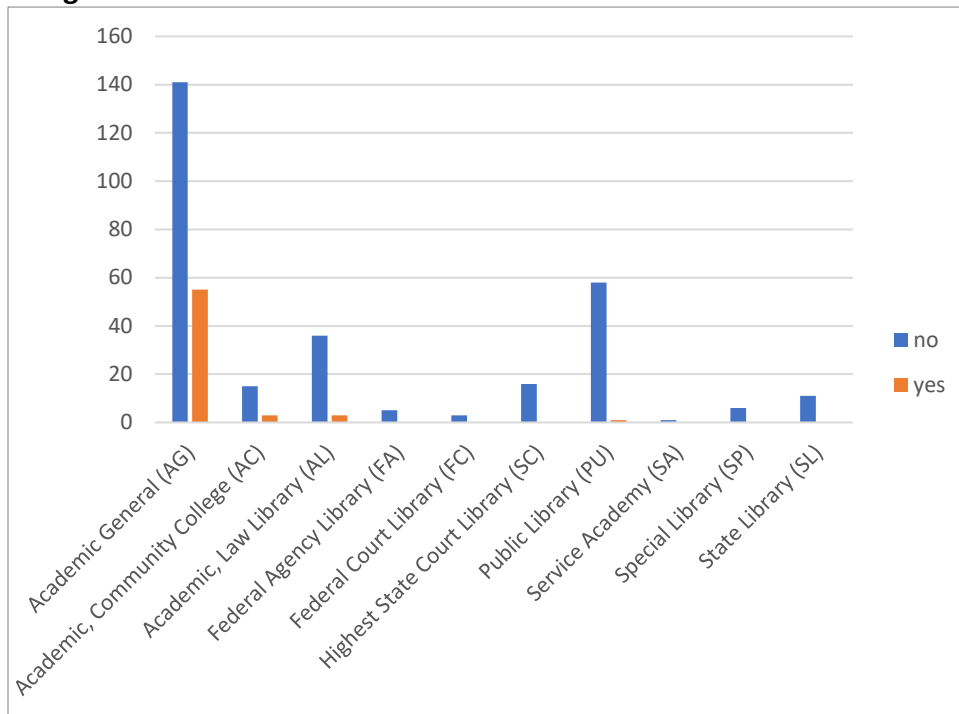
R4. How many libraries in this study have some other form of online reference services devoted to government resources on the library website?
Most libraries have general reference phone numbers and email addresses or forms on their websites. FDLP libraries have a listed government document coordinator with contact information listed in the FDLP directory. This question was asked to determine if the libraries in this sample were using other forms of online reference services, i.e. chat or appointment scheduling, specifically for government resources. Therefore, a library would have to offer more than the phone number and email link to a library liaison or government document coordinator on a government research page.

Figure 5 above illustrates that the academic and public library types were the only libraries in this study that offered other forms of online reference services dedicated to government resources. Twenty-eight percent or 55 of the 196 general academic libraries offer some other type of online reference service, followed by 3 of the 18 academic community colleges (17%) and 3 of the 39 academic law libraries (8%).

Only one public library in this study offers another type of online reference for government resources. These online reference services were often either a "schedule appointment" form or an online chat box in addition to the contact information of a library liaison or government document librarian.

Discussion and Conclusion
This study found that most libraries in the sample group maintained government resource pages of some kind on their websites, although these pages were not always linked directly from their homepages. The results suggested that most libraries were attempting to provide government resources and guidance to researchers. The difficulty in discovering these resource pages varied from library to library. Some websites had FDLP logos on their homepages linked directly to the resource page while others were listed under collections, resources, or LibGuides. The terminology used by the libraries also varied greatly. Libraries put these guides under names like Federal government, government documents, government resources, legislative history, or FDLP library.

The websites of the 35 libraries (10%) missing government research guides could be improved to better accommodate researchers.

