

UNC-CH Library School Master's Paper Abstracts Summer 2014 - Spring 2016

Summer 2014

Brittany Hayes. Detecting Lexically Cohesive & Temporally Bounded Tweet Sessions on Twitter Timelines. A Master's paper for the M.S. in I.S. degree. April, 2014. 59 pages. Advisor: Stephanie W. Haas

This exploratory study examines the concept of the “tweet session”—instances where a user of the microblogging site Twitter posts two or more related tweets in a short period of time. The study outlines a set of characteristics that aid in the detection of topically cohesive units. Four of these properties are external to the tweet text: a 24-hour time frame, inclusion of at least two tweets, inclusion of originally authored tweets and the exclusion of replies. Four additional properties were derived from the natural language processing and information retrieval literature: lexical cohesion based on unigram and character bigram feature representations, conjunction use, signals of continuation, and anaphora resolution.

A sample of 220 user timelines was analyzed to detect series of tweets meeting the definition of a session as conceptualized in the study. 93.6% of timelines included at least one technical tweet session. Lexical cohesion as determined by cosine similarity retrieved the most sessions: 815 technical sessions when unigrams were used as the unit of tokenization, and 1391 technical sessions when character bigrams were used. The majority of users engaged in tweet sessions exceeding 140 characters (the Twitter-imposed limit for a single tweet); however, when unigrams were used in the feature representation approximately 47% of timelines had tweet sessions of less than 140 characters on average. This research shows that tweet sessions exist and can be detected by computational means.

Erin L. Carter. Library and Information Science Students' Ethics Training and Attitudes about Intellectual Property Rights: An Exploratory Study. A Master's Paper for the M.S. in I.S. degree. April, 2014. 75 pages. Advisor: Anne Klinefelter

The purpose of this research is to gain a greater understanding of the factors that influence library and information science (LIS) students' views on intellectual property rights, specifically illegal reuse of content on the web. The study utilizes interviews and surveys to explore attitudes toward illegal downloading of digital content in general,

extent of ethics education in LIS classes, disciplinary differences between information and library science, and these variables' influence on attitudes towards illegal reuse of copyrighted content analyzed for correlation. The end result of this study is an exploration of the attitudes about intellectual property rights in the next generation of librarians to determine future areas of improvement (e.g., required ethics trainings for future librarians and information science workers; specific ways LIS programs can emphasize intellectual property concerns).

Joseph T. Gilmore. The Use of University of North Carolina Library Materials on Internet Archive. A Master's Paper for the M.S. in L.S. degree. May, 2013. 32 pages. Advisor: Dr. Richard Marciano

An examination of rates of use of digitized materials uploaded to Internet Archive by UNC Libraries. Suggestions for improvement to the organization of those materials.

Kathleen Hill. Usage of Social Media in the University of North Carolina at Chapel Hill Health Science Library: A Case Study. A Master's Paper for the Masters of L.S. degree. July, 2014. 32 pages. Advisor: Mary Grace Flaherty

This paper examines the efforts one health science library puts into outreach and marketing through social media platforms. It focuses specifically on a case study of the University of North Carolina at Chapel Hill Health Science Library. There is a strong correlation between the content of social media posts and the number of patron interactions with said post. Visual content in posts boosts interactions, but creating posts with only links does not. The data gathered from the study will allow for the library to target its postings in the future, which in turn could garner more followers and interactions with patrons.

Madeeha Khan. Using User-Centered Design Methodologies to Redesign the Office of International Student and Scholar Services Website. A Master's paper for the M.S. in I.S. degree. July, 2014. 73 pages. Advisor: Ronald E. Bergquist

The Office of International Student and Scholar Services (ISSS), is the administrative office that serves international students, research scholars, and visiting professors

at the University of North Carolina at Chapel Hill. ISSS spent the fall 2013 – spring 2014 academic school year redesigning their website using user-centered design methodologies with the assistance of a SILS graduate student. User-centered design is an approach where the needs and requirements of the users are put in focus throughout each stage of the design process. This study describes how user-centered design principles were incorporated into the final design of the website.

In addition, this study examines to see if incorporating user-centered design methodologies in the redesign of the website can allow for international students to successfully complete common tasks on the website at an above average user task completion rate of 80% or above. The study tested the task completion rate by conducting a series of user-testing sessions on the redesigned ISSS website with eight UNC international students.

Virginia L. Ferris. Beyond “Showing What We Have”: Exploring Linked Data for Archival Description. A Master’s Paper for the M.S. in L.S degree. July, 2014. 76 pages. Advisor: Timothy Shearer

Research explores current professional attitudes, applications, and potential impact of linked data in archival repositories, through eight structured interviews with archivists and early adopters of linked data and semantic web practices within the archival community. Interviews evaluate current archival practitioners’ perceptions of the benefits and challenges of applying linked data practices to archival description, to examine the current barriers and potential solutions in integrating linked data with archival description. Analysis investigates ways in which linked data and the semantic web may impact archival descriptive practices and user experience in accessing archival materials, and ways to facilitate greater engagement with linked data within the archival community.

Adrian T. Ogletree. Metadata Workflows Across Research Domains: Challenges and Opportunities for Supporting the DFC Cyberinfrastructure. A Master’s Paper for the M.S. in I.S. degree. August, 2014. 52 pages. Advisor: Jane Greenberg

Metadata is necessary for finding, using, and properly managing scientific data. This master’s paper presents results from a survey studying metadata workflows. A metadata workflow is a workflow that generates metadata for a data collection. A questionnaire was distributed to DataNet Federation Consortium researchers and collaborators. There were fourteen participants representing the following domains: hydrology, biology, climatology, ecology, library

sciences, computer science, engineering, social sciences, and information sciences. Data management best practices recommend that data documentation, including metadata planning, occur prior to the data collection activity. However, the results of this survey indicate that in the scientific domains explored, more metadata is created during and after the data collection process than when the activity commences. Results also show that few researchers take advantage of automated metadata generation workflows. In addition, 9% of respondents did not know whether or not a standardized metadata scheme is used in their institution, and 20% did not know whether or not they provide metadata along with their data to repositories. Lastly, impediments to research data sharing and reproducibility were explored, including the need for highly specialized knowledge, software, or equipment. Data curators, librarians, and archivists, along with automated systems, can assist researchers by intervening earlier in the data life cycle in order to produce higher-quality metadata and ensure long-term data preservation.

Joshua G Rice. Improving Conversion Rates at 80 Percent Solutions. A Master’s Paper for the M.S. in I.S degree. August, 2014. 44 pages. Advisor: Paul Jones

This experiment used A/B testing to attempt to improve three tracked conversion goals-- “Engagement”, “Paypal Submission”, and “Purchase Clicks” --on 80 Percent Solution’s product website www.MacFreedom.com. The participants for this study were web users from any location or device who visited www.MacFreedom.com during the testing period.

Three randomized controlled experiments were executed using Visual Website Optimizer to test for statistical significance of the conversion goals. The results of these experiments showed that:

- Changing the site’s tagline demonstrated significant success.
- Changes to landing page call-to-action buttons exhibited negative statistical significance.
- Variations of the purchase page call-to-action buttons demonstrated significant success.

Maria Terrien. Revistinha: A Brazilian Online magazine for Kids. A Master’s Project for the M.S. in I.S degree. April, 2014. 27 pages. Advisor: Brian Sturm

This project is the first phase of a new online magazine, a resource for young kids presenting topics related to the Brazilian culture. The magazine’s goals are to improve knowledge of Brazilian culture, provide fun, and improve reading literacy. Magazines for kids are very popular in

Brazil. The magazines are bought on the streets in a newsstand and they are in a comic format. As a result, today Brazilians have a comic book culture. For Brazilians living outside Brazil, magazines are the cheapest and easiest product from Brazil to transfer Brazilian culture to their kids. Not all of them can afford travels or shipping magazines. Many of these families do not speak Portuguese at home and the cultural withdrawal is worsened by the lack of pedagogic material. *Revistinha* wants to fill this market with a magazine in a comic format presenting topics related to the Brazilian culture.

Jody Seim Timmins. *Using Comics to Promote Literacy in the K-8 Classroom*. A Master's Paper for the M.S. in L.S degree. July, 2014. 44 pages. Advisor: Sandra Hughes-Hassell

Students, publishers, and educators have embraced comics for their engaging format and high-interest storylines. Comics are not just popular choices for independent reading, however. Comics can be used in the classroom to support literacy instruction. Comics have been found to foster multimodal literacy, support English language learning, and motivate reluctant readers. The layout of comics makes visible the meaning-making strategies deployed by proficient readers. These strategies include sustained comprehension, visualization, and making inferences. Comics also provide opportunities for readers to explore literacy concepts such as setting and characterization, and literary devices such as foreshadowing, point of view, and flashback. This paper provides a framework for educators to select high-quality comics that can be used to scaffold these and other literacy lessons for K-8 learners. It includes an annotated bibliography of print and digital curriculum guides to integrate comics in the classroom.

Haley M. Walton. *ORCID Integration Among Publishing and Funding Organizations: An Examination of Process and Rationale*. A Master's Paper for the M.S. in L.S. degree. July 2014. 57 pages. Advisor: Kevin L. Smith.

This study examines how a sample of scholarly publishers and granting organizations have integrated the Open Researcher and Contributor ID (ORCID) into their grant application and manuscript submission workflows. The study was conducted to discover what benefits these organizations gain from using the ORCID unique author identifiers and how effective they are at introducing scholars to ORCID as a service.

The data was collected through interviews of representatives from a sample of publishing and funding organizations: the National Institutes of Health, the U.S.

Department of Energy's Office of Science and Technical Information, the Wellcome Trust, Autism Speaks, Elsevier, and Oxford University Press. A representative from eJournalPress, a software company that provides manuscript management tools was also interviewed. The result is an analysis of best practices for ORCID integration at these types of organizations and suggestions for improvement. The conclusions drawn are generalizable to other institutions seeking to adopt ORCID themselves.

Zachery P Whitaker. *Moving With the Crowd: Gauging the Prevalence and Execution of Crowdsourcing in Archives*. A Master's Paper for the M.S. in L.S. degree. July, 2014. 50 pages. Advisor: Denise Anthony

This study describes an online survey sent to the Society of American Archivists' Archives and Archivists listserv to illicit responses from archivists regarding the use of crowdsourcing in archives. The survey was conducted to determine the prevalence of crowdsourcing in the archives profession. In addition, the survey sought to gain insight into the level of interest in crowdsourcing among archivists as well as the methods by which archivists have executed crowdsourcing projects.

Slightly over half of archivists surveyed indicated they have either engaged in, are currently engaging in, or have plans to engage in crowdsourcing, while seventy-nine percent of archivists who identified as having no plans to engage in crowdsourcing indicated they were slightly to very interested in the subject. In addition, the survey found that archivists execute crowdsourcing in myriad ways and often employ several technologies and competencies simultaneously.

Winter 2014

Kristen L. Bowen. *UNC-Chapel Hill North Carolina Collection Fiction from 2000-2014*. A Master's Paper for the M.S. in L.S degree. November, 2014. 45 pages. Advisor: Dr. Claudia J. Gollop

This study investigated how North Carolina fiction set in North Carolina has developed over the time period of 2000-2014. The North Carolina fiction studied was fiction held in the North Carolina Collection at UNC-Chapel Hill that had been published in the years 2000-2014 and was blogged on the Read North Carolina Novels blog. Seventy-five books were included in the study, and the genres, settings, and authors of these books were examined.

Based on the results of the study, the data revealed that the two most popular genres for the years of 2000-2014 were mystery and romance/relationship. These two genres

contain different subgenres and are adaptable to appeal to a wide range of users and also to authors because of their marketability. However, the lack of science fiction/fantasy novels from these years demonstrates the importance of studying North Carolina fiction to determine what is actually occurring within this market.

Lindsay J. Conway. Content Analysis of a Choir's Score Annotations: Characterizing Annotations and Assessing a Coding Scheme. A Master's Paper for the M.S. in Library Science degree. November, 2014. 66 pages. Advisor: Ericka Patillo

Previous research has found that annotations Western classical musicians create in their sheet music during ensemble rehearsal play a key role in fostering group coordination during music performance. Despite their important role in musicians' information interactions with sheet music and with each other, a dearth of research exists regarding musicians' annotations. This study conducted a content analysis of annotations that singers in a 100-voice choir created in 158 copies of music while rehearsing two pieces. More than 2,600 annotations were identified and classified according to a coding scheme previously developed by the most extensive study of musicians' score annotations to date. This study characterized choristers' annotations using the coding scheme. This paper offers an assessment of the coding scheme, suggestions for an improved research design, and ideas for future research of musicians' score annotations.

Vida Djaghouri. Gender, personality, and their effects on avatar customization for on-line video game environments. A Master's Paper for the M.S. in I.S. degree. November, 2014. 54 pages. Advisor: Richard J. Marciano

In light of the recent Gamergate controversy, the tension between male and female video game players is as discernable as ever. It behooves behavioral scientists, information scientists, and game developers to investigate the differences between men and women in video game environments, particularly in the ways in which they choose to physically represent themselves for online interaction. Several previous studies observed gender differences in avatar selection and customization, which typically only included human avatars as options to participants. Some of these studies also identified correlations between gender, Big Five personality traits, self-esteem, and avatar selection. The current study sought to improve upon these past studies by presenting other non-human races as additional avatar options. The results of the current study reflected similarities in men and women's avatar selection choices and

corresponding personality traits to previous studies in terms of avatar-participant discrepancies in light of the additional non-human race options.

