Master's Paper Abstracts
Summer 2016 - Spring 2017

Summer 2016


This study addresses the notion of information silos as it applies to the health informatics community. It asks the question: do authors, who have published on EHR usability testing in the health informatics literature, participate in the greater discourse of scientific communities that have a long history of usability and human factors engineering? Publications associated with the Association of Computing Machinery (ACM) and the Institute of Electrical and Electronic Engineers (IEEE) are known for their rigorous standards based testing methodologies.


A 1 x 2 multivariate analysis of covariance was conducted to assess the influence of auditory feedback on presence in Super Smash Bros. Brawl. 41 participants were assigned to a gameplay treatment condition of muted audio or sound effects only. Dependent variables were measured by the Self-Assessment Manikin, ITC-Sense of Presence Inventory, and Temple Presence Inventory. Covariates included familiarity with controls, visuospatial working memory, the Immersive Tendencies Questionnaire, recent gameplay experience, computer opponent difficulty level, age, sex, and handedness. A significant multivariate effect of treatment condition was observed, but further results were inconclusive. Possible explanations and reliability analyses are discussed.


Users encounter information and communication systems (ICT) within situated, dynamic contexts with political, economic, infrastructural and socioorganizational elements. Demand for eGranary’s offline library of digital content continues to grow in parts of the world that lack Internet access, particularly at schools and universities. But uptake is scattered and inconsistent, and the library’s impact on localized communities and its wider effects, e.g. on pedagogy, are poorly understood. This study analyses interviews with eGranary intermediary agents active in four sub Saharan countries. These Mediators reveal some of what is known about the context of eGranary adoption, adaptation and the issues that stakeholders negotiate in the process. This provides background understanding for future contact with eGranary end-users

Contextual characteristics identified include: reliability of technology and power supply; power-saving trends using smaller hardware and content structure; institutional and user preference for pre-tailored and/or local content; and desire for improved collection searchability.


This paper presents a case study of the development, launch, and assessment of a mobile application incorporating iBeacon technology at the Charlotte Mecklenburg Library. The iBeacon protocol, along with other “beacon” technologies, has enjoyed success within the retail sector as a platform for proximity marketing, and is drawing interest from libraries as a means of providing digital enhancements to visitor experiences within physical library spaces. The application launched at the Charlotte Mecklenburg Library was assessed positively by library users in comparison to an earlier mobile application that duplicated features of the Library’s website, although users expressed dissatisfaction with the push-messaging features present within the application. A set of best practices for incorporating beacons and other location-specific technologies in mobile applications is included for use by technologists and administrators in libraries and other cultural heritage institutions.


One tool that public library staff use for readers’ advisory is NoveList, which until 2014 was accessible to North Carolina’s public librarians and patrons through a public-private partnership known as North Carolina Libraries and Virtual Education
(NC LIVE). In 2014, NoveList along with other databases were dropped from NC LIVE due to financial constraints. Public library systems in North Carolina were surveyed to investigate the impact of losing access to NoveList via NC LIVE. 95% of respondents indicated that RA is either extremely or very important to the mission of their library system. The only readers' advisory tool ranked higher than NoveList was personal knowledge of the library's collection. Seven interviews with public librarians support the findings and demonstrate the continued resourcefulness of NC's public library professionals.

This study describes a latent content analysis of processing manuals used at U.S.-based college or university members of the Association of Research Libraries who currently use Aeon software from Atlas Systems. The purpose of the study was to assess the range of concepts present in archival processing manuals related to access restriction statements in finding aids.

This study is an in-depth evaluation of interfaces used by six interviewed educators to teach K-12 students how to code. Through examination of these discovered interfaces and interviewees' experiences with them, their utility and effectiveness for coding education is analyzed. The study reveals that much of an interface's utility relies upon the information needs of the specific educational environment. It also reveals that an interface's effectiveness, as defined by the educators interviewed, has less to do with relaying specific programming concepts and more to do with creation, exploration, student interest, and fun. The results of this study may be of help to educators interested in starting coding education programs, and need to find an interface that fits their students' needs.

Researchers always need to find publication to support their study. Traditionally, researchers will search in an information retrieval system where researchers input a query and obtain a ranked list of retrieved results. However, traditional information retrieval systems cannot help researchers if they are in anomalous state of knowledge. Due to linguistic barriers or lack of knowledge in a field, researchers may be unable to specify a query and thus, unable to do an efficient and effective publications search. A cluster-based information retrieval system will be designed to resolve the problem by presenting a topic map. The purpose of this study is to see whether such a system could help researchers in exploring information.

This study sought to determine whether utilizing visualization in health care would allow a wider audience of health professionals to understand geographic, temporal, and multidimensional trends in health data. A visual analytics tool was developed in Tableau that allowed users to dynamically and interactively interact with the tool in order to understand the impact of ACA Medicaid expansion. Data from the County Health Rankings & Roadmap was used (Rankings Data). The tool was made available to 5 participants who all had a connection to health care. An evaluation of the tool was conducted to determine if a visual analytics approach was useful in understanding geographic, temporal, and multidimensional trends and communicating health analytics information through the form of a use case. This study concluded that visualization was in fact an effective means through which to help a variety of users to understand geographic, temporal, and multidimensional trends.

This study aims to present data mining process and findings based on data sets of Program of International Student Assessment conducted by the Organization for Economic Cooperation and Development (OECD). The primary research questions are: 1) Does Information and communication technologies (ICT) use of 15-year-old students in five different countries/regions that ranked a top five in Program of International Student Assessment (PISA) have positive effect on their mathematics performance controlling for other independent variables such as Mathematics self-efficacy, Mathematics self-concept, Socio-economic status and Teacher support? 2) Which independent variables have positive impact on students’ mathematics performance when other independent variables are held constant? The study found that Internet use has statistically significant positive effect on student's mathematics performance while video game use has statistically negative effect on student's mathematics performance. Both higher Mathematics self-efficacy and Mathematics self-concept have statistically significant positive effect on student's mathematics performance.
The purpose of this study was to demonstrate the perceptions that public librarians have of their user populations with regard to people who are experiencing serious mental illness and the relationship to homelessness. Library association email listservs from multiple states across the U.S. distributed a questionnaire to their members that addressed these topics. The results found that a large number of public librarians experience concerns about violence in these populations and the impact that the presence of such users upon other users. Public librarians would be interested in learning more about serious mental illness with the goal that awareness about serious mental illness would help them in their interaction with library users who are experiencing serious mental illness. They expressed openness to trainings about serious mental illness. Such trainings would include liaisons with community agencies that work to help who are experiencing serious mental illness.