More disappointing were the results of the second question about the availability of information about the library's physical and electronic collections. Even the highest-performing library type, academic libraries, had thirty-one libraries (16%) with little or no information about how to find government resources in their libraries or online through their catalogs. Johnson's (2011) study, limited to large academic libraries, delivered similar results. In that study, thirteen percent of the selective FDLP libraries provided access from government information only through general subject guides. Even libraries without physical collections should have some form of instruction about types of government documents the library selects and how they can be located in the catalog. Johnson (2011) argues that libraries without these types of guides "might miss those researchers who are seeking multi-disciplinary government data as well as miss the opportunity to instruct those not familiar with government information or how it is created or disseminated" (p. 26).

Libraries in this study were much more successful in providing links to government websites and other external government resources than they were in providing guides to their own research. Unfortunately, sometimes only a minimum of these resources was provided. A link to an outside resource still leaves the researcher finding materials on their own, especially if the main outside link is to the Catalog of U.S. Catalog of Publications or the Federal Depository Library Program page. Many researchers require more assistance to narrow down government information to a specific agency or subject. Duvall (2010) emphasized the importance of knowing where to begin searching for different types of government information, given the many government databases and websites available to researchers.

The last question in this study was how many selective FDLP libraries offered online reference services beyond the usual phone, email, and name of a librarian. The results were not impressive. Only

academic libraries, apart from one public library, offered other types of services, and the chat boxes offered often turned into email forms if the librarian was not in their office, or the library was closed. In another study looking at general chat reference in academic libraries, Wilson (2015) concluded that forty percent of those libraries did not offer reference chat services. This explains the much lower percentage of academic libraries offering these services specifically for government information in this current study.

The "schedule appointment" forms used in some of these libraries were more promising, offering the chance to schedule an appointment with a subject liaison or government documents librarian in person or virtually. While it can be argued that an appointment can be made as easily with a call or email, this feature assures the user up-front that appointments are a regular service provided by the librarians. A couple of libraries in this study also offered services like document request forms or Interlibrary loan request forms directly from the government resources pages. Interlibrary loan services are already available in most libraries, and a link to these services on research guides is an easy way to provide additional help for library users.

While some of the academic and public libraries in this study offered these types of online reference services, none of the other library types did. This could be due to a variety of factors, from limited staff and funding to a more generalized focus on reference. Many libraries did not mention a specific librarian in connection with government resources, leaving the research requests for the reference desk to answer. This can become a problem, especially if the reference desk staff are not sufficiently trained in government document research. Mack and Prescod (2009) concluded that this training would be critical for reference staff in libraries to continue providing quality reference services in government information. Furthermore, a government depository coordinator for each library must be listed in the FDLP Directory, so it makes sense that libraries should also be able to provide this information on their websites for researchers.

This study suggests that most libraries are comfortable with putting government resources on their webpages, but many fail to meet the mark when it comes to providing library collection information, and government information-specific reference services. Some of these deficiencies might be caused by the changing roles of government document librarians documented by Mack and Prescod (2011), or the increase of electronic government documents causing libraries to send researchers directly to the source, but this study shows that there is room for improvement in many selective FDLP libraries.

This study was a quantitative look at the online reference and resources of FDLP libraries, similar in subject and approach to Johnson's (2011) study of academic FDLP websites. While the data from these studies give an insightful look into the online government resources and reference services offered by FDLP libraries, the methods used limited the amount of information that could be gathered from these websites. A future qualitative study of the government reference services and resources of selective FDLP libraries similar in scale to this study would be beneficial to the field. Future research could record the vast differences in the quality of government resource pages and reference services in these libraries and possibly discover what factors impact the level of quality of these services in the different types of libraries.

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Appendix
Libraries in Research Sample Listed by Type and Size