Caroline M. Eckardt. Meeting the Information Needs of Studio Art Students in the Academic Library: A Survey Conducted at the University of North Carolina-Chapel Hill. A Master's Paper for the M.S. in L.S. degree. November 2014. 32 pages. Advisor: Barbara B. Moran.

This study looks at the information-seeking behaviors of students enrolled in studio art courses at the University of North Carolina-Chapel Hill and the students' perceptions of the effectiveness of the library instruction session within their art courses. In an effort to contribute new findings to the established discourse on this topic, surveys were distributed to graduate and undergraduate students to determine similarities and differences in behaviors and perceptions. The results of the survey echo the findings of earlier literature on the information-seeking behaviors of studio art students, reinforcing the idea that this population seeks creative inspiration for their works from a variety of sources. Survey results also reveal that a majority of responders have attended library instruction sessions as part of a studio art course and have found these sessions useful in various ways when conducting research for art-based projects.

Barrye O. Brown. A Case Study on the Diversity Initiatives 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. November, 2014. 40 pages. Advisor: Dr. Claudia Gollop

This study examined the diversity initiatives at the School of Information and Library Science at the University of North Carolina at Chapel Hill (UNC-SILS), as they pertain to the recruitment and retention of students and faculty from historically underrepresented groups. The case study method was used to gauge the extent to which "diversity" as a core value of the Information and Library Science profession has been embraced and implemented within the context of an Information and Library Science (ILS) school. As such, this study addresses the following questions: 1. What is the history of the UNC-SILS diversity initiative? 2. How have the objectives of the diversity initiative at UNC-SILS been identified? 3. What major steps have been taken to promote diversity at UNC-SILS? 4. What steps are being taken to assess the success of the short and long term effects of the diversity initiative? What measures will be used?

Stacy R. Gilbert. As seen on TV and in the archive: A comparison of television shows in the Library of Congress Online Catalog, YouTube, and the Internet Archive. A Master's Paper for the M.S. in LS degree. November, 2014. 50 pages. Advisor: Ryan Shaw

The objective of this study is to compare the comprehensiveness of the television collections of a traditional archive, the Library of Congress Online Catalog, and video-sharing websites, YouTube and the Internet Archive. Content analysis was used to compare the collections and descriptions of U.S. television episodes. The collections were compared based on the comprehensiveness of genres and time, as well as the type and degree of descriptions. This study will build upon other research that compared YouTube to traditional archives. It will also provide further information on the similarities and differences between video-sharing websites and traditional archives by comparing three collections that have not been empirically studied before.

Hillary Hollinger. Preserving history in motion: using oral history to preserve and enhance the memory of a National Hockey League team and of the individual players. A Master's paper for the M.S. in L.S. degree. November, 2014. 31 pages. Advisor: Denise Anthony

This study describes a questionnaire survey of the Carolina Hurricanes fan base. The survey was conducted to establish fan interest in oral histories of the Carolina Hurricanes team and staff. 167 responses were received and analyzed. Participants answered three multiple-choice questions and two free-response questions offering opinions about the current state of the identity and team memory of the Carolina Hurricanes. It was determined that fans want more than what is being currently documented and presented as the history of the team. Desired types of information include greater fan recognition and inclusion, team history, and celebration of existence in a non-traditional market, all of which can be effectively captured by oral histories.

Joshua V. Leto. The Preservation, Curation, and Accessing of SILS Course Material Using the LifeTime Library. A Master's Paper for the M.S. in L.S. degree. October, 2014. 45 pages. Advisor: Arcot Rajasekar

Since the accretion of knowledge is a cumulative endeavor, it is a problem that all course materials used by students in UNC's School of Information and Library Science disappears after the completion of each semester. To remedy this problem I propose using the LifeTime Library to archive the course materials for each class offered at SILS and make the archive available for students. By

creating an easy to use template, adding metadata and rules, students can find information about classes they are interested in taking, as well as access old syllabi, PowerPoint slides, class lectures, assignments, and notes.

Christine F Mayo. The Location of the Citation: Practice vs. Recommendations in Data Citation. A Master's Paper for the M.S. in L.S degree. November, 2014. 32 pages. Advisor: Todd Vision

Over the last decade, citation of archived scientific data have been the focus of intense debate. However, much of the work on data citation has centered around proposing specific formats for references. In the meantime, scientists have been creating and citing archived data sets, and we thus far lack a deep body of evidence to map the emerging best practices onto actual usage of data references.

This study sketches out some of those connections by examining references to data from the Dryad Digital Repository as appearing in articles collected in PMC Europe. I collected examples of references that appear in works cited lists and intratextually, and analyzed the occurrence of references over time, both by themselves and in conjunction with several other factors. This paper offers preliminary insights into current data citation practices, which hopefully can be used to help inform the discussion surrounding data citation.

Mary Mellon. "The Use of Cyrillic Metadata for Enhancing Discovery of Russian Digital Collection Items: A Case Study of the Bowman Gray World War I Postcards Digital Collection." A Master's paper for the M.S. in I.S. degree. November, 2014. 35 pages. Advisor: Denise Anthony.

This paper examines the online discoverability of multilingual digital collections, focusing on the effectiveness of romanized and original script metadata for providing access to materials in non-roman script languages. Using the World War I Postcards from the Bowman Gray Collection digital collection at the University of North Carolina at Chapel Hill as a case study, the dynamics of Russian-language user access to postcards with and without Cyrillic description were compared with those of other major language user groups accessing the collection.

While limited on a dependence on Google's system of determining user language, the results suggest that the nature of the Cyrillic metadata included in postcard records, limited to title, publisher, and other information transcribed from the resource in a bibliographic cataloging context, did not enhance the discoverability of the postcards. Moreover, every language group was at a distinct disadvantage

compared to English-language users in terms of numbers of items discovered. In conclusion, I discuss various factors that may have affected these results, as well as implications for cultural heritage institutions with multilingual and multi-script collections.

Meredith McClure-Scott. Trainers, Shorten Thy Training! An experiment to predict the effectiveness of a high-quality, interactive electronic LC shelving training tool. A Master's Paper for the M.S. in L.S degree. November, 2014. 32 pages. Advisor: Robert M. Losee

Training students to work in academic libraries is important work. It is also constant, given the nature of student turnover. Therefore, library managers and trainers should seek efficiencies in training without sacrificing quality. One part of training to examine for efficiencies is LC (Library of Congress) shelving training. This study examines which characteristics the best interactive electronic LC shelving games share per a literature review. Then it compares the performance of twenty shelvees who trained with a high quality interactive electronic LC shelving training tool versus the performance of twenty shelvees who trained with an excellent static guide. The interactive electronic group scored higher on average and experienced fewer low scores on the LC shelving test. More significantly, the interactive group members pinpointed where they made errors, which suggests that library employees trained with interactive shelving tutorials would need less remediation than employees who were trained using static shelving guides.

Valerie A. Moore. Public Perception of the Differences Between Printed and Electronic Books: A Content Analysis. A Master's Paper for the M.S. in L.S degree. November, 2014. 77 pages. Advisor: Denise Anthony

This study investigated user perceptions of the differences between print and electronic books. Using Marshall McLuhan and others' contention that media are not neutral conduits of information but rather shape the information they convey according to their own affordances and biases, this study focused upon the fundamental differences that are based on each medium's essential nature. Seven such differences were drawn from the literature and were used to categorize comments posted to online discussion boards and blogs using qualitative content analysis. Comparisons on all seven dimensions were identified, with tangibility discussed most and the direction of information flow discussed least. Two additional dimensions emerged during the coding process which may form an additional category. The list of fundamental differences may help cultural institutions prioritize what to digitize and inform the

discussion as to why these media may be different and suited to different uses.

Megan Proctor. The Chronically Ill Child: A Content Analysis Assessing The Realistic Portrayal of the "Illness Experience" for Child Characters in 21st Century Children's Picture Books. A Master's Paper for the M.S. in L.S. degree. November, 2014. 90 pages. Advisor: Brian Sturm

The growing realism that has emerged in children's literature in the past several decades has made it possible for more complicated topics such as chronic illness to be considered. Despite the growing presence of illness in children's literature, chronically ill characters are still vastly underrepresented and are often portrayed negatively or only partially. This remains true even as more children are diagnosed yearly with a chronic condition.

Research suggests that for children's literature featuring chronically ill characters to be valuable to its young readers, it must be reflective of the realistic emotions and behaviors chronically ill people experience. The "illness experience" has been defined in this paper by medical, social, and emotional factors. The following content analysis considers whether twenty children's picture books published since 2000 realistically present the illness experience of childhood chronic illness.

Jody D. Smith. Deficiencies in the Collection of American Indian Children's Literature in North Carolina's Public Libraries. A Master's Paper for the M.S. in L.S degree. December, 2014. 72 pages. Advisor: Sandra Hughes-Hassell

North Carolina is home to the largest population of American Indians east of the Mississippi River, and the state with the seventh largest Indian population overall. Likewise, the nationwide Indian population is growing at a rate almost twice as fast as the U.S. average. Anticipating the needs of a growing population, it is important that public libraries in North Carolina provide Indian youth with books which provide culturally-affirming representations of Indian peoples, traditions, and histories.

For this study, the nine counties in North Carolina with the largest Indian populations were isolated using 2013 U.S. Census estimates. Then, utilizing the online public access catalogs of the public libraries serving those counties, bibliographic searches were conducted for a selection of 206 books recommended by professional reviewing authorities. The data indicate that less than a quarter of the selected titles have been collected by a majority of libraries in the subset.

Jayasurya Somasunder. Designing and Creating a Database for Effective Storage and Retrieval of Pediatric Drugs. A Master's paper for the M.S. in I.S. degree. December, 2014. 46 pages. Advisor: Brad Hemminger

This paper discusses the creation of databases specially designed for pediatric drugs. There are many medical drugs databases available currently for adults but there is no database for pediatric drugs that can benefit end users who are looking for information specific to drugs for children. So the Division of Pediatric Hematology Oncology in UNC, Chapel Hill wants to have a repository to store and organize information about pediatric drugs in order to provide this information in a structured and easily accessible format that will benefit end users. This database will also be used to provide information to end-users especially consumers about drug repurposing i.e. using the same pediatric drug for more than one purpose.

Tana W. Stewart. Identifying Criteria Predictive of Successful and Unsuccessful Process Automation Projects. A Master's Paper for the M.S. in I.S degree. 12, 2014. 91 pages. Advisor: Stephanie W. Haas

The purpose of this study is to discover criteria that can be used to predict the type of candidate a process is for automation; good, or poor. Although automation has become the natural solution for organizations to enhance work processes, not all process are best improved by automation. Risks of changing a system with automation were identified in a literature review. Data about process automation projects, collected from IT professionals at a single organization, were analyzed in association with these risks. This study found that a process may be a good candidate for automation if risks to stakeholder interactions, risks in planning and stakeholder interactions, and risks in implementation and stakeholder interactions can be sufficiently managed, whereas a process may be a poor candidate for automation if the risks in planning, risks to stakeholder interactions, and risks in planning and stakeholder interactions cannot be sufficiently managed.

Luke A. Williamson. Exploring Mobile Knowledge Workers' Technological Barriers and Adoptive Strategies. A Master's Paper for the M.S. in I.S. degree. December, 2014. 48 pages. Advisor: Mohammad Jarrahi

This paper focuses on the technological barriers mobile knowledge workers contend with in their professional activities. In conducting an exploratory study of a small group, themes emerged regarding their technological barriers that eroded their capacity for mobility, which included interacting with associates remotely, incorporating

mobile technologies into the suite of professional tools, and building a portfolio of applications and services that prioritized their efficiency. My analysis is developed from concepts in Ubiquitous Computing and sociotechnical theory. By analyzing their barriers and adoptive strategies, I suggest a framework that aims to identify barriers and associate them with solutions.

Christine J. Cherney. The Contemplative Space: How Theological Libraries Can be Hospitable to Their Patrons' Process of Reflection. A Master's Paper for the M.S. in L.S degree. December, 2014. 37 pages. Advisor: Brian Sturm

This paper answers the modern movement of library design toward group spaces and computer workstations, sometimes to the cost of quiet spaces needed for contemplation. The study and observation of places created to inspire contemplation will yield a sampling of common characteristics that will be gathered into a rubric, and which can then be applied to today's theological libraries, helping them remain hospitable to the process of reflection. Not an argument against modern trends, this is a call for the defense of the quiet, the solitude, and the beauty that were once defining hallmarks of every library.

Marli Johnston. Autism Spectrum Disorder Representation in Young Adult Literature: A Content Analysis. A Master's Paper for the M.S. in I/L.S degree. December, 2014. 49 pages. Advisor: Sandra Hughes-Hassell.

This study examines the representation of protagonists with Autism Spectrum Disorders (ASDs) in young adult literature. A sample of 11 books were analyzed in an attempt to determine the most common way this group of young adults were represented and what types of stereotypes may be perpetuated. The results of this study found that most characters were relatively realistic and overall were accurately represented.