This paper provides a new perspective of looking at emoji: Users. On 100 Twitter users represented by emojis from 200 tweets, an exploratory analysis is conducted to find patterns of emoji use for individual users. We use k-means clustering, principal component analysis and hierarchical clustering on different distance measures, with special focus on outlying users with unique using patterns. Our findings could give insights of how the ways people use emoji converge and diverge, show hidden connections between emojis, and help people better understand this novel language in the digital era.

Winter 2016

Libraries regularly collect statistics in order to understand and communicate the value of products and services to stakeholders. These statistics, also known as metrics, can incur quantitative or qualitative data and can fall into one of five categories: input measures, process measures, output measures, outcome measures, or impact measures. Outputs, such as the number of books circulated or attendees to a webinar, are the most common, but outcomes, such as how a class helped streamline a patron’s workflow, are the most desired. The monthly statistics collected in a government special library were gathered and classified according to their conformity to one of these types of performance measures. The library collected the most output metrics, followed by inputs, then outcomes. While metric diversity is beneficial, suggestions for how to improve the evaluation procedures and gain more outcomes and impacts are discussed.

Health care increasingly requires complicated self-care regimens that demand patients and family caregivers learn about unfamiliar topics and practices to support their recovery. Due to the prevalence of low health literacy, patient education materials must comply with health literacy standards so that all patients understand how to take care of themselves. This content analysis examines the quality and consistency of patient education materials used at a large academic medical center to inform self-care of burns, tracheostomy, and peripherally-inserted central catheters. The Patient Education Material Assessment Tool (PEMAT) was used to evaluate thirteen patient education materials from inpatient, outpatient, and home health settings. PEMAT scores were associated with the presence of visual aids and document source. Consistency of materials was greatest among documents describing self-care for burns. Study methods employed may be used as a foundation for assessment of additional patient education materials.

International students are an expanding population at universities in the United States. It is important that academic librarians understand the information needs and unique challenges of this patron group and address their needs accordingly. This study explores international students’ use of Davis Library at UNC-CH from the perspective of both academic librarians and international students. The study employed semi-structured interviews with three academic librarians at Davis Library and ten international students who have used Davis Library. The responses demonstrated areas in which the library is serving international students effectively and ineffectively, and it illustrated some of the challenges these patrons face in locating resources within the library.

and keep project documentation during a three-year period, the Safety Research Center (HSRC) with a manageable way to plan project’s launch—provided the small, one-person transportation process as opposed to a single, linear stage completed prior to a project. Project planning practiced in this way—as a continuous and perhaps even re-envisioning the course and direction of a project’s original objectives, goals, and purpose. In the face of such change it is not uncommon for members of a project team to find themselves, in a sense, “on the road again,” re-evaluating and perhaps even re-envisioning the course and direction of a project. Project planning practiced in this way—as a continuous process as opposed to a single, linear stage completed prior to a project’s launch—provided the small, one-person transportation research library at the University of North Carolina Highway Safety Research Center (HSRC) with a manageable way to plan and keep project documentation during a three-year period, from 2013 to 2016, that saw tremendous change to the library and its larger role at HSRC. This report documents the process of composing a project plan for transferring HSRC Library’s archival collection of original research manuscripts, publications, and ephemera to UNC-CH University Archives and illustrates one way a project planner might create and keep project plan documentation within small and single-librarian environments.


This master’s project was developed for the Development Finance Initiative (DFI), a program of the School of Government (SOG) at The University of North Carolina at Chapel Hill. The goal of this master’s project was to build a website to assist DFI track key project metrics, compare projects through those metrics, and develop an internal knowledge base that could lead to evidence-based practices for the redevelopment of a distressed community. Moreover, this master’s project is part of the greater push for standardization in DFI’s workflow and describes how an organization under twenty employees can develop a system for collecting, storing, and displaying key project metrics to better document the impact of the organization’s work.

**Stephanie R. Carreira. Feminine and Masculine Characteristics in Young Adult Fairy Tale Retellings: The Differences in Female Protagonists from the Original Fairy Tales and Young Adult Retellings. A Master’s paper for the M.S. in M.L.S. degree. November, 2016. 40 pages. Advisor: Sandra Hughes-Hassell**

Many studies have shown the stereotypical characteristics of female protagonists in the original fairy tales. Many characters are passive, and rarely show any masculine characteristics. For today’s young adults, retellings of fairy tales are popular topics for teens to read and they want to be able to relate to the characters and stories found within. Using a modified version of the Bem Sex Role instrument, this quantitative content analysis compares the female protagonists in five selected fairy tales to their counterparts in five young adult fairy tale retellings from recent authors. Have the female protagonists stayed more feminine or do they portray more masculine qualities? Are roles still gender biased, or have they become neutral? This study explored the changes that retellings of fairy tales have taken towards addressing gender stereotypes.


Over the past sixty-eight years, oral history interviews have emerged as valuable primary sources of research by capturing nuanced perspectives of the past. Proponents argue that the enduring value of these resources stems from their ability to fill the gap in archives by giving voice to those who have been historically marginalized in society. For much of the twentieth century these voices remained silent, as archivists struggled to provide access to these unique acquisitions. The digital revolution has ignited new hopes that technology can resolve the problems of access to oral history collections. This paper aims to shed light on how oral histories have been presented in the digital interfaces of several collections from Africa, Australia, Europe, and North America. By examining the content that is available to users worldwide, a clearer image of the priorities and standards used in this new era of oral histories will be revealed.