Row Labels	Count of Library Type
Academic General (AG)	**196**
Large (more than 1,000,000 volumes in the library)	79
Medium (250,000 - 1,000,000 volumes in the library)	81
Small (less than 250,000 volumes in the library)	36
Academic, Community College (AC)	**18**
Small (less than 250,000 volumes in the library)	18
Academic, Law Library (AL)	**39**
Large (more than 1,000,000 volumes in the library)	2
Medium (250,000 - 1,000,000 volumes in the library)	33
Small (less than 250,000 volumes in the library)	4
Federal Agency Library (FA)	**5**
Large (more than 1,000,000 volumes in the library)	2
Medium (250,000 - 1,000,000 volumes in the library)	3
Federal Court Library (FC)	**3**
Small (less than 250,000 volumes in the library)	3
Highest State Court Library (SC)	**16**
Medium (250,000 - 1,000,000 volumes in the library)	3
Small (less than 250,000 volumes in the library)	13
Public Library (PU)	**59**
Large (more than 1,000,000 volumes in the library)	23
Medium (250,000 - 1,000,000 volumes in the library)	22
Small (less than 250,000 volumes in the library)	14
Service Academy (SA)	**1**
Medium (250,000 - 1,000,000 volumes in the library)	1
Special Library (SP)	**6**
Large (more than 1,000,000 volumes in the library)	1
Medium (250,000 - 1,000,000 volumes in the library)	1
Small (less than 250,000 volumes in the library)	4
State Library (SL)	**11**
Large (more than 1,000,000 volumes in the library)	2
Medium (250,000 - 1,000,000 volumes in the library)	6
Small (less than 250,000 volumes in the library)	3
Grand Total	**354**

Webometrics and Mississippi Public Libraries:
A Webometrics Study of Public Libraries in Mississippi
By Charlie Simpkins

Masters Research Project
May 2019
Readers: Dr. Teresa Welsh
Dr. Stacy Creel

Introduction

What a library is has been a discussion for many years. Some may consider it a place only used when a member of the public wants to check out a book. Summers and Buchanan (2018) define libraries as cultural hubs, by "offering trusted spaces for people to come together to access, share, create, appropriate, and appreciate cultural resources and material" (p. 286). But until the advent of the Internet, public libraries were simply a brick-and-mortar presence, one that the user would need to physically visit to gain information. Today, a library's website can serve as a patron's first interaction with the library.

With the introduction of the Internet, library websites have become new access points for a global community. A library's website serves as a new branch for its users, one that can be accessed 24/7 globally. But with that continuous access to such a large audience, a library's website should include certain information to be truly beneficial to the user. This website content analysis examines the websites of public library systems in Mississippi for the presence of four elements from Kumar and Bansal's 2014 seven essential menus for a library's homepage:

- My Account –for members of the library. It provides the login window for members and general rules and procedures for quick access.
- Services – Various types of services provided by the library.
- Hours – Library hours specifically, e.g. if there is any holiday or if any cut/extension in opening hours on a particular day" (p. 285).
- Eight elements from Chow, Bridges, and Commander (2014) study of public and academic libraries in the United States:
- Contact – phone number or email address

- eResources – databases, eBooks, eAudiobooks, and streaming services
- OPAC
- Location – physical address or map
- Circulation Information – how to get a library card, loan periods, or fines
- Key Staff – administrative or front-line
- Search Tool – search website tool
- Creation/Copyright Date – creation or last update posted (Kumar & Bansal, 2014).

Purpose Statement

This research assesses public library websites in the state of Mississippi for essential elements identified by Kumar and Bansal (2014) and Chow, Bridges, and Commander (2014).

Research Questions

R1. How many library systems in Mississippi have dedicated websites?

R2. How many of the library systems' websites in Mississippi contain elements of Kumar and Bansal's "Ideal Homepage" and/or Chow, Bridges, and Commander's criteria?

R3. How do library systems' websites in Mississippi compare to the results of Chow, Bridges, and Commander's study?

Definitions

Branch Library: "An auxiliary service outlet in a library system, hosted in a facility separate from the central library, which has at least a basic collection of materials, a regular staff, and established hours, with a budget and policies determined by the central library. A branch library is usually managed by a *branch librarian* who may have responsibility for

more than one branch. In a public library system, new branches may be sited on the basis of a comprehensive plan for the entire city, county, region, or library district served by the system" (Reitz, 2018).

Cybermetrics: "Description and evaluation of the impact of the internet as a scholarly communication tool, primarily by means of quantitative analysis of web-based scholarly and scientific communications. Sometimes used synonymously with *webometrics"* (Reitz, 2018).