Laura Vepraskas. An Evidence-Based Study of Social Media Use by Small Businesses. A Master's paper for the M.S. in I.S. degree. January, 2015. 135 pages. Advisor: Stephanie W. Haas

Over the past decade, social media networking has become increasingly valuable to individuals and other entities, such as small businesses for promotional means. Developed as a tool to help individuals interact, communicate, and exchange information, social media use can yield positive outcomes for small businesses as evident through financial gain and increased customer communication.

Using Evidence-Based Practice (EBP) principles, this study evaluates the current body of literature regarding small business use of social media. Thirty articles were evaluated using a criteria checklist to develop recommended principles of how small businesses may best use social media in their future marketing strategies.

Spring 2015

Lisa D. Becksford. What Do Composition Faculty Want Their Students to Learn? Examining Source Evaluation. A Master's Paper for the M.S. in L.S degree. April, 2015. 47 pages. Advisor: Claudia Gollop

Over the last 25 years, library instruction has come to include not only teaching students how to find sources, but also how to critically evaluate information. A common place for such instruction is the composition classroom, but little research has been done to learn about the attitudes of composition faculty in regards to teaching students these skills. Through interviews with composition instructors in North Carolina State University's first-year writing program (FYWP), this study sought to learn about the attitudes of composition instructors towards teaching students to evaluate sources, including what students should learn and who should teach them. Participants' responses indicate that composition instructors want their students to be able to distinguish between reliable and unreliable sources and develop a basic understanding of the context of scholarly communication. In addition, most participants believed that some form of collaboration with the library was the best way to teach source evaluation.

Faith A. Burns. The Library as an Intervention in Children's Health: An Assessment of How Five Public Libraries in North Carolina are Collecting and Circulating Children's Books that Promote Physical Activity.

A Master's Paper for the M.S. in L.S degree. April, 2015. 63 pages. Advisor: Dr. Mary Grace Flaherty Childhood obesity is a concern in the United States, with over one-third of children being overweight or obese. Obesity increases children's risks for chronic conditions, premature disability and death. Bibliotherapy is an intervention that encourages individuals to cope with life and health challenges through reading. It has been used to help children deal with issues and can be guided by a trained professional. Because of their professional skills, and the collection of materials in the library, librarians are at a unique position to use bibliotherapy to help children. With the growing emphasis on fighting obesity, many libraries have implemented initiatives and programs that encourage healthy

lifestyle choices. This paper examines the extent to which five public libraries in North Carolina collect and circulate children's books promoting physical activity. The paper uses the data collected to assert that the studied libraries have a unique opportunity to help fight childhood obesity.

Alison Blaine. A Survey of How Organizations Address the Information Needs of Farmworkers and Considerations for Mobile Solutions. A Master's paper for the M.S. in I.S. degree. April, 2015. 47 pages. Advisor: Cliff Missen

This study describes results from a survey of organizations that deliver information to farmworkers and three semi-structured interviews related to mobile technology projects that address farmworker information needs. The survey was conducted to determine how organizations currently meet farmworker information needs and explore whether mobile technology is part of their information solutions. The interviews were conducted to provide examples of mobile solutions and offer considerations for organizations interested in exploring mobile options.

Brian M Burns. Physical Versus Digital Museums: The User Experience. A Master's Paper for the M.S. in LS degree. April, 2015. 26 pages. Advisor: Brad Hemminger

The purpose of this study is to distinguish the way people interact with artifacts in a physical environment versus a digital environment. As technology advances, we are getting closer and closer to having a more 'realistic' experience within digital museums. A literature review looks at the pros and cons of these advancements, and discusses what they mean for the future of museums. A study is conducted and concludes that while digital museums are a fantastic resource, they do not perfectly capture the experience one has within a physical museum.

Kelsey C.H. Chandler. Virtual Spaces and Physical Places: Analyzing Patron use of Digital and Physical Collections at the Louis Round Wilson Library, University of North Carolina, Chapel Hill. A Master's Paper for the M.S. in L.S degree. April. 2015. Year. 89 pages. Advisor: Dr. Denise Anthony

This study describes a multi-modal use assessment of the digital collections and corresponding special collections materials at Wilson Library, the University of North Carolina at Chapel Hill. The study includes: a study of Google Analytics data relating to specific digital collections, an analysis of physical collections use based on metadata provided by the Aeon request system, and a survey-based exploration of current user experiences and expectations

regarding materials in Wilson Library's Special Collections.

Collections that data indicated were more popular had a higher bounce rate and a lower depth of exploration by patrons than collections with a smaller user population, the use of which suggested an in-depth, purposeful exploration of the collections. Subjects indicated interest as the most likely reason to use physical collection materials or visit a physical exhibit incorporating said materials, but also privileged accessibility and outreach as key components in use decisions. The study indicated an interest, among subjects, in more visible outreach and advertising regarding programming at Wilson Library and a need for greater awareness regarding the accessibility of special collections materials at Wilson Library.

Brett D. Currier. Comparing Dyslexia and Visual Impairments under W3C's WCAG: A Legal Standard for Web Design? A Paper for the M.S. in L.S degree: April, 2015. 51 pages: Advisor Amelia Gibson.

W3C's Web Content Accessibility Guidelines (WCAG) has become the de facto legal standard for web design based on recent settlement agreements. The Department of Justice has even tried to make WCAG the actual law. This paper examines the most common plaintiffs in successful Americans with Disabilities Act (ADA) litigation against colleges and universities (individuals with visual impairments) and compares these plaintiffs to individuals with dyslexia, as both populations are covered under the ADA, as both populations have the same affected major life activity: reading. After identifying the 15 overlapping Success Criteria, this review then uses a systematic review methodology to determine when designing for individuals with dyslexia, then it also creates accessible webpages for individuals with visual impairments and when they do not.

Kai Ewing. LGBTQ Center Resource Library Access: A Case Study. A Master's Paper for the M.S. in L.S degree. April, 2015. 60 pages. Advisor: Sandra Hughes-Hassell.

This case study discusses why LGBTIQ collections are important, LGBTIQ people and their needs, a brief history of UNC and the LGBTQ Center, and work done at the LGBTQ Center's Resource Library. This included inventorying and cataloging the collection as well as working on the Resource Library webpage. Finally, the study addresses results of the reorganization process, limitations faced in this particular setting, and lists recommendations for other LGBTIQ groups, organizations, offices, and centers looking to increase the visibility of their collections.

By conducting and writing the results of this case study, I hope to contribute to the literature on how LGBTIQ

organizations on college and university campuses develop and promote their collections. In particular, I hope to create a template LGBTIQ-focused organizations, centers, and offices can employ to build representative collections and represent their existing resource library in their institution's online catalog.

Gergana Dimitrova. Correlating Twitter Sentiment with Basketball Game Events and Characteristics. A Master's Paper for the M.S. in I.S degree. April, 2015. 75 pages. Advisor: Stephanie Haas.

This study performed sentiment analysis on Tweets created during 30 basketball games. 14,440 Tweets were collected using the Twitter Streaming API, parsed by a script and analyzed using the program SentiStrength. There was significant strong positive correlation between game sentiment of fan Tweets and the outcome of the game. Significant correlation was also found between fourth quarter sentiment of fan Tweets and the outcome of the game. Findings suggest that fans participate in live-Tweeting game events as a way to interact with the game and other fans. This study proposes that improvements can be made to sentiment analysis through domain-specific approaches such as improved domain dictionaries and lexicons.

Neda E. Defibaugh. Librarian Perceptions of Problematic Adult Behavior in the Teen Space. A Master's Paper for the M.S. in L.S degree. April, 2015. 43 pages. Advisor: Sandra Hughes-Hassell

This study investigated problematic adult behavior in the teen spaces of public libraries in North Carolina. Data was gathered through surveys and interviews, recruiting participants through the state listserv for children and youth services library staff. The results of this study found that problematic behavior commonly included adult use of space, invasion of teen privacy, predatory behavior, disregard of library policies or signage, and acting as authority figures towards teens within the space. This study concludes libraries should consider the role the physical library layout plays in problematic incidents, as well as foster cooperation among staff outside of youth or teen services in addressing problematic behavior in addition to current strategies for handling problematic adult behavior.

Kelly M Fullerton. Popular Reading Collections in Academic Libraries: Are they worth it? A Master's Paper for the M.S. in L.S degree. April, 2015. 43 pages. Advisor: Mary Grace Flaherty

Academic libraries, though situated within universities, are not purely for academic purposes and have made efforts

to provide services that support the overall university life of students. These efforts include providing recreational reading materials to patrons. This paper is a case study of one particular leased recreational reading collection at a southeastern university that looks at how these collections are utilized by patrons and perceived by librarians. Circulation statistics for the collection were analyzed and interviews with librarians involved with the collection development and maintenance of the materials were conducted to consider how these collections fit within academia. Additionally, this paper includes a survey of 12 universities with similar collections to determine if the results from one university are broadly applicable to others. Research determined that popular reading collections have a demonstrated use for various patron groups and are valuable to both patrons and librarians.

Landon J Grindheim. Data Visualization Service: SQL vs. NoSQL. A Master's Paper for the M.S. in I.S degree. April, 2015. 36 pages. Advisor: Arcot Rajasekar

This paper compares the performance of a relational database (PostgreSQL) and NoSQL database (MongoDB) in retrieving sets of IP intelligence data for information visualization. After an overview of the history of the two database paradigms, a study reporting the performance of an instance of each is described. Also described is database performance in conjunction with visualization software. Results are compared and discussed. Finally, limitations of the study are discussed and areas of future research are introduced.

Paul D Farrell. Automating Author Gender Identification from Blogs. A Master's Paper for the M.S. in IS degree. April, 2015. 27 pages. Advisor: Stephanie Haas

The rapid growth of public blogging on the Internet has opened up a vast trove of information that can be text mined for potential insights. This study explores the potential of automating blog author gender based on differences in lexical expressions. The results of this study were mixed, and further refinement is needed.

Courtney Fenters. Evaluation of a Training Method for Library Cataloguing Volunteers. A Master's paper for the M.S. in L.S. degree. April, 2015. 46 pages. Advisor: Ericka Patillo

This paper describes a project conducted in conjunction with the library at the LGBT Center of Raleigh. Five volunteers were instructed to create catalog records for the same ten books, following only the instructions in a set of procedures called the cataloguing manual. Their work was

then briefly discussed. The effectiveness of the manual was evaluated by comparing the participants' records with librarian-created "perfect" records for the same books. Participants' qualitative feedback was then incorporated into the final draft of the manual.

Charles S Fultineer. A Case Study and Literature Review: How Effective IT Governance is the Key to Successful Enterprise Resource Planning Deployments. A Master's Paper for the M.S. in IS degree. April, 2015. 43 pages. Advisor: Lew Hassell

Deploying an Enterprise Resource Planning (ERP) solution is a complex and risk laden program of work that not every company is successful in delivering. In this study, the author (an IT leader at a large pharmaceutical company) presents a case study where he draws upon his experiences and learnings from leading two ERP implementations, as well as a literature review examining whether the author's hypothesis that IT Governance is the critical success factor in ERP deployments is supported amongst IT industry researchers, analysts, and strategists. The study goes was able show a strong correlation between companies who have strong IT Governance presence on ERP deployments and their ability to deliver the program of work successfully.

Catherine Field. A window opened on the library: An analysis of public library marketing. Master's paper for the M.S. in L.S. degree. April, 2015. 48 pages. Advisor: Mary Grace Flaherty

This study performed content analysis on nine library websites, which were deemed to be leading libraries by The Library Journal's Star Index. The content analysis was conducted to determine what America's leading public libraries were doing to market their services. First the cycle of marketing was divided into four necessary steps: analysis, planning, implementation, and evaluation. Twelve indicators were developed to represent the different steps in the marketing process. The websites were searched for evidence of these twelve indicators, and the results varied greatly from library to library. Four of the indicators were found on every library's website, showing that public libraries are currently placing importance on library logos and branding, social media accounts, online resources, and patron contact forms. Overall the findings suggest that libraries are doing some steps in the marketing process, but they lack cohesion and connection.

Halley L. Hair. Investigating the information needs of interdisciplinary research centers: A content analysis.

A Master's paper for the M.S. in L.S. degree. April, 2015. 32 pages. Advisor: Rebecca Vargha

This study describes a content analysis of the websites of interdisciplinary research centers co-located on and associated with university campuses. The purpose of the study was two-fold; first, to determine whether the information needs of interdisciplinary research centers were indicated on their websites, and second, whether these needs appear to be met by current academic library partnerships or services. Little evidence was observed of services or partnerships between academic libraries and interdisciplinary research centers. This analysis fills a gap in the literature, as research on the relationships between interdisciplinary research centers and academic libraries has been limited. The study uses a small sample of twenty-five websites in order to develop themes and categories upon which later research might be based.

Michael E. Head. Change Blindness in Web Applications. A Master's Paper for the M.S. in I.S degree. April, 2015. 52 pages. Advisor: Todd Barlow

Design practitioners have long believed that web interfaces are at a disadvantage compared to desktop interfaces because the web page model may cause change blindness more than non-page based interfaces. To evaluate this concern, a within-subjects experiment was set up to test various change types in a mock web application. User performance was better when a page loaded as normal and when elements changed instantly on screen compared to a half-second flicker change type. However, change detection rates were only 5% greater and response times only 0.1 second faster for the instant change compared to page loading. This shows that there is some change blindness effect due to the Web's page-by-page architecture, but it is not nearly as disconcerting as practitioners have long believed. Furthermore, single page applications that minimize full-page refreshes may help reduce the incidence of change blindness on the web.