**Karl E. Germeck. On the Road Again: Planning the Transfer of an Academic Transportation Research Library’s Archival Collection to University Archives. A Master’s paper for the M.S. in L.S degree. December, 2016. 54 pages. Advisor: Rebecca Vargha**

So much of project planning is circumstantial. Even after the approval of a formal project proposal or plan, an unsuspecting shift in environmental factors can often alter or redirect a project’s original objectives, goals, and purpose. In the face of such change it is not uncommon for members of a project team to find themselves, in a sense, “on the road again,” re-evaluating and perhaps even re-envisioning the course and direction of a project. Project planning practiced in this way—as a continuous process as opposed to a single, linear stage completed prior to a project’s launch—provided the small, one-person transportation research library at the University of North Carolina Highway Safety Research Center (HSRC) with a manageable way to plan and keep project documentation during a three-year period, aimed at The University of North Carolina at Chapel Hill. The goal of this master’s project was to build a website to assist DFI track key project metrics, compare projects through those metrics, and develop an internal knowledge base that could lead to evidence-based practices for the redevelopment of a distressed community. Moreover, this master’s project is part of the greater push for standardization in DFI’s workflow and describes how an organization under twenty employees can develop a system for collecting, storing, and displaying key project metrics to better document the impact of the organization’s work.


Ethical hackers emulate the processes of cyber-criminals in controlled settings in order to test the security posture of their systems.
clients. One common part of this process is testing the susceptibility to social engineering. This study explores the information seeking habits of Ethical Hackers during the reconnaissance phase of a social engineering attack in order to better understanding the strategies involved in cyber-crime.

Eight ethical hackers with social engineering experience were interviewed using contextual inquiry. Participants were asked to walk through their process for gathering information in two- three social engineering scenarios as well as asked to describe the scenario they most often encounter. The study revealed a semi-structured, cyclic approach to information gathering that used many of the same tools as everyday life social search. The results of this study should help businesses and individuals better understand the risk of posting information in public forums.


Data sets collected in the real world usually contain large amounts of features, many of which are interdependent with each other. The number of dimensions that can be shown concurrently with modern visualization techniques often does not match the number of features contained in the dataset, and this discrepancy can lead to selection bias undetected. This paper presents an advanced visualization system designed to enable sample bias detection introduced during the high-dimensional data selection and visualization, and to support the bias reduction using a sample-reweighting algorithm. A detailed description of the system’s web-based interactive user interface is provided. In addition, the results from an 11-participant user study on the system are presented, which demonstrate the effectiveness of the system in practice.


This research examined how people perceive current site connection indicator icons and corresponding informational message statements found in six web browsers. The paper begins by providing some background of the research area as well as an overview of the site connection indicator icon and informational message statement. An online survey was also conducted, which asked participants to best match statements from the informational messages with site connection indicator icons. The main finding of this research was that based on the wording of the informational message statements, participants often chose corresponding site connection indicator icons in a manner similar to how web browser developers paired the site connection indicator icons and informational message statements. This provides evidence that web browser users perceive the informational message statements as generally matching the site connection indicator icons that represent them.


This paper aimed to evaluate the existing room management system on School of Information and Library Science, UNC Chapel Hill, and suggested a new room management system that has all the features of the existing system and, based on Internet of Things technology, allows users to find the room by themselves with the help of the mobile app that interacts with Bluetooth beacons. The newly developed mobile app is then evaluated by usability inspection and usability test on a few test subjects. The test showed that new functions come with the mobile app is efficient in providing new features that are useful when booking and checking the room for more information. The author concluded that the new system could be helpful for users to manage room booking by themselves and offered further development suggestions to the system.

Spring 2017


Cultural heritage institutions are increasingly engaging with Wikipedia to improve its content and reach out to new audiences. This exploratory study investigates the frequency of photographs and historic photographs embedded as illustrations in Wikipedia articles. A random sample of 500 articles was examined, in which roughly half of all articles lacked any illustrations; 128 articles, or 26% of the sample included photographs; of those, only 26 articles, or 5% of the sample, included historic photographs. Sources are examined to determine where these photographs originated, and suggestions are made for future research into related factors and potential automation using software to collect data.


Using semi-structured interviews, this study describes how varieties of data librarians in North Carolina stay up-to-date in their fields. As data based research and decision-making has
become ubiquitous within academic communities, librarians have been required to gain new technical and interpersonal skills to help them in navigating data related patrons and tasks. The study documents the specific strategies and techniques that participants use to provide useful service to patrons and continue learning over changing learning environments. These strategies and the experiences that the participants use for professional development could be applicable to library schools that are open to adjusting curriculums in order to support greater data literacy and data-related skills among their new graduates. The study makes several specific recommendations for library schools based upon the data gathered from participants’ remarks.


Persons with autism spectrum disorder (ASD) are a growing population that public libraries serve. This study sets out to discover what children with ASD use their public library for and what they would like the library to change or improve in order to best serve them. Eight children with ASD and their families were interviewed for this purpose. Results showed areas where public libraries are serving children with ASD effectively and ineffectively and pointed to a greater need for universal design.


Few studies have focused on the information-seeking behaviors of archival users interested in particular cultural communities. But as community and social history are growing areas of research, it is important that archivists investigate how users identify and access relevant materials within their holdings. Of particular consideration are researchers interested in Native American communities. Collections related to Native Americans are not only dispersed across multiple indigenous and non-indigenous archives, but frequently described in ways that reflect inaccurate and outdated colonial ideologies. In this exploratory study, six archival users interested in Native American collections were interviewed about their information-seeking behaviors and research challenges. Findings from these interviews suggest several strategies for making Native-related collections more discoverable and accessible in culturally appropriate ways. Each of these strategies depends on creating and sustaining cooperative, collaborative, and mutually beneficial partnerships with Native communities.