Homepage: "The first or main page of a site on the World Wide Web, displayed whenever a user logs on to a Web browser and opens the site address (URL). The filename at the end of a homepage address is often *home.html*, *index.html*, *main.html*, or something similar. A well-designed homepage gives the title of the site, name of author, host, date of last update, notice of copyright, table of contents, and links to subpages providing more detailed information about the site, usually the best starting point when navigating the site for the first time. Also spelled *home page"* (Reitz, 2018).

Library system: "A group of libraries administered in common, for example, a central library and its branches or auxiliary outlets. Also, a group of independently administered libraries joined by formal or informal agreement to achieve a common purpose. Under such an arrangement, each library is considered an affiliate" (Reitz, 2018).

OPAC: "An acronym for online public access catalog, a database composed of bibliographic records describing the books and other materials owned by a library or library system, accessible via public terminals or workstations usually concentrated near the reference desk to make it easy for users to request the assistance of a trained reference librarian. Most online catalogs are searchable by author, title, subject, and keywords and allow users to print, download, or export records to an e-mail account.

Web site: "A group of related, interlinked web pages installed on a web server and accessible 24 hours a day to internet users equipped with browser software. Most web sites are created to represent the online presence of a company, organization, or institution or are the work of a group or individual. The main page or welcome screen, called the homepage, usually displays the title of the site, the name of the person (or persons) responsible for creating and maintaining it, and the date of last update. Also spelled *website"* (Reitz, 2018).

Delimitations

This study is limited to specific essential elements of public library websites in Mississippi and does not include the presence of social networking pages, such as Facebook or Twitter.

Assumptions

For the purpose of this study, it is assumed that the "Master List of Mississippi Library Systems & Branches" (MLC, 2019) is correct and complete. It is also assumed that the accompanying information on each library (such as affiliated system and name of the library) is accurate and current. Additionally, it is assumed that all websites examined are current and fully functional at the time of data collection.

Importance of the Study

Comparable research could not be located in the research literature, so this study and its findings may help fill a gap in the existing research on the extent to which public libraries' websites include essential elements. The findings of this study will not only be applicable to public libraries in the state of Mississippi but will be beneficial for those involved with designing and maintain the websites for public libraries and library systems in general.

Literature Review
Web Analysis of Library Websites
To analyze a library website, criteria of what is needed should be offered. Websites for libraries are not a new concept, and experts have offered their suggestions on what information they should present and how they should be formatted.

Breeding (2004) postulated what he deemed the essential elements of a library website, which included what to consider as basic information and what could interfere with finding information easily. Basic information included "the official name of the library, the complete street and mailing address of the main library and all its branches, the phone number(s), an e-mail for general inquiries, the hours of service, a link to the library's online catalog, and descriptions of the library's facilities and collections" (Breeding, 2004).

Websites of libraries have been the subjects of content analysis before. Kumar and Bansal (2014) conducted a study of eight Indian Institute of Technology websites. In the study, the authors synthesized existing criteria for qualities of "good websites" as discussed in the definitions, which they propose as "a single source guide in developing a website for a big/small library."

Chow, Bridges, and Commander (2014) did a webometric study of US academic and public libraries' websites. The study utilized a sample of one evaluation per state for four types of libraries: urban public, rural public, private academic, and public academic. Since the data were amalgamated into core information, the study did not delineate the results by type of library. The article does provide criteria that align with Breeding's (2004) suggestions and Kumar and Bansal's (2014) "source guide."

Velasquez and Evans (2018) acknowledge that websites for public libraries are referred to as "electronic branches," due to how it establishes a digital presence for the physical entity. They surveyed 1,517 public library websites in Australia, Canada, and the United States over a four-year period. They concluded that Canada and the United States included more information on their websites, while there were overall similarities in all three nations. They developed what they considered a model of how to improve public library websites, which aligned with the suggestions of Breeding (2004), Kumar and Basnal (2014), and Chow, Bridges, and Commander (2014).

With the library's website being an extension of the physical entity, Becker and Yannotta (2013) discussed the importance of redesigning the website to be user-centered. They identified areas of importance, such as not using jargon and focusing on ease of access by keeping navigation near the top and logical. Their recommendations build on the suggestions given in previous articles reviewed for this paper.