Elizabeth M. Huessy. Change Makers: An Annotated Bibliography of Social Action in Children's and Young Adult Literature. A Master's Paper for the M.S. in L.S degree. April, 2015. 54 pages. Advisor: Sandra Hughes-Hassell

A recent focus in education on the importance of teaching social justice issues necessitates the creation of resources to support teachers and librarians in this work. This annotated bibliography recommends a selection of children's and young adult literature that features social action and social justice in the areas of human and civil rights, labor

and community organizing, and the environment and animal welfare. This resource is not comprehensive, rather it highlights a selection of high-quality literature published in the last twenty years that through the genres of realistic fiction, historical fiction, narrative non-fiction and biography, provides models of social action for young people. Through identification with the literary role models in these works, children and teens can begin to understand the myriad forms that social justice can take and be empowered to make change in their own lives. This, then, is a collection of works for exploring the lives of historical change makers, imagining fictional ones, and identifying with the unsung heroes in our midst today.

Joy E. Jones. We share what we are: user contributions and annotations in digital contributory archives. A Master's Paper for the M.S. in L.S degree. April, 2015. 45 pages. Advisor: Ryan Shaw

A contributory archive is one in which individual users may interact with materials through activities like commenting, tagging and sharing, but more importantly they may add content to the collection through uploading items like photos or videos and adding stories and text. This paper examines the community-led contributory archives listed at the website for the UK Community Archives and Heritage Group (www.communityarchives.org.uk), an umbrella organization that provides a central location for community archives, as a case study for expanding our knowledge of user participation in digital archives. This study examines user-generated content in digital community archives including annotations and contributions, the type and frequency of content created, and technical specifications as insight into amateur digital preservation of heritage materials. The information gleaned from this study can be used to assess the effectiveness of community-led projects as a possibility for cultural heritage centers to expand their mission in a participatory platform.

Lynne E. Jones. Graduate Education in Cataloging: What Courses and Competencies Are Being Taught?. A Master's Paper for the M.S. in L.S degree. April, 2015. 41 pages. Advisor: Wanda Gunther

This study has, through crafting a list of competencies for catalogers, analyzing course offerings, and conducting a content analysis of syllabi, attempted to describe the current state of cataloging education in ALA accredited graduate programs for library and information science. A review of the literature has yielded a list of seventeen basic competencies in several different topical areas. Analyzing course offerings has shown that of the fourteen selected

schools, all have at least two courses that contained cataloging content. The analysis of syllabi revealed that adequately addressed competencies include cataloging and classification standards, general knowledge of theory and tools, subject analysis, and the theory behind and format of authority records. However, courses do not properly address competencies in the areas of bibliographic utilities, understanding of library catalogs and integrated library systems, practical skills for authority work, an understanding of cooperative programs and groups in the field, and meta-data instruction.

Evgeniia Kazymova. Carolina Health Informatics Program website overhaul to improve usability and information access. A Master's Paper for the M.S. in I.S. degree. April, 2015. 42 pages. Advisor: Javed Mostafa

The Carolina Health Informatics Program (CHIP) is a new program at the University of North Carolina at Chapel Hill that conducts research and training in health sciences by applying informatics approaches. The CHIP "Faculty, Scholars and Researchers" webpage (<http://chip.unc.edu/faculty-scholars-researchers/>) provides information about the CHIP faculty and researchers. The goal of this project is to enhance the webpage by adding dynamically updatable information about each member's current research. The goal was achieved by retrieving the information from Google Scholar and PubMed databases by executing the client-side and server-side code written in JavaScript/JQuery, PHP, CCS, and Ajax. A usability study was performed to assess the enhanced webpage. Based on the usability study findings, the prototype system was improved and further suggestions for improvements were proposed. The usability study demonstrated that the developed prototype greatly enhanced the usefulness of the website and helped to achieve CHIP's goal to provide easy access to the current research information for each faculty member.

Anna B. Loewenthal. Comparing Representations of Race in Finding Aids Over Time. A Master's Paper for the M.S. in L.S. degree. April, 2015. 42 pages. Advisor: Denise Anthony

This study compares two sets of finding aids about the same set of collections, written in the early 1990s and updated in 2011, in UNC's Southern Historical Collection. Instances of race terms, particularly as relating to black people, were compared between the finding aids to discover how representations of race have changed over time. The study revealed a decrease in the use of "negro" with an increase in the use of "African American." The word "slave" in both sets of finding aids most often identified the

presence of black people in the collections. Archivists updated their race terms, but there were ultimately fewer instances of race words, which in some instances lead to a loss of representation.

Ashleigh N. Lumpkin Stevens. Sheet Music Cover Art: A Case Study in Institutions' Guidelines and Practices. A Master's Paper for the M.S. in L.S. degree. April, 2015. 40 pages. Advisor: Ericka Patillo

Sheet music cover art is a seldom studied point of access for users in the modern library. While research is beginning to recognize that users desire greater discoverability via cover art, it is not known how this is being handled currently in music institutions' collections. In this study three institution's collections are studied to establish the community's guidelines and practices for describing cover art. Through comparative case studies, the study found that the process and practice of description for cover art is a complex mixture of standards, research, and institutional limitations. This amalgam, while based in standards, was found to be overall ineffective in presenting cover art for users. Issues of definition, transparency, and aging were identified to compound this.

McAdams, Jessica. Portrayals and Presence of Adult Female Characters in Children's Picture Books: A Content Analysis of Bestsellers from the Past Five Years. A Master's paper for the M.S. in L.S. degree. April, 2015. 55 pages. Advisor: Brian W. Sturm.

This paper presents a content analysis of thirty-one bestselling picture books from the years 2010 – 2014 in order to reveal how women are portrayed to children. The purpose of the study was to discover whether or not young readers are receiving stereotypical gender representations through picture books that can affect their view of gender roles in society. The analysis explores professional roles adult female characters held in these books as well as what they were performing, where they were physically located, and what they were wearing.

The results of the content analysis revealed that women are more frequently present in children's picture books than men. These female characters however, are not representative of the abundance of job opportunities available to women today; rather they are predominately depicted as mothers with their primary responsibility being caring for children and other household duties. These results suggest that there has been progress towards gender equality in picture books but there is still more work to be done to ensure that the breadth of male and female gender roles is showcased.

Elizabeth J. McGlynn. Information Literacy by Design: Creating a Teaching & Training Template for Developing Library Instructors. A Master's Paper for the M.S. in L.S degree. April, 2015. 47 pages. Advisor: Jonathan McMichael

To meet increased demand for library instruction, many academic research and instruction departments rely on pre- and paraprofessional librarians to teach classes. However, due to the general lack of teaching experience these staff members tend to possess at the time of their hire, they often have to receive extra training. This paper documents the process of creating a framework for developing instructors at the University of North Carolina's Undergraduate Library, entitled Information Literacy by Design (ILbD). Based on Wiggins and McTighe's Understanding by Design, this framework acts as supplemental training for new and developing instructors, equips them with a template for creating lesson plans, and provides a web-based outlet for them to share their work.

Grant L. McLendon. Talking Back: How Congress Engages With the Public on Twitter. A Master's Paper for the M.S. in IS degree. April, 2015. 27 pages. Advisor: Jaime Arguello

This paper examines political social media interaction between Members of the United States Congress and the general public on Twitter. Specifically it attempts to gain a better understanding of what motivates a Member of Congress to reply to a tweet by building a model to predict which tweets Members of Congress will reply to. Predicting social media interaction of elected Members of Congress is a challenging machine learning task. MOCs reply more often to positive tweets based on personal interactions they have had and positive feedback. The distribution of reply to non-reply tweets makes predicting responses very error prone. In this process a several methods of predicting rare events in text were attempted with inconclusive results.

Shelby L. Merritt. Describing Historical Objects for Users with Subject Knowledge: Lessons from the Charles Kuralt Learning Center. A Master's Paper for the M.S. in L.S degree. April, 2015. 45 pages. Advisor: Denise Anthony

The research on improving the accessibility of descriptive records for cultural objects is extensive. Such studies, ranging from indexing and subject access to experiments with social tagging, have historically focused primarily on art objects to the neglect of other cultural objects, however. Utilizing the Charles Kuralt Learning Center, a collection of historical objects at the University of North Carolina-Chapel

Hill, this study explores the needs of a specific user group—researchers with relevant subject knowledge—when using descriptive object records for research. Three major themes emerged during the data analysis process: the contextualization of objects; the relationships between object records; and an interest in confirmation, validation, and authenticity.

Katherine L. Meyer. Towards a Definition of Minimalism: Principles of Minimal Visual Design in Web Interfaces. A Master's Paper for the M.S. in I.S degree. March, 2015. 58 pages. Advisor: Dr. Ronald Bergquist

“Minimalist” has grown into more than just a buzzword amongst Web designers. In the past ten years, a minimalist design aesthetic has rapidly gained popularity and respect in mainstream Web audiences. Most Web design experts agree that minimalist Web designers approach their work with a ‘less-is-more’ philosophy: only absolutely necessary graphic and content elements should be included. However, Web design experts differ in the details, and each has a slightly different argument about what characteristics qualify as minimalist.

This study surveys the writings of several prominent Web design experts to tease out a working definition of what constitutes a minimalist Web interface. The study then codes a sample of minimalist interfaces based on the most important characteristics of minimalism, as determined by the working definition. The results suggest that visual focus on primary content, flat graphic design, and restricted color palettes are important features of minimalist websites.

Hillary K. Miller. Securing Text and Data Mining Rights for Researchers in Academic Libraries. A Master's Paper for the M.S. in L.S degree. April, 2015. 50 pages. Advisor: Anne Klinefelter

This study describes the results of an online survey of librarians involved in license negotiations at academic institutions in the United States. The survey sought to discover the approaches taken by academic librarians to secure text and data mining rights through licensing of electronic resources.

Kathleen A. Monahan. “can i h3lp u?”: Analyzing Chat Reference Questions in a Special Collections Library. A Master's Paper for the M.S. in L.S degree. May 2015. 49 pages. Advisor: Claudia Gollop.

This study examines the types of questions asked via chat reference in a special collections library at a public university. Examining a year of chat transcripts (115

transcripts in total), this study categorized questions as research, ready reference, directional, policy and procedural, holdings/do you own, and reproduction requests. It also examined whether questions asked via chat were answered entirely within the chat conversation or if the staff referred the patron to email in order to answer the question at a later time. The study found that 36.7% of total questions were research questions and that 45% of questions were answered completely in chat while 55% were referred to email.

Sarah E. Morris. Evaluating the Impact of the Student-Athlete Library Liaison Program at the University of North Carolina- Chapel Hill. A Master's Paper for the M.S. in L.S degree. April, 2015. 46 pages. Advisor: Ericka Patillo

This plan was created to assess the impact of the Student-Athlete Library Liaison Program on student-athletes' self-efficacy when approaching library resources. The program is an initiative of the library to ensure it is meeting student-athletes' information needs. The program uses an embedded model where library tutors hold drop-in hours at the athletic center at UNC. The evaluation action plan includes pre- and post-intervention surveys developed to measure self-efficacy and the impact of immediacy and location on student-athletes' comfort with the library resources. The assessment plan can be implemented by tutors during and after sessions, and this paper discusses potential setbacks and opportunities when libraries evaluate programs involving student-athletes.

David O'Ferrell. Introducing an Enterprise Project Management Tool into an Agile Development Environment: Fit and Performance Impact. A Master's Paper for the M.S. in I.S. degree. May, 2015. 68 pages. Advisor: Barbara Wildemuth

The principles of Agile software development promote interactions over tools, but practical application of Agile can demand a considerable amount of structure from software development teams. Vendor software solutions specifically designed for Agile work offer an alternative for many organizations still using manual methods or ill-fitted tools. In this study, we examined task-tool fit between functionality provided by a vetted Agile software solution, and tasks needing to be accomplished by software development teams practicing Agile Scrum methods. A high level of task-tool fit was determined for tasks within several Scrum summary activities. Also evaluated was task-tool fit impact on actual performance of Scrum teams. Quantitative metrics demonstrated an average overall increase in

performance after tool implementation for accomplishment of tasks within two Scrum summary activities being measured (Sprint Planning and Sprint Execution). It is suggested this performance improvement can be generally attributed to the determined high level of task-tool fit.

John O'Connor. Towards a Profile of Open Government Data Users. A Master's Paper for the M.S. in I.S. degree. April, 2015. 65 pages. Advisor: Prof. Paul Jones

This paper studies the user bases of two large open data initiatives in the United States in order to determine a profile of the users of open data services. Survey data from Open Raleigh (Raleigh, NC) and DataSF (San Francisco, CA) are used in combination to determine demographics of open data users. Discussion includes implications of demographics on the future of open data initiatives and whether the demographics as they exist today are acceptable for programs funded by the public at large.