This study used diaries and interviews to examine everyday information seeking behaviors among a group of frequent users of intelligent personal assistants. All participants completed diaries and met for a brief interview following the completion of their diaries. Diary responses captured real life examples of intelligent personal assistant usage, while interviews focused on general perceptions of intelligent personal assistants. Participants frequently used their intelligent personal assistants to find factual information but often expressed reluctance to ask assistants questions that would be difficult for the assistants to answer well. Many assistant uses were for repetitive and frequent types of information needs. Participants expressed mixed opinions about the appropriateness of intelligent personal assistant use in social situations. Some, though not all, of the findings of this study confirm the findings of other research in the growing body of research on intelligent personal assistants.


Broaching issues related to archives’ ethical obligations to participants, transcripts as derivative documents, and web publication of archival materials, this case study explores the development of web access policies in oral history archives by examining the complications that emerged during the Archives of American Art’s (AAA) transcript review and web publication of a set of oral history interviews conducted in 2007-2008 with the Guerrilla Girls.

Using program documentation and interview and questionnaire data from current and former Archives staff members as well as from a user of the Guerrilla Girls material, this study compares the AAA’s standard processes for oral history collection to the process of collecting the Guerrilla Girls interviews. Study participants discussed lessons learned from decisions made regarding web access to those interviews. Findings from this study bear a potentially transferrable relationship to policy review for oral history collections, archives’ donor/patron relations, and web access to oral histories.


Music mood classification has always been an intriguing topic. Lyrics and audio tracks are two major sources of evidence for music mood classification. This paper compares the performance
between feature representations extracted from lyrics and feature representations extracted from audio tracks. Evaluation results suggest text-based classifier and audio-feature-based classifier have similar performance for certain moods.


This is an investigation of perpetual access rights and archival provisions for licensed electronic resources at The University of North Carolina at Chapel Hill. Perpetual access refers to post-cancellation access to e-resources. Archival provisions specify the format of perpetual access to these resources. E-resources, including e-journals and databases, make up the majority of many libraries’ collections budgets. Tightening budgets may force librarians to make the difficult decision to cancel large e-journal packages or other subscribed resources. Negotiating strong perpetual access clauses into license agreements ensures continued access to these resources. In addition, provider participation in thirdparty archiving services allows for long-term preservation and access. This investigation examines the state of perpetual access and archival provisions for licensed e-resources at UNC-Chapel Hill.


In recent years, the federal government has mandated that data produced using federal funds be made available to the public. This, and the recent surge in the amount of data produced and the size of datasets, have made the pressure to share data ever more urgent. Data can be shared using open access repositories, which can be institutional or domain-specific. In the social sciences in particular, data sharing is unique because of the various sources and types of data produced. This paper examined the usage patterns of the datasets in one social science repository based on production date. It found that the average number of download statistics for each year was remarkably consistent, but the data were extremely skewed. Further analyses could look at usage patterns based on topic/keyword, non-use of datasets, or time of usage of particular datasets.


Digital Humanities scholars have not traditionally been focused on the overall usability of their online projects or how users perceive these resources. As a result, Digital Humanities is in danger of leaving out users voices entirely. This presents an opportunity for libraries, as partners, to add value to digital scholarship by assessing the extent to which Digital Humanities resources are meeting the needs of its users.

The following study is a qualitative user assessment of Project Vox, a Digital Humanities initiative that provides pedagogical and research materials on underrepresented philosophers from the early modern period. Through interviewing six philosophy professors, this user assessment takes into account humanists’ existing workflows, investigates their usage and the usability of the site, and finally examines how they perceive some of Project Vox’s practices and the broader Digital Humanities landscape.


This study describes the results of interviews with eleven Chief Records Officers at North Carolina state agencies and University of North Carolina System campuses. The interviews were conducted to identify records management challenges and factors influencing public records management at these institutions. The interviews revealed that timely records disposition and electronic records management were the two most common records management challenges. Additional factors influencing records management were employees’ level of records management knowledge, the role and responsibilities of the Chief Records Officer and the level of legal and institutional support the records management programs received. Overall, Chief Records Officers believed they had strong records management programs and adhered to the instructions of the North Carolina Department of Natural and Cultural Resources.


This paper accompanies a project website, www.re3dan.com. The website consists of workflows for using 3D Scanning and Photogrammetry to create and display 3D models of objects from cultural institutions. It includes workflows for the Matter and Form 3D Scanner, the photogrammetry programs Agisoft Photoscan and Visual SFM, the mesh repair programs Meshmixer and Meshlab, and the online display tool Sketchfab. The paper describes the process of choosing these tools, building the website, and the changes made to the site based on feedback from users.

**Erika Henderson. The Effects of Evidence-Based Practice on the Changing Role of School Librarians. A Master’s paper for the M.S. in I.S degree. April, 2017. 55 pages.**

| North Carolina Libraries | Volume 76 Issue 1 Spring/Summer 2018 | 31 |
Advisor: Sandra Hughes Hassell
The decline in the number of school librarians throughout the United States could have far-reaching consequences for students and teachers. In an increasingly digital environment, many believe the school librarian to be an antiquated concept. The development of exceptional library programs through the use of evidence-based practices cements the role of librarian as valuable instructional and resource partner. The role of the librarian in shaping the attitudes, knowledge, and perceptions of stakeholders directly affects the perception of value. The purpose of this research was to investigate the role of the school librarian in implementing evidence-based practice through semi structured interviews. Nowhere is this more important than in school libraries where building a strong library program will begin with collecting and disseminating empirical evidence. Interviews revealed that school librarians are participating in collecting and sharing data, but it does not have the same qualities of rigorously methodical science. Library science is, at its core, a social sciences and librarians have managed to create a model for collecting data that applies to the environment where they are teacher, instructional partner, information specialist, and program administrator. The ambivalence regarding whether the collection of data by school librarians should be labeled ‘evidence based practice’ remains uncertain.

Clutter is an aspect of web aesthetics that has come to the fore in recent years as the research community works toward a fuller understanding of what clutter is and how it affects users’ perceptions and performance with interfaces. In this paper, I examine the possible effects of cultural background on users’ first impressions of display clutter in website designs. The study was conducted using a series of five-second impression tests that asked participants from two distinct cultural groups to view a set of screenshots encompassing multiple levels of clutter, as measured by a JPEG file size measure. Results showed some effects from cultural background on perceptions of clutter, raised some issues with the cross-cultural applicability of the objective JPEG measure’s ability to predict subjective judgments, and provide some evidence that organization is a key distinguishing factor between visual complexity and clutter.