Wilson (2013) analyzed the websites of academic libraries in Alabama. He discussed the necessity of certain web elements and practices that enhance the functionality of the website, thus impacting the user experience. Wilson concluded that many of the sites lacked consistency and failure to demonstrate the sought-after elements. His study added to the field of webometric analysis of academic libraries, but Wilson's checklist provides adequate criteria for public libraries as well, thus impacting a field of study less focused on.

As discussed in the literature review, webometrics have been conducted on library websites, but have focused mainly on academic websites such as the study by Shneiderman (2006), which does not address public library websites specifically, but contains general information that is useful for all types of library websites: use of breadcrumb navigation, avoidance of jargon, and placement of important information at the top of the page.

Since their website is an extension of a library, a user's exposure to its website could be their first experience with the library. While the aforementioned research has included various elements suggested to enhance a user's experience, this research uses selective criteria of Kumar and Bansal (2014) and the criteria of Chow, Bridges, and Commander (2014) to evaluate public libraries' websites in Mississippi.

Methodology
This webometric study is a content analysis of public library and library branch websites in Mississippi. The Mississippi Library Commission's "Master List of Mississippi Library Systems & Branches" (2018),

which lists 53 public library systems and their websites, was used to identify the library websites examined in this study.

Data Collection and Analysis
The data collected from each public library or library system website included selected criteria identified by Kumar and Bansal (2014): My Account, Services (such as programming), hours, as well as criteria identified by Chow, Bridges, and Commander (2014): contact information, access to electronic services (if offered), OPAC, location, circulation information, key staff names, a search tool, and the creation or last update date posted. The data were recorded in an Excel spreadsheet, compiled and analyzed to address each research question and to generate tables and figures.

Limitations
The websites analyzed were limited to Mississippi, so the results cannot be generalized to other states or on a national level.

Results
R1. How many library systems in Mississippi have dedicated websites?
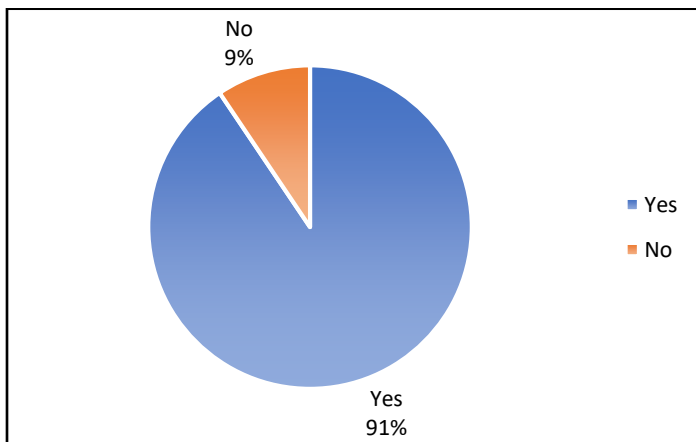
Figure 1. Library Systems with a Website