Jamie A. Patrick-Burns. History and Genealogy: A Study of the Relationship between Genealogical Research and Interest in History. A Master's Paper for the M.S. in L.S degree. April, 2015. 50 pages. Advisor: Helen Tibbo

Genealogists make up an important segment of libraries' and archives' user population. This study explores the connection between genealogical research and interest in history to better understand user interests and needs. A survey of three North Carolina genealogical societies was compared to the answers of graduate students at the University of North Carolina – Chapel Hill. The results indicate that genealogists tended to be more interested in history in general than the students and revealed some common motivations for genealogical research between the two groups. Both groups enjoyed learning the context of ancestors' lives, exploring the continuity of family traits, and building a narrative. Distinct from the students, genealogists also tended to like community, the learning process, and problem-solving. These findings can help information professionals develop more effective resources for and provide better service to their genealogist patrons.

Elizabeth I. Peele. Forming Your Terrorist Network: ISIS, Twitter, and the Terrorist Propaganda Campaign. A Master's Paper for the M.S. in IS degree. April, 2015. 77 pages. Advisor: Mohammad Hossein Jarrahi

Since the founding of the Caliphate in June 2014, the Islamic State of Iraq and Syria has gained worldwide media attention for its campaign of violence across Iraq and Syria. Social media, particularly Twitter, has become a main aspect of ISIS's media campaign. It has been used to spread

propagandistic images and videos of ISIS into the Twittersphere. This propaganda is important to ISIS because it spreads their message far past its occupied borders and helps to gain support from a wider audience. Using social media analysis and Twitter's own APIs, this research focused on ISIS's Twitter propaganda campaign and sought to discover the underlying network structure. The resulting network structure – scale-free – is then analyzed to see how it affects ISIS's dissemination of propaganda on Twitter. Ultimately, this research hopes to start a conversation on how network structure can be used to stop terrorist organizations from spreading their message online.

Mary E. Peterson. Not-so Social Media: Citizen-Legislator Communications in the Digital Age. A Master's Paper for the M.S. in I.S. degree. April, 2015. 48 pages. Advisor: Jaime Arguello

This exploratory analysis investigates how constituents talk to their members of Congress via the popular micro-blogging site, Twitter. An analysis was performed on roughly 3500 tweets sent to members of Congress over a 6-week period by developing a novel categorization system and then applying the categories both with human annotators and machine learning.

Jonathan L. Pulliza. An Analysis of Speculative Language in SEC 10-K Filings. A Master's Paper for the M.S. in I.S. degree. May 2015 36 pages. Advisor: Stephanie W. Haas

This study applies sentiment analysis techniques to model the usage of speculation within a collection of financial documents. The model is trained on the MPQA corpus to extract features that correlate with speculative sentences and applied to a collection of SEC 10-K documents from a five year period. The documents with the highest amount of speculation contained a different concentration of terms compared to the entire collection, and the sentences mostly consisted of explaining potential risks concerning projects, taxes, and pensions.

Michael Schaffer. Law School Mission Statements and Librarians' Perceptions: An Analysis of Law School Library Practices. A Master's Paper for the M.S. in I.S. degree. April 2015. 43 pages. Advisor: William Cross

This study examines the mission statements of three different law schools and compares those stated missions to the actual practices of the affiliated law school library. In an attempt to better understand the purpose of law school libraries and what influences their practices, librarians at three law schools with differing missions were

interviewed regarding the practices, policies and priorities of the library and the results from those interviews were compared to the content of the libraries' related law school's mission statement. The findings in this study prove that the mission of a law school has a great influence on the practices of the school's library, and the practices of those libraries play a significant role in assisting the school in carrying out its mission. In addition, the findings of this study highlights ways in which law school library practices can both differ and be similar.

Oak Ritchie. Platform Algorithms and Their Effect on Civic and Political Arenas. A Master's Paper for the M.S. in IS degree. April, 2015. 66 pages. Advisor: Dr. Zeynep Tufekci

The purpose of this research was to analyze the ways that social media platform algorithms affect user experience and thus, civic and political arenas. This paper analyzes literature on the topic that will illuminate specific ways that algorithms dictate to the user what is visible or invisible, considered "fresh" or "irrelevant" and the implications of such digital curating.

C. Allison Sills. Library Services for the Homebound: You Can Afford It. A Master's Paper for the M.S. in L.S. degree. April 2015. 38 pages. Advisor: Mary Grace Flaherty

Homebound patrons are an often-overlooked population, though their needs like their size are growing. This paper examines literature about the population, their needs and the methods used to reach them. Included is research about several North Carolina public library homebound programs that show real world examples of different delivery methods. Different delivery methods include home delivery and mail delivery. Examination of those methods can be used to determine, from a variety of different methods, which method may be financially feasible for a library seeking to add homebound service in their community.

Lindsey J. Smith. Users and Special Collections: Access and Outreach Awareness at the University of North Carolina's Wilson Library. A Master's Paper for the M.S. in L.S. degree. April, 2015. 53 pages. Advisor: Denise Anthony

This study examines the experiences of a sample of users of the Wilson Library Special Collections. Issues of accessibility, outreach effectiveness, and user satisfaction are addressed, including access to digitized collections, user awareness of outreach activities, and patron experiences

with the spaces and resources available for their use. Survey results are discussed and suggest that, from this small sample, user priorities and those of archivists may differ in their scope. When developing collections, outreach programs, collection websites, and other user tools and spaces, special collections professionals should take into account their desired audience and examine their needs as objectively as possible to make such activities as successful as possible.

Kyle J. Shaffer. Predicting Speech Acts in MOOC Forum Posts Using Conditional Random Fields. A Master's Paper for the M.S. in I.S degree. April, 2015. 54 pages. Advisor: Jaime Arguello

Massive Open Online Courses (MOOCs) have emerged as a way to reach large numbers of students by providing course materials as free online resources. The popularity of these courses has been reflected in high enrollment numbers, however it is unclear how successful MOOCs are at educating their students given their high attrition rates. One cause for this may be due to instructors' inability to manage the large number of students that enroll. While discussion forums are available for students to seek help, instructors are unable to monitor the large number of posts written in these forums. This study investigates the effectiveness of using machine learning models to classify posts into speech acts as a way to help instructors monitor these discussion forums. Speech acts describe the purpose of a post and may be indicative of common functions such as asking questions or raising issues. A linear classifier is compared against a conditional random field (CRF) classifier, which is able to leverage contextual information about the forum in order to make predictions. The results of this study find that CRFs outperform a simpler linear classifier, and this suggests that casting this prediction problem as a sequence labeling task is fruitful for predicting these speech acts, and automatically identifying posts of interest.

Anna M. Snyder. Stages of E-Government Service in North Carolina Counties: Examining the Inventory. A Master's Paper for the M.S. in L.S degree. March 2015. 101 pages. Advisor: Evelyn Daniel.

This study examines the use of e-government services by North Carolina county governments. The study was conducted to investigate at what stage of e-government North Carolina counties have reached. Three variables were examined to determine which, if any, could explain the e-government stage where the counties are the three variables were region, economic development tier level, and broadband access. Methods employed over the course of the study included sending a survey to county IT directors and

managers, and examining county websites in the case of non-response. Zero counties were found to be at the Presence stage, while 13% were found to be at the Interactive stage, and 87% are at the Transactional stage—which was divided into Early and Advanced Transactional stages for closer inspection. Though the variables individually can impact Internet or e-government uses, none of them completely explain the e-government stage of North Carolina counties.

Rebecca Solomon. Personal Digital Photograph Management and the Impact of Social Media. A Master's paper for the M.S. in I.S. degree. April, 2015. 53 pages. Advisor: Robert Capra

This study describes eight one-on-one interviews of UNC-Chapel Hill undergraduate students about their digital photograph collection. Analysis of the interviews explores how participants manage their personal digital photographs and the influence of social media on their collection management. The participants discussed why they post photographs to social media, why they delete photographs from their devices and social media, and how they transfer photographs between their multiple devices. They also discussed their photograph management through the lifecycle of a photograph, from capturing, editing, sharing, and storing an image on their devices. The social media sites used by the participants included Facebook, Instagram, Twitter, Google+, and Picasa.

Caroline A. Simpson. Nonprofit Use of Information Visualization. A Master's Paper for the M.S. in L.S. degree. April, 2015. 47 pages. Advisor: David Gotz

This study explores how nonprofit organizations implement information visualization in their operations. Nine nonprofit employees were interviewed to better understand how these organizations use information visualizations to make decisions, plan for the future, and communicate information insights to stakeholders.

Expertise and use of information visualization in nonprofits seems to be growing. Interestingly, some nonprofits create information visualizations and tools that foster relationships with stakeholders and spread the use of data to different levels of the organization and various partner organizations. Most nonprofits interviewed use information visualizations on some level in both internal and external organizational activities although many lack standards for creating visualizations and methods for evaluating the effectiveness of the visuals they create.

Margaret Southwell. "I Don't Care What Color You Are": The Depiction of Adolescent Interracial Romances in Young Adult Novels. A Master's paper for the M.S. in L.S. degree. April, 2015. 65 pages. Advisor: Brian Sturm.

This study used qualitative content analysis to examine the way in which adolescent interracial romances are portrayed in Young Adult novels. The purpose of the study was not only to identify the consistent, overarching themes in the novels but also to compare their depiction of adolescent interracial romances to the research on the reality of the experience of these relationships. Seven realistic fiction, YA novels in which the protagonists date interracially were selected for the study, and analyzed in depth using several guiding questions based on the literature, emergent coding, and the constant comparative method. Overall, the study found that the portrayal of adolescent interracial romances in these novels was positive, encouraging the hope for a more tolerant, integrated society in the future. Surprisingly, race was not the focus of most of the novels, and the difference in race was often only a secondary obstacle to the relationships.

Emily D. Spunaugle. Books Unre(a)nd : The Institutional Logics of Soviet Book Procurement in the Wake of the Foreign Agents Registration Act. A Master's Paper for the M.S.L.S degree. April, 2015. 76 pages. Advisor: Stewart Varner.

The Foreign Agents Registration Act (FARA) of 1938 was instrumental in detaining or destroying solicited and unsolicited mail from the Soviet Union bound for American addressees, including libraries and research centers, until the 1960s. FARA appears briefly in library literature, but no in-depth examination of its mechanisms and effects has been hazarded. This study posits a model for representing the importation and circulation of materials using Roger Friedland and Robert R. Alford's (1991) concept of institutional logics, highlighting the tension created through the competing interpretations of FARA of the Soviet export house, Department of Justice, Department of State, Post Office Department, Customs Bureau, booksellers, and research libraries. FARA's perniciousness coincided with the library's fundamental shift in institutional ethics, as the profession became politicized amid the coalescence of contemporary notions of intellectual freedom.

Julie N. Stivers. The Graphic Novel Gap: Collection Strength and School Librarian Understandings of Graphic Novel Benefits. A Master's Paper for the M.S. in L.S degree. April, 2015. 43 pages. Advisor: Sandra Hughes-Hassell

Educators and researchers advocate for including graphic novels in both the school library and curriculum, as a wide range of literacy benefits have been identified for both specific groups of youth—and students as a whole. Despite this professional advice however, school librarians differ in the extent and manner in which they collect and promote these materials. This research examined school librarian attitudes, behaviors, and collection habits regarding graphic novels to better understand the reasoning behind collection choices and how these factors were affected by librarians' knowledge of graphic novel benefits. Interview data and collection analyses comparing libraries with study-specified strong and weak collections showed that expressed belief in the importance of graphic novels did not always translate into accompanying levels of use. Those libraries with the strongest collections, however, promoted the format heavily in their own libraries and advocated graphic novel use throughout their schools.

Sarah D. Thornton. Factors Influencing Changes in Public Library Adult Programming: A Look at Program Practices in Two North Carolina Public Libraries. A Master's Paper for the M.S. in L.S degree. April, 2015. 44 pages. Advisor: Mary Grace Flaherty

This study describes an examination of the history and current practices of adult programming in two North Carolina public libraries. The examination was conducted to determine the current state of adult programming in public libraries, as well as the factors that have influenced its changes.

Public libraries have begun to offer more diverse types of adult programming for their patrons. For example, some categories of programming being offered that have recently grown in prevalence are Entertainment, Arts/Crafts, and Health. This is due to a combination of many factors, and reasons vary between communities. The most significant factor affecting the planning of adult programs is the preferences of an individual community. Librarians must take into account what their communities need and desire from the library in order to have successful programs.

Rachel D. Walton. Looking for Answers: A Usability Study of Online Finding Aid Navigation. A Master's Paper for the M.S. in L.S degree. April, 2015. 76 pages. Advisor: Helen Tibbo

In an effort to move towards a practical and user-centered model for online finding aid navigation, this usability study asks -- what kind of navigational features are effective, efficient, and user-valued components within an academic archive's online finding aid? Using Princeton University's

Finding Aid website as a prototype, the researcher collected quantitative as well as qualitative data from ten relatively inexperienced online finding aid users as they interacted with and reacted to the finding aid interface in question. The results of the study suggest major navigational difficulties experienced by users included ambiguous and/or unintuitive labeling, unclear relationships between tabs, and insufficient visual cues for certain navigational features. In contrast, user-valued navigation aids included centralized hyperlinked content, nested and hierarchical content tabs, and a collection-level search bar. The paper concludes with ten pragmatic guidelines for archival professionals trying to solve the ongoing puzzle of online archival finding aid usability.

Mari EA Warren. The Value of the Stone Center Library in the African-American Undergraduate Experience. A Master's Paper for the M.S. in L.S degree. April, 2015. 33 pages. Advisor: Amelia Gibson

This study describes how African-American students use and perceive the library within the Sonja Haynes Stone Center for Black Culture and its impact on their undergraduate experience. On the campus of the University of North Carolina at Chapel Hill, six interviews were done with undergraduate students ranging in ages from 18-22 and across classifications.