Legal scholarship is unique amongst nearly all disciplines because it is edited and published through student-run law reviews and journals rather than through the traditional peer-review and editing processes. The student-edited law review system has been in place for over a century and serves two purposes: (1) to act as a vehicle for legal scholarship and (2) to serve as a learning opportunity for American law students. Law reviews are cited by practicing attorneys, judges, and legislators, and these publications have helped to shape the current state of American law. However, law students who serve as staff members on these journals often receive little training and support from legal institutions and faculty. This research paper explores the types of services that academic law libraries are providing for staff members of student-edited law reviews and journals and seeks to identify emerging best practices and areas for further expansion of services.

Since academic libraries began to open their doors to students in the late 19th to early 20th century, librarians have engaged in nearly continuous discussion of the college student’s need for leisure reading materials, the broad benefits of reading such material, and the declining rate of American literacy. Given that budget is one of the most frequently cited obstacles to providing browsing collections or leisure reading materials in academic libraries today, understanding strategies used by librarians in tight times in the past may be informative for present-day academic librarians. This thesis addresses whether/to what extent the incorporation of the campus trade book store, the Bull’s Head, into the university library at the University of North Carolina-Chapel Hill in 1935, at the height of the Great Depression, was one such strategy.

Stephen G. Krueger. Diversity and Inclusion Education at the School of Information and Library Science at the University of North Carolina at Chapel Hill. A Master’s Paper for the M.S. in L.S. degree. April, 2017. 44 pages. Advisor: Dr. Claudia Gollop
This study was conducted for a master’s paper at the School of Information and Library Science at the University of North Carolina at Chapel Hill. The project assessed the diversity and inclusion education available to SILS master’s
students. The sample consists of course titles, descriptions, and syllabi from a two-year period (August 2015 through May 2017). The method used was content analysis, using a coding scheme based on existing literature as well as language and concepts found in the sample. It is hoped that the results provide a current depiction of the role of diversity and inclusion in the master’s degree at SILS.

Casey D. Lanier. Everything Has Changed: The Depiction of the September 11, 2001 Terrorist Attacks in Historical Fiction for Young Adults. A Master’s Paper for the M.S. in L.S. degree. April, 2017. 51 pages. Advisor: Dr. Brian Sturm

This study utilizes content analysis to examine 19 historical fiction novels for young adults, ages 12-18, which address the September 11, 2001 terrorist attacks. This study was conducted to identify any important trends regarding publication and supplemental information included in the sample, the scope of 9/11 described in the selected texts, and the diversity of the protagonists in each novel, and their connections and responses to the 9/11 attacks.

Increasing numbers of 9/11 related historical fiction novels for young adults are being published that are better researched and offer readers a broader scope of the day’s events than earlier works in this genre. While white characters are most prominent, diversity is becoming more common over time, as well as the desire to portray the stories of characters that were directly affected by the terrorist attacks. Protagonists’ multifaceted grieving cycles have been a hallmark of this genre throughout time as well.

Meggie A. Lasher. Logging In to Life: Examining the Digital Divide through the lens of ELIP and Library as Place. A Master’s Paper for the M.S. in L.S degree. April, 2017. 70 pages. Advisor: Dr. Amelia Gibson

This study aims to understand how individuals who participate in basic computer classes navigate life within the digital divide. Much of the literature available about the digital divide and literacy takes a reductionist focus on the abilities of those learning how to use computers. This study incorporates the literature and frameworks from Everyday Life Information Practices and library as place to inform the direction of the study. The goal of the study was to examine the information practices of older adults in computer classes and gain insight on how they have developed strategies to live in a technology-centric world. Overall, the study found that these individuals are creative and resilient when it comes to navigating the digital divide. The implications of this study can be applied to future understandings of the library as a learning place, a positive approach to LIS research, and accessible and adaptable system design.


E-commerce business become successful by offering people convenient online experience as well as providing tens of thousands of crowd-sourced reviews that are written by customers and users about their experiences and opinions regarding the products or the services they paid for. For an online shopping website, such as Amazon.com, it is very important to recommend high-quality product reviews to the website users because customers make decisions based on what they read from the reviews. However, there are simply way too many reviews out there, and it would be a dreadful task for anyone to read them all. In this paper, we try to build a logistic regression model that can than predict helpfulness of reviews.


Online reviews have been widely used for sentiment analysis tasks, for example, sentiment polarity prediction. In this paper, I address the rating prediction problem, using Yelp reviews. A star rating, in most cases, agrees with its review sentiment, which makes sentiment-words a reasonable solution for this task. Topics in reviews, on the other hand, are also likely to influence rating prediction. For example, for a restaurant, a customer may think it has a 5-stars service but the food is just 3-stars. So overall, that customer might give that restaurant a 4-stars rating. Using this idea, in this paper, I investigate whether topics, in addition to sentiment, are helpful in rating prediction task. I incorporated topic model with sentiment model and observed performance improvement.


Supporting Library Departments through Data Visualization sought to demonstrate the power of data visualization in supporting library departments’ potential to leverage internal data and improve communication and decision-making processes. In collaboration with the User Experience and Research and Instruction department at Davis Library – UNC Chapel Hill and the Southern Historical Collection Wilson Library – UNC Chapel Hill, I developed a series of visualizations after conducting a needs assessment of department. For Davis Library, I developed a series of visualizations analyzing user engagement with UNC Library LibGuides in effort to support their annual content review and for Wilson Library, I developed a series of visualizations to support digitization planning efforts.

This paper analyzes the representation of women in wartime era comics during World War Two (1941-1945) and Operation Iraqi Freedom (2001-2010). The questions addressed are: In what ways are women represented in WWII era comic books? What ways are they represented in Post 9/11 comic books? How are the representations similar or different? In what ways did the outside war environment influence the depiction of women in these comic books? In what ways did the comic books influence the women in the war outside the comic pages?