According to the Mississippi Library Commission's "Master List of Mississippi Library Systems & branches" (2018), there are 53 library systems in Mississippi. Two library systems did not have a website listed (Choctaw County Library System and Pike-Amite-Walthall Library System), while three could not be accessed. As seen in Figure 1, 48 library systems (91%) in Mississippi had a website, while 5 library systems (09%) did not.
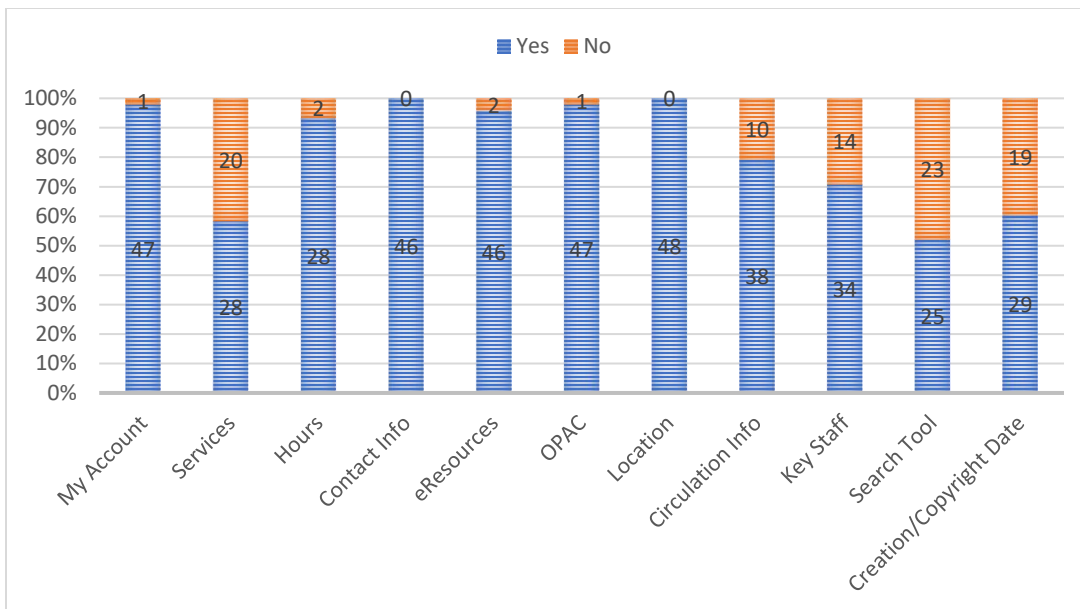
R2. How many of the library systems' websites in Mississippi contain elements of Kumar and Bansal's "Ideal Homepage" and/or Chow, Bridges, and Commander's criteria?
Figure 2 illustrates the elements observed on library branch websites in Mississippi. Of the 48 library systems with websites, 47 websites (97.9%) offered the capability to log into an account to make requests or renew items, 28 websites (58.3%) provided information about services, such as events and programming.

Of the observed websites, 46 (95.8%) included the libraries' operating hours. All of the 48 observed websites (100%) included contact information, either the phone number or an email address. Of the 48 observed websites, 46 (95.8%) provided information about available e-resources and 47 websites (97.9%) featured access to the library systems' map.

While 1 (2.1%) did not provide access to an OPAC, all 48 websites (100%) provided a physical address. Of the 48 observed websites, 38 (79.2%) included circulation information, such as how to get a library card, loan periods, and/or fine rates. Thirty-four websites (70.8%) included some of the key staff names and/or contact information. Twenty-five of the observed websites (52.1%) provided a search tool specifically for the website, and 29 websites (60.4%) included a creation or copyright date.

Figure 2. Elements found on Mississippi Library Systems' Websites

R3. How do library systems' websites in Mississippi compare to the results of Chow, Bridges, and Commander's study?

Figure 3 compares observations of the listed elements on the Mississippi library systems' websites to the Chow, Bridges, and Commander's 2014 study of library websites in the United States:

- 97.8 percent of websites in Mississippi were observed to have a My Account feature, while Chow, Bridges, and Commander observed 94 percent of websites nation-wide.
- Only 58.3 percent of websites in Mississippi had services, such as events or programming, while 84 percent of websites nation-wide were observed by Chow, Bridges, and Commander;
- 95.8 percent of websites in Mississippi had the hours of operation, while Chow, Bridges, and Commander observed 99 percent of websites nation-wide.
- All (100%) websites in Mississippi had contact information, either a phone number or email, while 98 percent of websites nation-wide were observed by Chow, Bridges, and Commander;
- 95.8 percent of websites in Mississippi provided access to eResources, such as databases, eBooks, and eAudiobooks, while Chow, Bridges, and Commander observed 97 percent of websites nation-wide;