Students generally found the library as an important space, but there is some hesitancy as to whether it is an important part of the black experience as an undergraduate. They took value in the history and culture preserved in the space, and felt welcome when visiting. Students are also split when deciding whether they would be willing to fight to support the space and feel that it should be better utilized.

Emily A Yates. Exploring Local History through Primary Sources: Model Lesson Plans for High School Teachers and Librarians. A Master's Paper for the M.S. in L.S degree. April, 2015. 72 pages. Advisor: Sandra Hughes-Hassell

This paper documents the process of creating lesson plans that use primary sources to teach about the movement toward civil rights in Durham, North Carolina. It also discusses the creation of a website designed to house the lesson plans and offers teachers and librarians resources on how to find and select primary sources. The lesson plans were created using backward design, and are grounded in elements of inquiry-based learning. The paper explores the benefits of teaching local history with primary sources, and supports this research by examining how primary sources can help diversify history instruction through critical race

theory's concept of counter-storytelling. The website can be accessed at <https://localhistorythroughprimarysources.wordpress.com/>.

Katie G. Womble. Collaboration between Library Publishing Services and University Presses. A Master's Paper for the M.S. in I.S. degree. April, 2015. 58 pages. Advisor: Amelia Gibson

The rapid pace of change in scholarly communication in the digital age has led many academic research libraries to adopt new roles as scholarly publishers, while university presses have also been in a state of changing roles. Qualitative research explores both the development of these library publishing services at responding libraries and how these services collaborate and relate to the university presses at their host institutions. Results demonstrate a variety of degrees of collaboration between library publishing services and university presses.

Karna Younger. The Politics of College Reading Programs in South Carolina: A case study of the College of Charleston and the University of South Carolina Upstate, 2013-2014. A Master's paper for the M.S. in L.S. degree. April 10, 2015. 124 pages. Advisor: Mary Grace Flaherty

This study analyzes the political response to and the resulting state budget cuts of the college reading programs at the College of Charleston and the University of South Carolina Upstate in the 2013-2014 academic year. Three participants in the events were interviewed: the directors of both reading programs and one state senator involved with the political debate. Coupled with an analysis of media reports, these interviews provided insight into why and how state politicians elected to cut the budgets for program and how these budget cuts affected the programs. Studying the South Carolina cases provides an example of how reading program directors can cope with political backlash, and how reading programs can simultaneously build and disrupt community.

Yonghao Yu. Research on Augmented Reality Technology and Build AR Application on Google Glass. A Master's Paper for the M.S. in I.S degree. April, 2015. 42 pages. Advisor: Brad Hemminger

This article introduces augmented reality technology, some current applications, and augmented reality technology for wearable devices. Then it introduces how to use NyARToolKit as a software library to build AR applications.

The article also introduces how to design an AR application in Google Glass. The application can recognize two different images through NyARToolKit build-in

function. After find match pattern files, the application will draw different 3D graphics according to different input images.

Zekun Yu. Title. Web Design for Low Bandwidth Area. A Master's Paper for the M.S. in I.S degree. April, 2015. 30 pages. Advisor: Cliff Missen

This study gives an overview of the issues and solutions to develop Web sites for low bandwidth areas. It sheds lights on the fields in web design, cross-cultural environment, low bandwidth, and mobile web design. It provides some examples and potential solutions from the design and technique perspective to solve low bandwidth problems. And finally a demo project was created to prove the correctness of the analysis.

Chunxi Zhang. Usability Evaluation of A Clinical Knowledge Summary System. A Master's Paper for the M.S. in I.S degree. April, 2015. 36 pages. Advisor: Javed Mostafa

Physicians frequently raise questions during patient visits and around half of those questions are not even pursued due to various reasons. These unanswered questions represent huge knowledge gap and could lead to negative treatment outcomes. Internet technologies have been developing rapidly. On one hand, Internet provides us numerous information resources. On the other hand, Internet brings us voluminous increase in information and knowledge needs. To make medical information more easily accessible and to facilitate physicians' decision making process, we designed and developed a system that called the Clinical Knowledge Summaries (CKS) to automatically extract and synthesize relevant medical evidence from major resources including UpToDate and PubMed. We performed a usability study involving 10 physicians to evaluate the effectiveness, efficiency and satisfaction associated with the use of the system. Physicians in general found CKS intuitive to use and the information delivered valuable in adding in their knowledge gaps.

Summer 2015

Laura D. Ashcraft. Journal Access for Underserved Areas (JAFUA): Designing a Database for Underserved Countries for the WiderNet Project. A Master's Paper for the M.S. in I.S. degree. July, 2015. 65 pages. Advisor: Cliff Missen

The main job of a reference librarian is to know where to go for information resources needed by their clients and many of these resources are housed in databases.

Fortunately there are programs offering developing countries free or reduced cost access to their journals and books. However librarians in developing countries struggle with finding these organizations. The overarching problem is that they have to deal with a huge or total lack of Internet connection, and this is one of the biggest enablers to the digital divide that is currently and rapidly growing between first and developing countries. This project aims to connect journal providers who provide their content at free or reduced cost to underserved countries to librarians in these countries by means of a hybrid database called Journal Access for Underserved Areas JAFUA.

EunJeong Cheon. Information Practices of Young Users in the Context of Health Tracking Technologies. A Master's Paper for the M.S. in IS degree. July, 2015. 71 pages. Advisor: Mohammad Hossein Jarrahi

Use of health tracking devices by Digital Natives has drawn the attention of the health tracking technology industry. Despite that, it is not clear how those technologies really work for them in their life contexts, and more study is needed to understand how they interact with the large amount of information generated by these technologies. My study borrowed the Savolainen model of everyday information practice as a theoretical lens to focus on life contexts around the use of health tracking technologies. The data was collected qualitatively, through semi-structured interviews with nine college students. In the findings, information practices, personal life contextual factors, and technology enablement are identified. In evolving relationships among these factors, how information affordance was offered was discussed. Many information practices still relied on manual means, as reflected by life contexts.

Brendan D. Ferreri-Hanberry. Application of a POS Tagger to a Novel Chronological Division of Early Modern German Text. A Master's Paper for the M.S. in I.S. Degree. 106 pages. August, 2015. Advisor: Stephanie Haas.

This paper describes the application of a part-of-speech tagger to a particular configuration of historical German documents. Most natural language processing (NLP) is done on contemporary documents, and historical documents can present difficulties for these tools. I compared the performance of a single high-quality tagger on two stages of historical German (Early Modern German) materials. I used the TnT (Trigrams 'n' Tags) tagger, a probabilistic tagger developed by Thorsten Brants in a 2000 paper. I applied this tagger to two subcorpora which I derived from the University of Manchester's GerManC

corpus, divided by date of creation of the original document, with each one used for both training and testing. I found that the earlier half, from a period with greater variability in the language, was significantly more difficult to tag correctly. The broader tag categories of punctuation and “other” were overrepresented in the errors.

James K. Geer. Tacit Knowledge in an Explicit World: An Exploration and Audit of Knowledge Management in an Organizational Context. A Master’s Paper for the M.S. in I.S. degree. July, 2015. 50 pages. Advisor: Dr. Mohammad Jarrahi

This study is a qualitative survey and review of tacit and explicit knowledge management in an organizational context. It involves qualitative research and interview of fifteen employees and system designers in a medical malpractice insurance environment regarding their knowledge management habits and needs.

Traditionally, research has divided knowledge management into tacit and explicit knowledge. Models have emerged which state certain types of organizations should primarily focus of explicit knowledge management while others should focus on tacit in an 80/20 ratio. Further research intimated that 80/20 as a strict guideline should be eschewed in favor of strategies that bridge the gap between the two.

In this organization, explicit knowledge needs rarely exist and primarily serve to orientate new employees, while tacit needs and opportunities continually exist regardless of employment duration.

Elizabeth Brooke Guthrie. Special Collections Instruction and the Undergraduate Student: A Study of the Wilson Special Collections Library’s Collaboration with the Introductory English Program at the University of North Carolina at Chapel Hill. A Master’s Paper for the M.S. in L.S degree. July, 2015. 68 pages. Advisor: Helen Tibbo.

This study presents the results of a survey distributed to first-year undergraduate students at the University of North Carolina at Chapel Hill. The survey examined instruction offered at the University of North Carolina at Chapel Hill’s Louis Round Wilson Special Collections Library to undergraduate students during the spring semester of 2015. Focusing on first-year undergraduates enrolled in the University’s required introductory English course, the survey collected information about the student experience in special collections instruction and the impact of instruction on the ability of undergraduates to conduct research at

Wilson Library. The survey produced thirty-five responses and revealed that students, while largely unfamiliar with special collections research, found the instruction session useful and relevant to their immediate needs. Survey responses also revealed a number of challenges faced by both students and library instructional staff and suggest that future instruction may benefit from changes in practice.

Caroline B. Hallam. The Definition and Roles of a Contemporary Undergraduate Library. A Master’s Paper for the M.S. in L.S. degree. June, 2015. 108 pages. Advisor: Ronald E. Bergquist.

Though undergraduate libraries have changed since they were first conceived of and implemented more than half a century ago, the published definitions of undergraduate libraries have not. This paper explores proposed definitions of undergraduate libraries to determine if they are accepted by contemporary undergraduate librarians. Five librarians who work at Robert B. House Undergraduate Library at the University of North Carolina at Chapel Hill were interviewed using a card sorting task to determine which definitional criteria they considered most important, which criteria could be eliminated, and which additional criteria could be added. It was found that, though disagreement existed over which roles the Undergraduate Library should prioritize, the participants favored a simple definition that outlined the population served rather than listing the roles the Undergraduate Library should fill.

Rhonda D. Jones. Saving and Sustaining Community History One Block at a Time: A Case Study on the Marian Cheek Jackson Center and the Convergence of Public History, Community Informatics, and Digital Archives. A Master’s Paper for the M.S. in L.S degree. July 2015. 48 pages. Advisor: Dr. Denise Anthony

Intertwining public memory, community archives, and technology, St. Joseph’s C.M.E Church, the University of North Carolina’s Southern Oral History Program (SOHP), and the Marian Cheek Jackson Center for Saving and Making History documented the legacy of the minority and working class voices within the Northside and Pine Knoll neighborhoods in Chapel Hill, North Carolina. Having preserved hundreds of oral interviews with a social justice orientation, the narratives were transformed into a physical and digital archive. This paper uses a case study approach to explore the Jackson Center’s ethnographic framework and survey methodology used to entice community participation and examines 1) The application of oral and public history to document marginalized communities that may be underrepresented in traditional

archival repositories 2) The definition of community archives 3) The role of Community Informatics in galvanizing support for the digital archives and 4) The implications of archival custody and the future for wider use.

Travis Jones. Giving 21st Century Researchers a Place in the Library: A Study of the Research Commons Planning Process at Duke University and the University of North Carolina at Chapel Hill. A Master's Paper for the M.S. in L.S degree. July, 2015. 43 pages. Advisor: Rebecca B. Vargha

Technology and other factors have radically altered the character of teaching, learning and research in higher education. In order to continue to meet the needs of their communities, academic libraries have introduced new spaces and services responding to these changes. Using semi-structured interviews with key librarians and administrators, this study uses the research commons at Duke University and the University of North Carolina at Chapel Hill—The Edge and The Research Hub, respectively—as case studies, in order to better understand how libraries identify, plan and create new initiatives to serve their communities. The interviews demonstrate that both libraries exist in a complex research environment and that their ability innovate is dependent on understanding these environments in order to responsively position their spaces and services.

Xuxiang Mao. Oral history Topic Modeling using MALLET and Termit. A Master's Paper for the M.S. in I.S degree. July 6, 2015, 2015. 39 pages. Advisor: Ryan Shaw

This work aims to construct multiple topic models on a large corpus of oral history transcripts. In the paper, I explain the algorithm, toolkit and the process how to construct the topic model and make a preliminary analysis of the result.

Erin K. Moore. How does Cognitive Ability impact the use of Query Reformulation Moves? A Master's Paper for the M.S. in IS degree. August 2015. 27 pages. Advisor: Diane Kelly

People have different mental strengths and weakness, which can be measured according to cognitive ability. Learning about strengths and preferences in terms of search behavior, and looking for patterns between behaviors and cognitive abilities, creates the opportunity to make search tools and systems more effectively meet user needs and preferences. While we know that different cognitive abilities exist, and that people form and reform search queries in a variety of ways, we do not know

how these two elements interact, or if the interaction is predictable or significant. This paper performs secondary analysis of data collected during a study of cognitive ability, adding in the element of query reformulation moves. It assesses the effect of these cognitive abilities on study participants' search formulation behaviors. Analysis showed that the most common search move was adding a concept to a query, followed by deleting concepts and manipulating search terms. Of the cognitive abilities, the only statistically significant differences between high and low groups were found in the visualization ability. Those in the high skill group made significantly more moves, and significantly more term manipulation moves, than their low skill counterparts.