This research will closely examine two vital periods in the publications of comic books. The World War II era includes the genesis and development to the first war-themed comics. In addition many classic comic characters were introduced during this time period. In the post-9/11 and Operation Iraqi Freedom time period war-themed comics reemerged as the dominant format of comics.


Collection development is at the core of library services. With growing awareness of diverse communities and the lack of diverse representation in literature and the publishing industry, it is essential that librarians create collection development policies that accurately and effectively advocate for diversity and representation within a library collection. This is especially imperative for youth librarians, who are serving patrons going through a process of identity development and have the potential to be deeply harmed by inaccurate portrayal of their communities. This study examined how librarians can use collection development policies and ongoing education to curate diverse collections. The study consisted of four semi-structured interviews with librarians and professionals in fields of children’s literature, some of whom are also members of marginalized populations, exploring topics of diverse literature, specific factors librarians should be aware of, and the language participants would like to see explicitly addressed in collection development policies.


Superheroes are a huge commercial tent pole in today’s pop cultural landscape. Their representations are part of the fabric of our culture, and the superhero concept comes with a history of hyper-masculinity and extreme gender expression. This paper explores three superheroes’ recent comic iterations – Hawkeye, Black Lightning, and King Tiger – to evaluate the cultural accuracy of the hero’s performance of masculine identity. The comics were coded by the researcher, and each was intercoded by a member of the race of the hero in question. While culturally accurate masculine elements were present in all character’s performances, culture is not central to their masculinities and the hegemonic ideal is still a heavy influence on all.


This study was conducted in order to uncover ways in which public libraries help their communities before, during, and after hurricane events. A systematized review of the literature found in six Library and Information Science and Health Sciences databases revealed public libraries offer services that contribute to the user’s fulfillment of multiple needs. Results from twenty full-text articles were categorized and four themes were identified: physical needs, emotional or mental needs, logistical needs, and information needs. By identifying how these public libraries have provided outreach in their communities during hurricane events, other libraries will have the opportunity to learn from their experiences.


There has been significant work in extracting medical related information from clinical notes and EHR records. With the increasing use of social media tools for healthcare purposes, there is an abundance of patient generated data with valuable information. Recent studies have focused on extraction of useful information from patient generated content. Healthcare professionals also use social media platforms for various purposes. Existing clinical NLP tools are specialized in processing biomedical literature and clinical texts. For efficient processing of social media text, it’s important to analyze it’s linguistic characteristics. In this paper the difference between language used by physicians in weblogs and the language used by patients in health discussion forums is analyzed by determining the frequency of usage of MetaMap concepts, affect words and named entities by both the groups. The results show that patient language differs from physician language in these aspects. So the existing clinical NLP tools require additional functionalities for automatic processing of text.

The purpose of this study was to examine the effectiveness of the chat reference interview as performed by the libraries at the University of North Carolina – Chapel Hill. Chat transcripts containing were purposively selected from two periods, October 1 – 21, 2015 and March 1 – 21, 2016. These two periods were selected in order to give the study a view of chat reference as conducted by staff at different points in training and with different levels of experience. These transcripts were analyzed according to a series of questions, in order to determine whether or not the reference interactions resulted in the satisfaction of a patron’s information need. Through this analysis, it was determined that the reference interview as performed at UNC is effective, but incomplete implementations of the interview create significant barriers to the successful completion of reference interactions.


This paper describes an exploratory study that was conducted to determine how academic libraries use Google Analytics, and how they balance the implementation of Google Analytics with their patrons’ privacy. UNC System Library websites were surveyed to determine whether or not they utilized Google Analytics. The privacy policies of the 13 websites that ran Google Analytics were examined to determine whether their privacy policies contained language disclosing the presence of Google Analytics on the library website. In addition, interviews were conducted with employees from five of the libraries to determine how those libraries employ Google Analytics on their websites and how they balance the employment of Google Analytics with the privacy of their patrons. Four out of the five libraries reported actively using Google Analytics, but only one of those five library websites contained a privacy policy with explicit language pertaining to the website’s use of Google Analytics.


This exploratory study examines webseries adaptations of classic literature created by young and new adults under the age of twenty-five. A web survey was conducted in an attempt to discover: why young adults are creating these series; how they are choosing which texts to adapt; why the series seem to be focused on youth of marginalized identities; and why they are being hosted on interactive, social media platforms. The paper explores facets of identity development, representation, and restorying in the context of these series and their creators.


This paper describes a needs assessment and system design process to support technology lending purchase decision making. Personal interviews with five librarians and one paraprofessional were conducted to gather both feature requirements and an understanding of the current workflow. This paper details the results of this investigation in terms of system needs. It describes features that would support this difficult decision process. It also includes many design diagrams and models that present both the current and proposed workflows.


There is a concerning development occurring in today’s libraries stemming from a complex intellectual history and fed by contemporary identity culture and politics. This is the increasing hold that a class of ideas is having on the underpinnings of librarianship: namely, those ideas commonly styled ‘postmodern.’ The effect that postmodernist thinking has had on libraries is threefold: It gives the profession a theoretical stance about knowledge that is unfit for accomplishing the emancipatory aims of the library; undermines the pursuance of libraries as a public good; indulges an unreasonable skepticism about authority in general.

Natalie Ornat. Reading for your Life: The Impact of Reading and Writing During the Siege of Sarajevo. A Master’s paper for the M.S. in L.S. degree. April, 2017. 53 pages. Advisor: Brian W. Sturm

In the spring of 1992, the city of Sarajevo was surrounded by nationalist Serb troops and bombarded with shells, bullets, and terror for four long years. Isolated from the world, Sarajevans found a refuge and a freedom that took them beyond their circumstances: they read, they wrote, and they survived. This paper examines how these activities impacted the mental, physical, and spiritual survival of Sarajevans during the war. Diaries, memoirs, personal histories, letter collections, and oral histories are analyzed for what they may reveal about the value of reading and writing during this time of crisis. What we learn from these accounts is that even during the most trying times, activities such as reading and writing give us a space for control and self-preservation. This paper strives to learn about the power of literacy and writing from those who faced adversity in wartorn Sarajevo.