- 97.9 percent of websites in Mississippi provided access to the OPAC, while 98 percent of websites nation-wide were observed by Chow, Bridges, and Commander.
- All (100%) of websites in Mississippi provided a physical address or map, while Chow, Bridges, and Commander observed 92 percent of websites nation-wide;
- 79.2 percent of websites in Mississippi were observed to provide circulation information, such as how to get a library card, loan periods, and/or fine rates, while 95 percent of websites nation-wide were observed by Chow, Bridges, and Commander;
- 70.8 percent of websites in Mississippi were observed providing some of the key staff names and/or contact information, while Chow, Bridges, and Commander observed 72 percent of websites nation-wide;
- 52.1 percent of websites in Mississippi were observed provided a search tool specifically for the website, while 62 percent of websites nation-wide were observed by Chow, Bridges, and Commander;
- 60.4 percent of websites in Mississippi included a creation or copyright date, while Chow, Bridges, and Commander observed 59 percent of websites nation-wide.
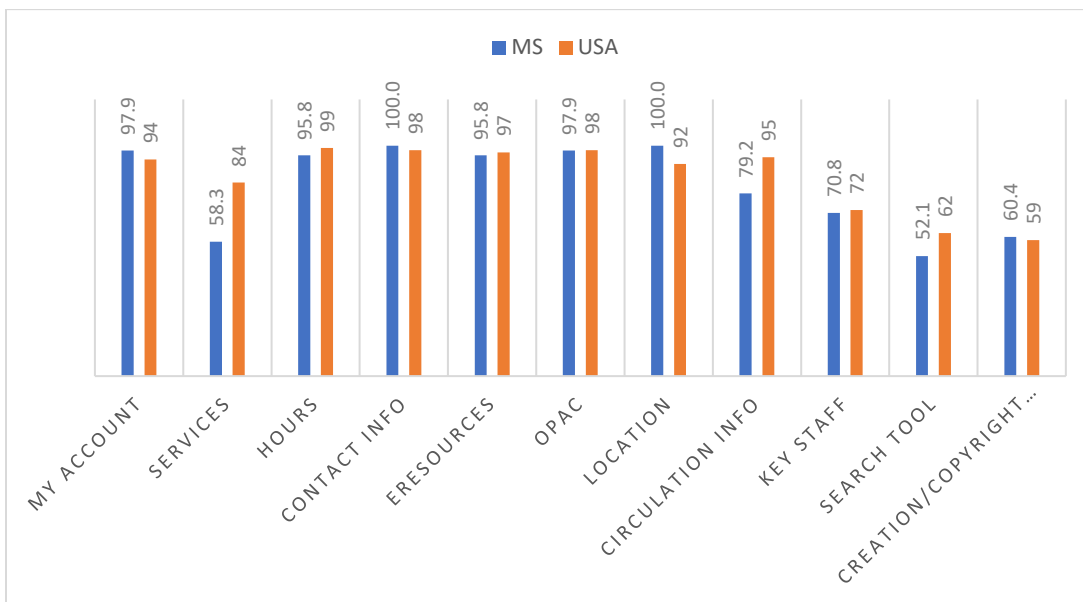
Figure 3. MS Library Websites vs. USA Library Websites

Discussion and Conclusion

The summative findings of this survey are two-fold: first, the essential elements identified in previous studies by Breeding (2004), Chow, Bridges, and Commander (2014), and Kumar and Bansal (2014) as necessary for a high-quality library website still have not been fully embraced by those who design and maintain public library system websites.

Secondly, findings indicate Mississippi public library systems' websites are on par with other public library systems' websites throughout the United States with the information available on their websites. Many of the criteria described in the aforementioned studies are easily incorporated into website designs at no additional cost through the sight host.

The data of this study indicate the library's contact information and location had the highest observed presence on their websites, with all (100%) displaying these elements. Further research is needed to do a direct comparison of study results exclusive to Mississippi.

The library's contact information only scored 98 percent on Chow, Bridges, and Commander's (2014) national study, while the library's location only scored 92 percent on the same study. This indicates that Mississippi public libraries' websites have increased the presence of their contact information and location on their websites since the national average in the 2014 study.

The results of this study indicate that the library's search tools (52.1%) and services (58.3%) had the lowest observed presence on their websites. Further research is needed to do a direct comparison of study results exclusive to Mississippi.

The library's search tool only scored 62 percent on Chow, Bridges, and Commander's (2014) national study, while the library's services only scored 84 percent on the same study. This indicates that Mississippi public libraries' websites have a decreased presence of search tools and services on their websites compared to the national average as determined in the 2014 study.

Further research could be conducted on the specific locations of the criteria information, especially whether it was located on the homepage or how many clicks a user needed to access the information. Another area that could also be explored is the accessibility of the websites. This could include the accessibility of the websites through different web browsers, on different smart devices and computers, as well as those needed for ADA compliance, such as text-resizing capabilities.

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