Stefanie N. Protasowicki. Usability Study Methodologies of Electronic Health Record Systems: A Systematic Review. A Master's Paper for the M.S. in IS degree. July, 2015. 57 pages. Advisor: Javed Mostafa

This study is a systematic review of literature on electronic health record systems (EHRs) and the evaluation methods performed to study their usability. The purpose was to identify and review the extent of usability testing methods in their respective clinical environments. Full text review was completed for 121 of 753 titles intentionally identified, and 70 final articles were included.

The majority of methodologies reviewed were well established in HCI and the most common was the questionnaire. There was a wide range of study designs in terms of user populations (physicians, nurses, pharmacists, nurse practitioners, physical therapists and others), clinical settings (inpatient and outpatient, ambulatory, pediatric, intensive care units, and others), testing time (pre-implementation or post), and qualitative data analysis. Chosen methodologies and study designs closely depended on study goals, but all of them had large implications for the future of quality healthcare and how to achieve it.

Amanda B. Tickner. A Study of Users of the Liquid Galaxy Earth and Streetview Display at Davis Library. A Master's Paper for the M.S. in L.S degree. July. 2015. 29 pages. Advisor: Stewart Varner

This paper presents the results of a mixed method (survey and interview) qualitative study of users of the Liquid Galaxy Google Earth/Google Streetview immersive display in the Research Hub of Davis Library of the University of North Carolina Chapel Hill conducted in April of 2105. 25 users of the Liquid Galaxy responded to survey or interview questions about their user experience and their emotional response to the Liquid Galaxy.

Jaci Paige Wilkinson. *Low-Hanging Fruit and Pain Points: An Analysis of Change Implementation Resulting from Flash Usability Testing at Duke University Libraries.* A Master's paper for the M.S. in L.S. degree. July, 2015. 89 pages. Advisor: Ronald E. Bergquist

This paper describes a mixed method study of change implementation resulting from flash usability testing at Duke University Libraries. Flash usability testing, also known as guerilla or on-the-fly, is a method that allows researchers to collect large amounts of data in a short amount of time with quick, unplanned think-aloud tests in a high-traffic library space.

Data from usability reports was triangulated with data from interviews with members of Duke University Libraries' WebX team. WebX is a cross-departmental team that acts as "functional owner" of the libraries' web presence. It commissions flash usability tests and uses the data to implement changes or spur further research. Interviews incorporated a card sort of the recommendations from every flash usability test. The paper unearths myriad attitudes toward the libraries' web presence and perceptions of the role of usability testing in the academic library. Additionally, the paper details the subsequent effectiveness of change implementation.

Winter 2015

Elliot Maxwell Aronson. *I Don't Get any Inspiration Sitting at my Desk: The Patterns of Flow Experiences in Expert Researchers.* A Master's paper for the M.S. in L.S. degree. December, 2015. 41 pages. Advisor: Brian W. Sturm

This study describes the findings from coding the transcripts of personal interviews with associate and full professors within the University of North Carolina's School of Information and Library Science. The interviews were conducted to determine whether and how fully-present states of consciousness, known often as flow states in the literature, occurred in the research process.

A definite pattern was discovered wherein fully-present states of consciousness were occurring, but most often not during the active work of research, such as reading or writing. Rather, flow came to researchers when they would take a break from their work to do something less intellectually demanding. Here they would receive a personal insight on how to proceed with their work. Then the researchers would return to work to address the challenge of how to package what they had synthesized in their flow experience into language that could be understood and accepted by other researchers.

Rose M Combs. *Searching for Unknown Allusions: A Need to be Filled.* A Master's Paper for the M.S. in I.S. degree. November, 2015. 44 pages. Advisor: Jaime Arguello

In the growing world of technology, there are tools that have been developed to explore texts for those in the social sciences or humanities. These tools allow searching and analysis to occur that previously had to be done manually. While the tools that are available meet many needs, there is one need that is not being met. The ability to locate unknown allusions has not yet been addressed. This paper explains the benefits of having the ability to locate unknown allusions. In addition, it examines some of the tools that are available and what they are capable to producing. In conclusion, a description of the needed ability of a future tool is provided.

Madeline A. Coven. *Toward a Visual Language for Abstract Ideas: Effect of Concepts on Perception of Symbols.* A Master's Paper for the M.S. in I.S. degree. November, 2015. 22 pages. Advisor: Ryan Shaw

In our society, there is an ever-increasing demand for media, and the need, as much as ever, for ordinary people to think critically about ideas. This paper presents the first steps toward the creation of a visual language that might convey these ideas to an educational software or infographic audience. Since the problem I am trying to solve is one of agreement over abstract symbols, I conducted a paper questionnaire in which respondents selected shapes that they associated the most with a particular one-word concept. In most of the questionnaire categories (nature, order, significance, good, anti-, and divinity), most respondents chose one symbol over the other. Future work is needed to reproduce these results, but the results point to the possibility that we can indeed design a universal visual language of ideas with "dialects" for different cultures.

Patrick Dollar. *Users' Perceptions on Searching, Locating, and Accessing Dispersed Materials in Archival Institutions.* A Master's paper for the M.S. in L.S. degree. December, 2015. 33 pages. Advisor: Denise Anthony

This study describes a semi-structured interviews of professional researchers located in the North Carolina area. This study evaluates the personal experiences and information seeking behaviors of researchers working with materials dispersed across multiple physical and digital locations. The survey was conducted to determine the strategies researchers use to identify and access all material relevant to their research questions, even if the materials are dispersed across different archival institutions.

Olivia D Dorsey. A Visual Analysis of Phases of Police Brutality Against Unarmed African Americans from 1979 to 2014. A Master's Project for the M.S. in I.S. degree. November, 2015. 31 pages. Advisor: David Gotz

This report describes the process used to create an online resource that compiles a sample dataset regarding police brutality incidents against African Americans between 1979 to the present and also analyzes the similarity between these incidents by contextualizing them into "phases of police brutality." However, this dataset is only a small sample of the total population and may not be entirely representative of that population. Data regarding these incidents were collected from various news sources including crowdsourced database efforts, local news websites, and national news websites.

Ebony S. McDonald. The Only One in the Room: Professional Identity and Black Male Librarians in North Carolina. A Master's Paper for the M.S. in L.S degree. Dec, 2015. 66 pages. Advisor: Claudia Gollop

A qualitative study was conducted using semi-structured interviews to describe how seven black male librarians' dual minority status within the profession influences the construction of their professional identities. Recently, successful professional identity construction has become an important theme in career literature because it has often been associated with career success. However, career literature fails to link the influence social identities have on the construction of professional identity, particularly if those identities are in some way marginalized within that profession and/or stigmatized within the society at large. Black male librarians hold both a marginalized and stigmatized identity in their profession and American society through their race and gender. Yet, in Library and Information Science (LIS) literature, there is little focus on the intersection between professional and stigmatized social identities, particularly when it comes to race and gender. This study addresses the knowledge gap in LIS literature.

Bendte L. Fagge. Usability Study of Request Functionality in Website User Interfaces at Duke University Libraries. A Master's Paper for the M.S. in I.S. degree. November, 2015. 109 pages. Advisor: Robert Capra

This paper presents the results of a usability study on request functionality conducted using web page interface mock-ups of Duke University Libraries' website. The study focused on account logins as well as single- and multiple-item requests. In addition, participants had to select delivery locations and assess the clarity of confirmation status for the requests. Results of this study identify areas where

these interfaces can be improved, particularly around account login for users who have Library Card accounts and for requesting multiple items at one time.

Sierra K. Johnson. Access to Legal Information by Public Patrons in Varying Types of Law Libraries: A Case Study. A Master's Paper for the M.S. in L.S degree. July, 2015. 52 pages. Advisor: Hollie White.

This paper describes a case study conducted in three different varieties of law library in North Carolina. Public, private, and hybrid libraries were studied to determine if any meaningful difference existed between the types as to the level of legal materials and services available to members of the general public. Although much research has been conducted on why people file pro se, little research has been done on how they, and other public patrons, are able to access legal information once they determine that they need it. The results of this study indicate that two libraries showed no major observable difference, despite being different library types, while one library stood out as being much less helpful in allowing public patrons to access legal information. Results of this research may be of interest to public service attorneys, members of the public conducting research, law librarians, and anyone determining funding for law libraries.

Sreenivasula R Gajjala. Longitudinal Analysis of Re-admission Risk Using Machine Learning. A Master's Project for the M.S. in I.S. degree. November, 2015. 30 pages. Advisor: David Gotz

Unnecessary hospital readmissions are a major problem impacting millions of patients and costing billions of dollars per year. Unfortunately, accurate assessment of readmission risk remains an open problem. In this study, several methods and tools for readmission prediction were developed using UNC hospital data available from April 1, 2014 to November 1, 2014. This study investigated the change in readmission risk for patients over time to explore at which times high-risk patients can be most effectively identified. Toward this goal, multiple Machine Learning models of hospital readmission using patient history prior to admission and comparing them with baseline model which uses data during hospitalization were developed. The results of this study find that patients history did not produce better predictive performance than the baseline model that considered just hospitalization data. However, the dataset considered is small and results may not generalize to large data sets over longer period of time.

Amanda Gresham. Portrayal of Gifted Children in Children's Chapter Books. A Master's Paper for the M.S. in L.S. degree. December, 2015. 42 pages. Advisor: Brian Sturm.

This paper is a content analysis of seventeen chapter books geared towards upper elementary and middle school aged children that feature twenty-three intellectually gifted child characters. The books were analyzed for the presence of themes mentioned in literature on the subject (isolation and resulting desire for acceptance, normalcy, and belonging) as well as gifted stereotypes often seen in media. The overall portrayal in the books of the gifted population's abilities was then compared to the real distribution of cognitive abilities in the population. Themes were largely handled well, with positive resolution for most characters, and stereotypes were mostly avoided. There was, however, an overrepresentation of profoundly intellectually gifted characters.

Sierra Moore. A Mobile Security Document Collection. A Master's Paper for The M.S. in I.S. degree. November 18, 2015. 45 pages. Advisor: Robert Capra

Mobile security refers to the safeguarding of a device's (often a smartphone) data against potential viral threats resulting in a user invasion of privacy. As part of this Master's paper, a Mobile Security document collection and an accompanying Wordpress website were created. The intent of this project is to make it easier for smartphone users to learn about security issues. The collection is composed of documents categorized as: academic, best practices, consumer, corporate, government document, how-to, magazine and product review. Each category is associated with key term subject tags.

Wickliffe W. Shreve II. CrowdTrusting: Case Studies in Crowdsourcing Projects. A Master's Paper for the M.S. in L.S. degree. November, 2015. 48 pages. Advisor: Denise Anthony

Crowdsourcing has gained popularity over the past few years as a way for library and archive professionals to supplement and enhance the description of their collections. This paper provides case studies of four community archiving projects, focusing on crowdsourcing techniques they used to describe or enlarge their collections. The studies were conducted to determine the kinds of techniques used in community archives, and the potential benefits and barriers they faced in developing and using the techniques. Analysis of the projects indicated that the up-front investment in developing crowdsourcing tools may be prohibitive for community archiving projects. However, the results also indicated that digitization projects were still of value.

Lauren W. Turpin. Vertical Search Behavior and Preference of Users with Different Visual Memory and Perceptual Speed Abilities. A Master's Paper for the M.S. in I.S. degree. November 2015. 43 pages. Advisors: Diane Kelly and Jaime Arguello

Vertical search in Information Retrieval (IR) represents display opportunities for searcher interaction in the form of blended and non-blended results. Search behavior and preference in interacting with these results can be influenced by both design and personal, cognitive abilities. This study evaluates the relationship between cognitive ability and vertical search behavior and preference.

In this lab study cognitive tests measuring perceptual speed and visual memory were administered to sixteen participants who subsequently performed four search tasks on two search engines, one with a blended display and one with a non-blended display. Cognitive tests, search logs and participant questionnaires were used to evaluate vertical search behavior and preference in cognitively high and low performers. The findings suggest that cognitive ability influences vertical search engagement and preference. The value in this research is its ability to contribute to issues of result merging, display, and interaction at a personal level in vertical search.

Latia L. Ward. A Content Analysis of Major Themes in Young Adult and Middle Grades Novels Published Between 2006 to 2015 That Feature Young Undocumented Immigrants as Protagonists. A Master's Paper for the M.S. in L.S. degree. October 2015. 98 pages. Advisor: Sandra Hughes-Hassell

This paper presents a study of common themes in young adult (YA) and middle grades novels published between 2006 and 2015 that feature young, undocumented immigrant protagonists who live in the United States. The themes found in the novels include the realistic yet sometimes sanitized portrayal of the violent experiences of undocumented immigrants, the protagonists' perilous journeys to the United States, their silence over their status as undocumented immigrants, their refusal to be victims which corresponds with a demonstration of agency, their desire for and assistance in getting an education, and their development or display of a hybrid identity. Overall, the novels have happy endings even in situations in which the protagonists do not obtain United States citizenship. Although the prevalence of happy endings may not be entirely true-to-life, reading the novels may be a starting point for exploring issues relevant to undocumented immigration.