This study is a content analysis presenting and summarizing the existing online documentation concerning the topic of genrefication. Genrefication is the organization of public and or school libraries’ collections by subject heading rather than according to the Dewey Decimal Classification (DDC). This is a heated controversial trend dating back to the 1890s. However, little has been added to the professional conversation since 2013. This paper seeks to lay a foundation for an informed discussion on the topic by culminating the existing information up to 2017 in a single location for introduction and further research and discussion. It highlights the contributing factors enabling genrefication’s continued existence and success despite the lack of additional professional publications on the topic.


This paper examines the presentation and perception of the libraries by tour guides at the University of North Carolina at Chapel Hill during Admissions campus tours for prospective students and families. Perspectives from tour guides, librarians, and admissions staff are considered through an analysis of tour observations and interviews with library and admissions staff. Tour guides’ statements about the libraries varied, sometimes containing misperceptions and inaccurate claims, but for the most part indicating that they viewed the libraries as positive and valuable places. This paper discusses the value of collaboration between academic libraries and admissions departments to ensure that guide training incorporates useful and relevant information about the library that will aid prospective students in (1) understanding the library’s role on a university campus, (2) feeling welcome and comfortable in the library space, and (3) envisioning themselves using the library and taking advantage of library spaces, collections, services, and staff.


Cameras are included as a standard piece of equipment on many electronic devices, which make it increasingly easier for people to document their lives with photographs as moments occur. As a result, personal photographic collections continue to grow in size, and assume a wealth of complications related to an individual’s ability to manage the size of their collection and considerations for preservation. The purpose of this study is to determine the long-term preservation techniques of the personal digital photographic collections of the Millennial Generation, and to inform archivists and others involved with memory institutions about the ways this generation thinks and acts upon the preservation of these collections. The population for this study was chosen using a nonprobability, convenience sample of students and employees between the ages of 18 and 37 at the University of North Carolina at Chapel Hill. The data was collected using an anonymous multiple-choice survey.

Debahutee Rout. What are the Important Information Needs of Faculty, Staff, and Current Students with Regards to the SILS Website? A Master’s Paper for the M.S. in IS degree. May 2017. 82 pages. Advisor: Robert Capra

This research study aimed at studying the SILS website and understanding if the current design catered well to the needs of three user groups; faculty, staff members, and current students. An online survey questionnaire was created and sent to the listserv of the three user groups. Out of the 58 responses that were received, 17 were MSIS students, 18 MSLS, 2 BSIS, 5 Faculty, 4 were staff, and the rest chose to remain unidentified. Participants were asked about their usage, level of satisfaction, level of difficulty, and kinds of issues they faced, their opinions and feedback regarding various sections of the SILS website along with the embedded pages within. The responses suggest that although participants were fairly satisfied with the website, there were areas that could be improved in the site’s navigation, deeply embedded links, and inconsistent information.


This exploratory study describes the results of a survey of 39 self-published writers who were contacted through several North-Carolina-based writers’ groups. The survey was intended to determine background about the platforms and formats they used as well as the importance these writers placed on the preservation of their work, asking whether they had lost files or had tried to get their work into libraries. Follow-up interviews with four writers who took the survey feature their reflections on being an “indie author,” including their methods for finding an audience, how they learn information about self-publishing, and the challenges and benefits they have experienced from the process.

The study begins with a literature review that includes interviews with two librarians and a small publisher in North Carolina. The study concludes with a number of implications for further research, as well as a discussion of the major finding that publicity equals preservation.
Archives, libraries, and museums focused on performing arts have collected musical instruments alongside traditional archival materials in order to connect patrons with the tools musicians and composers utilize to shape cultural legacies. This mixed-methods study illuminates how cultural heritage institutions apply basic archival functions (appraisal, arrangement, description, access, and preservation) to musical instruments. Representatives from four such institutions were interviewed: Three archives (The Institute of Jazz Studies, the Rock & Roll Hall of Fame Library & Archives, and the Louis Armstrong Archives) and one museum (The Metropolitan Museum of Art). Simultaneously, a survey was distributed to archivists, with respondents detailing their experiences and philosophies related to archiving musical instruments. Issues discussed by those interviewed and surveyed included the importance of a well-defined collecting policy, an access policy that makes holdings available to users while ensuring that the artifacts accessed are subjected to minimal potential damage, and approaches to instrument preservation.

Research consultations are meetings between a patron and a librarian during which the librarian attempts to assist the patron with their information or research need. Many academic libraries have implemented research consultation services as part of the suite of reference services that their libraries offer. Outside of the reference interview model created for the traditional reference desk setting, no model has been put forth to provide guidance to librarians attempting to learn how to perform a research consultation, which can differ significantly from traditional reference desk interactions because of their intensive and personal nature. The ultimate goal of this study is to investigate how the librarians who provide research consultations learned their craft both in terms of their ability to conduct the more technical aspects of a research consultation and their ability to manage the affective elements of the research consultation.

Academic Librarians have been creating research guides since the 1950s. These resources were design to help patrons become familiar with the basics of a subject or discipline. Research guides evolved into course pages, which provide resources related to a single course. This study considers students’ perceptions, and how that effects their intent to use the course page in the future. The study seeks to answer the question, does students’ perception of usefulness, interactivity, ease-of-use, attitude, and satisfaction effect their intention to use course pages?

The method used for this study is adapted from the Technology Acceptance Model which looks for correlations between perceived usefulness, interactivity, ease-of-use, attitude, satisfaction, and intention to use. 47 undergraduate students from the University of North Carolina, Chapel Hill, responded to an online survey. These findings will help determine if student perceptions match the findings from previous studies regarding the usability and implementation of course pages.

This paper describes the design and development of a website to introduce the problem of gender diversity in tech through narrative data visualizations. It combines three publicly available datasets describing the demographics of technologists in high school, university, and industry, presenting them together to provide a full picture of how badly underrepresented women are in tech fields. Viewers can interact with detailed visualizations of each dataset to explore their own questions, without the analytical expertise necessary to analyze the raw data. The data visualizations are supplemented with narrative explanations of the relevant academic literature, so that even viewers without background knowledge can interpret the data in the correct context. The website is available online at https://thekatheri.net/tech-ladies.

This paper examines how well North Carolina public libraries use Facebook and Twitter to portray themselves as community information providers in the face of social and environmental disasters. As technology connects people more and more on a daily basis, public libraries are continuing to connect themselves to patrons as well by using social media to extend, and even create, new services that they would not have been able to twenty years ago, or at least not as well as new technologies and software are allowing them to now. However, in the face of community strife, emergencies, disasters of a social, environmental, political, or economic nature, can public libraries use the power through alternative avenues to reach out to their communities and provide as unbiased resources as possible?

This research examined the role of information infrastructures in decentralized contexts of the sharing economy. The community studied was a group of nomadic workers known as digital nomads. An investigation of three online forums was conducted and elements of emergence and generativity were identified in the community’s patterns of sharing and access across information infrastructure.


This paper examines the nature and scope of collaborations between institutional archival repositories and community groups. Seven community-based archival research initiatives were chosen and examined, including: Historically Black Towns and Settlements Alliance, Documenting Ferguson, D.C Afri- caana Archives Project, Black Metropolis Research Consortium, Institutional Archives on Women and Architecture, Eighth Air Force Archive, and the Saints at War Project. Interviews with the professionals at these initiatives helped the researcher to identify perceptions regarding how the partnerships form, the activities performed by each of the participants, how materials were collected and maintained, and the long-term sustainability of these efforts. This research has numerous implications for the archival profession, including both benefits and barriers to collaboration. Archivists at other institutions can look to this research when attempting to democratize collecting practices and develop lasting partnerships with surrounding communities.


This study aims to develop a deeper understanding of the individuals who are special librarians. In order to create this defining view into special librarianship, a secondary analysis of the Workforce Issues in Library and Information Science (WILIS) was completed. Comparisons were made between special librarians and librarians who work in traditional library settings to determine significant patterns and differences.

Through statistical testing, the areas of inspiration, education, career history, and job satisfaction were explored. Despite their similarities, the two librarian types differed with their motivations and valued job characteristics. Special librarians would often value job qualities uniquely available in special libraries, like flexible career options and opportunities for advancement while they were less inspired by the service-oriented aspects of traditional librarianship, like helping others and making a difference in society. Results from this study create a clearer definition of who special librarians are and what makes them so special.


As libraries, archives, and museums (“LAMs”) adopt linked data for purposes of enhancing their bibliographic and authority metadata, the technologies around digital repositories also are similarly changing course to model digital objects using linked data standards such as RDF. This study explores the digital repository community’s engagement and perceptions of linked data modeling. The study is split into two phases consisting of a web survey and semistructured interviews. Qualitative analysis of the data summarizes key characteristics of the community of practice, and open problems in transitioning to linked data in the redesign of the Fedora storage and preservation architecture commonly used in digital repositories. Other areas of discussion include the perceived concerns in cross-walking MODS to RDF, as well as the community’s recommended implementation of the Portland Common Data Model (PCDM).


This project develops a web database management system for Gfeller Center at the University of North Carolina at Chapel Hill. This system allows users to upload and download structured data in terms of specific requirements.

The Gfeller Center works on research that studies the health condition of athletes. Researchers have collected a large amount of data from previous studies and they keep collecting data as the research goes on. The researchers need tools to help manage and organize the data and need advanced functionality to support their research. Therefore, this project helps to develop a web database system to manage data according to the requirements of the researchers in Gfeller Center. The system development includes requirements analysis, functionality analysis, and interface design. Finally, this project proposes a plan for usability testing to evaluate the system.


This study examines the use of trusted digital repository tools and standards for self-audit in digital repositories. While there
has been increasing attention given to external audit and certification of trusted digital repositories, there has not yet been a cross-institutional study of repository self-audits.

Describing a series of semi-structured interviews with six information professionals employed at six university digital repositories, this study examines these repositories’ experiences with self-audit. The study explores the tools that are being used for self-audit, how self-audits are conducted, and the value of self-audit to repositories and their stakeholders. Findings from this study provide some insight into the current state of self-audit in digital repositories, and the paper also suggests areas for improvement and future research in this field.


Diversity and inclusion are hot topics in the world of education and libraries are in a position to be at the forefront of this movement given their close relationship with the public. Having diverse books in a library collection is one part of ensuring a more diverse and inclusive space. Teens and young adults are readers who greatly benefit from having diverse materials available to them. To examine whether or not diverse YA books are available and searchable via subject headings two public libraries in North Carolina were examined. The subject headings assigned to 60 chosen YA books proved to be a sufficient and easy way to search for and find these materials. Despite being able to find these diverse books via the catalog there are still ways to improve the way libraries are organizing their materials on the shelves to ensure diverse books can be found.

**Megan Wolff. What is Good Programming and How Do You Know?: An Examination of the Assessment Criteria of Teens and Teen Librarians in Young Adult Programming.. A Master’s Paper for the M.S. in L.S degree. April, 2017. 77 pages. Advisor: Brian W Sturm**

This study describes interviews of adolescents between the ages of thirteen and nineteen attending teen programs at public libraries in southeastern North Carolina and of the teen librarians running those programs. The interviews were conducted to determine the different assessment criteria used by teens and teen librarians when assessing teen programs in public libraries. Subjects at six different teen programs at four public libraries were used to explore the similarities and differences in assessment of teen programs. In these North Carolina public libraries, teens and teen librarians use both similar and dissimilar criteria to measure program success.

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**Looking for help with collection development?**

If you want to expand your library’s collection of novels set in North Carolina, you should visit the Read North Carolina Novels blog hosted by the North Carolina Collection at the University of North Carolina at Chapel Hill (http://blogs.lib.unc.edu/ncnovels/).

If your interest in North Caroliniana is more general, the North Carolina Collection at UNC-Chapel Hill regularly posts lists of new additions to their collection at this address: http://blogs.lib.unc.edu/ncm/index.php/whats-new-in-the-north-carolina-collection/.