Megan Williams. The Changing Face of Cultural Heritage and Art Archives: The Challenge and Promise of Online, Digital Repositories. A Master's Paper for the M.S. in L.S. degree. August, 2014. 42 pages. Advisor: Heather Gendron

Cultural heritage and art archives that exist exclusively online are becoming increasingly popular, however little has been written about their particularities. This paper presents an exploratory study of four different online cultural heritage archives: the African American Performance art Archive, Documents of 20th – century Latin American and Latino Art, Public Art Archive and Europeana. Through website analysis, each project was surveyed with respect to their mission, producer, collection development, collection materials and online presence. A synthesis of that information compares the online archives to one another and to traditional, physical archives and argues that although online archives represent a challenge to certain archival principles and practices, they also embody the monumental changes in archival science brought forth by postmodern theory and the internet. These projects raise important questions about what an archive is and what it can achieve, and should therefore be included in wider discussions about the future of the field.

Spring 2016

Emma C. Boettcher. Predicting the Difficulty of Trivia Questions Using Text Features. A Master's Paper for the M.S. in I.S. degree. April, 2016. 70 pages. Advisor: Stephanie W. Haas

In numerous contexts, including community question answering systems, school exams, and trivia competitions, a need to assess the difficulty of questions arises. This study examines what features predict difficulty in the realm of trivia questions, considering features related to readability and the question's topic as potential contributors. Using clues from the game show Jeopardy!, the study finds that features relating to a trivia question's length, the inclusion of audiovisual media, and its constituent noun and verb phrases have a significant impact on the clue's difficulty. Based on these findings, this study proposes that finding more nuanced ways to depict the amount of information in a trivia question would lead to further advancements.

Erin E Baucom. Do Archival Finding Aids Describe LGBT Individuals the Same Way They Would Describe Themselves? A Master's Paper for the M.S. in L.S. degree. April, 2016. 42 pages. Advisor: Denise Anthony

This study compares the terms used by the LGBT community to describe themselves to those terms used in institutional archives' finding aids. An archive and LGBT history project website from each region in the United States and one region of Canada was chosen in an effort to examine differences in language uses. The history project websites were examined to find a list of terms used by the LGBT community to describe core identities. These terms were then searched for in the archival finding aids. It was determined that the archival descriptions were often only using general, politically correct terms to describe LGBT collections. There was also evidence that some archivists were describing materials incorrectly.

Harika Boya. Finding similarity using metadata of clinical trials using Natural Language Processing in DataBridge. A Master's Paper for the M.S. in I.S. degree. April, 2016. 40 pages. Advisor: Arcot Rajasekar

Information explosion in every field in this age creates one big challenge - how to extract meaningful information from massive amounts of data. Currently there are millions of datasets available as a result of research by various scientists. It is necessary to find the hidden potential of this data and identify different ways data can be related to each other. The purpose of the project is to identify the level of similarity between the metadata of any two clinical trials that have been completed in Databridge application. The dataset being considered is the entire metadata of all the concluded clinical trials as updated on clinicaltrials.gov. Only the trials which have been completed and have results updated are being considered. This paper discusses four different techniques employed for finding similarity between any two particular clinical trials and their corresponding results.

Jiaoling Chen. A Study to Explore How Differences in the Amount of Details in Visualization Impact Decision-making. A Master's Paper for the M.S. in I.S. degree. April, 2016. 41 pages. Advisor: David Gotz

This study explores how differences in the amount of details in visualization impact the decision-making process. Everyday decisions like buying a used car are the focus of the study. A visualization tool that is able to show different number of attributes was designed and developed using JavaScript library d3. Twenty users participated in the user study and were asked to make car-buying decisions based on the observation of different levels of details of car information presented in the developed visualization tool.

Two patterns of the decision-making process were summarized. The increasing number of details in information

visualization does not always influence participants' decisionmaking, while the value range and the level of importance of the newly added attributes turned out to be more influential on participants' decision-making processes. A weak correlation between level of confidence and the number of details in information visualization is found.

Maria E. Chiochios. *The Tweets Heard Around the World: Ferguson Municipal Public Library's Twitter Use Around the 2014 Civil Unrest and its Role in Supporting Community Disaster Resilience*. A Master's Paper for the M.S. in L.S degree. April 2016. 102 pages. Advisor: Ericka Patillo

In 2014, Ferguson, Missouri experienced multiple waves of civil unrest in response to the fatal shooting of Michael Brown and the grand jury decision not to indict Darren Wilson, the police officer responsible for the shooting. During this time, the Ferguson Municipal Public Library served a crucial role in responding to this community crisis. The actions of this library supported Ferguson's community resilience by limiting the impact and helping residents respond, recover, and heal from the civil unrest. A content analysis of the library's tweets reveals how the library used Twitter to communicate with the public and support its resilience around both waves of civil unrest. This case study highlights the importance of library disaster planning, roles libraries can play in helping communities plan, respond, and recover from crises, and explores how a library can employ social media to communicate with patrons and support community resilience.

Aurora L. Cobb. *Supporting Victims, Striving Against Violence: How Public Libraries Can Serve the Information Needs of Sexually Assaulted Women*. A Master's Paper for the M.S. in L.S. degree. April, 2016. 71 pages. Advisor: Mary Grace Flaherty.

Every year in the United States millions of women are victims of rape, sexual assault, and other forms of sexual violence. In order to determine what might be done in public libraries to extend support to victimized women and prevent sexual violence, this study sought to identify the information needs of sexually assaulted women. Interviews were conducted with three "companions," or victim advocates, responsible for assisting callers to the Orange County Rape Crisis Center's 24-Hour Help Line. The interviews revealed key areas of information need among victims of sexual violence, including information related to reporting crimes of sexual violence, interacting with law enforcement, the procedures of the sexual assault forensic exam, and facts about sexual violence against women. These

findings were applied in the development of recommendations for public libraries and librarians seeking to address sexual violence against women in the communities they serve.

David A Cowhig. *End-user System for Generating SoundExchange Reports*. A Master's Paper for the M.S. in I.S. degree. April, 2016. 42 pages. Advisor: Paul Jones

This paper describes the design, implementation, and testing of an information system built to generate streaming radio reports for ibiblio and the open-source Icecast streaming media server. This new system allows end-users to generate reports on demand, in either standard Icecast format or the SoundExchange 2013 reporting format. The system was designed to help aid community radio stations in complying with government reporting and regulations. In addition, a plan to increase system availability for ibiblio radio streaming is discussed.

Matthew B Cresson. *Consistency in Reference Systems*. A Master's Paper for the M.S. in L.S. degree. April, 2016. 30 pages. Advisor: Denise Anthony

This study was created to determine the differences or similarities between different locations of the National Archives and Records Administration in how they receive and maintain researcher data.

Nahali R. Croft. *Keep It or Toss It? Legislative Records Retention Practices in the U.S. House of Representatives*. A Master's Paper for the M.S. in L.S degree. April 2016. 51 pages. Advisor: Christopher A. Lee

Because the records of individual Members of the House of Representatives are considered personal property, what happens to those records once a Member leaves office is up to him or her. Legislative records, particularly files and reports used to develop policy and draft bills, have historical value and are one of the types of files most used in current Congressional collections, as they point toward legislative intent. The House Records Management Manual for Members suggests that offices permanently maintain these types of files. This study reveals to what extent House offices are preserving records that provide future researchers with legislative intent, finding that while congressional staffs are not largely aware of the manual, they do attempt to preserve differing types of legislative background materials. There is a general awareness that their practices have room for improvement, but with no requirements to implement a retention schedule, there is little incentive for congressional staffs to develop better records management procedures.

Melissa A. Denby. A Descriptive Study of IT Spending at Library and Information Science Programs. A Master's Paper for the M.S. in I.S degree. April, 2016. 49 pages. Advisor: Aaron Brubaker

This study examines and compares how decentralized IT departments serving Library and Information Science (ILS) programs operate. An online survey was sent to 47 American Library Association (ALA) accredited ILS IT departments in the United States. Survey questions focused on demographics, budget, and current and future operations of the IT departments, along with perceptions of the respondents. Two programs emerged within the survey, those with an internal IT department within the ILS school and those with a hybrid mix of an internal IT department and support from central IT. The hybrid IT respondents were more macro focused and served several colleges within the university. The internal IT respondents served larger populations, had more employees and student workers, and higher budgets in comparison to the hybrid IT respondents. Both groups had similar revenue sources and spending trends. Priorities and day-to-day operations differed among all respondents as each department had unique IT solutions.

Colleen E. Daw. Fan Materials from a Galaxy Far, Far Away: A Study of the Potential Use of Fan Materials in Archives. A Master's Paper for the M.S. in L.S degree. April, 2015. 60 pages. Advisor: Steve Weiss

This paper addresses a need for further collection development in the archives community. As more and more items from popular culture are archived (i.e. movies, music, television, etc.) so should the accompanying fan materials. These fan materials provide important contextual information for their source materials, as well as evidence of the rich cultural history surrounding these materials. To get an understanding of these fan communities, this paper focuses on the large and active Star Wars community. In order to explore the potential archival value of the materials produced by these communities, a qualitative content analysis was conducted of a Star Wars fan fiction, fan podcast, and fan news site. They were analyzed using a contextual entity model designed by Christopher Lee for digital objects, in order to see how the fan materials contextualized and informed on the source materials or Star Wars films. By doing this study, we hope to encourage archives to expand their collections and consider this new type of material that expands the overall cultural history.

Laura K Dimmit. Building a Community of Practice Around Information Literacy by Design: A Case Study at UNC-Chapel Hill's Undergraduate Library. A

Master's Paper for the M.S. in Library Science degree. April, 2016. 62 pages. Advisor: Jonathan McMichael

A gap currently exists between the level of instructional training needed for public service librarians to succeed, and the level being provided by employers and LIS programs. Communities of practice (CoPs), as described by Lave and Wenger, provide a sustainable, practice-centered model for instructors of all experience and skill levels to grow individually while supporting each other. This paper documents the analysis of redesigned instructional training for the instruction team at UNC-Chapel Hill's Undergraduate Library (UL), centered around Information Literacy by Design (ILbD). Interviews with instruction team members are coded to track indicators of CoPs, which reveal key trends involving peer relationships, self-efficacy, and ways of learning. The redesigned training is revealed to have influenced the development of a community of practice among the UL instruction team.

Jessica D. Dixon. Measles on Main Street, USA: How Public Health Events Affect Public Library Policy. A Master's Paper for the M.S. in L.S degree. April, 2016. 65 pages. Advisor: Mary Grace Flaherty

This study describes a questionnaire survey of library directors, county librarians, and city librarians representing eighty-three of California's one-hundred and seventy-nine total public library districts. The study was conducted to determine the effects, if any, of the 2015 Disneyland measles outbreak and California Senate Bill Number 277 on public library policy in California.

One library district changed an existing policy following the Disneyland outbreak, and another district changed an existing policy in response to the Senate Bill. No library districts added, eliminated, plan to change, plan to add, or plan to eliminate policies owing to either event. Three districts anticipate that these events will likely impact policies in the future. Although the events have yet to elicit many policy changes, public libraries should consider implementing such policies to strengthen the health of the communities they serve before governing bodies place pressure on them to do so.

Erin M. Enos. Generation Speaking: A Perspective of Genealogy Captured Through the Lens of the Millennial Generation. A Master's Paper for the M.S. in L.S degree. April 2016. 77 pages. Advisor: Denise Anthony

Within the last 20 to 30 years, researchers have conducted studies of the genealogy community. Unfortunately, these studies have not recognized the millennial generation, as an active group of the genealogical

community. Millennials have overtaken the Baby Boomer generation as the largest age group in America. Regarding the generation's population size, why haven't millennials been widely studied in the genealogy community? Few studies about millennials and genealogy leave numerous questions left to be answered: How much is known about the millennial generation in genealogy studies? What thoughts do millennials have in regards to genealogy? What factors drive their feelings? The researcher conducted a genealogy-based survey with millennials at the University of North Carolina at Chapel Hill in hopes of uncovering answers about this generation. The findings of this study will help institutions to better understand millennials as recognized members within the genealogical community.

Abigail K Flanigan. Digital Humanities Collaborations in the Library: A Case Study of Project Beta. A Master's Paper for the M.S. in L.S degree. April, 2016. 44pages. Advisor: Stewart Varner.

This paper investigates the libraries' role in collaborative digital humanities projects through an anonymized case study of Project Beta. Digital humanities collaborations are becoming increasingly common in libraries, but there is a dearth of scholarly literature articulating the experiences of and challenges faced by people actually doing this work. This study aims to contribute to a shared knowledge about how libraries can effectively partner with scholars to create innovate digital scholarship. Semi-structured interviews were conducted with key stakeholders on Project Beta, which illuminate the institutional, social, and technical challenges associated with creating and sustaining a digital humanities project in the library. Recommendations for addressing the identified challenge areas are made based on the holistic picture provided by interviewees.

Laura A. Fogarty. Measuring Trends and Efficacy: An Analysis of the British Museum's Facebook. A Master's Paper for the M.S. in L.S degree. April, 2016. 39 pages. Advisor: Denise Anthony

There is a distinct lack of current and specific guidance on the creation of content for social media in cultural heritage institutions. This study aims to remedy that lack of specificity by examining user responses to social media strategies employed by cultural heritage institutions and in so doing, identify and evaluate emerging trends in social media content generation. In order to accomplish this task, the researcher conducted an analysis of the British Museum's Facebook page. This consisted of evaluating posts according to a coding schema and recording the level of user response to each post. This method allowed the researcher

to identify past, present, and emerging trends as well as the efficacy of each trend in terms of user interaction.

Julia R. Glauberman. Academic Integrity Policies: Content, Context, and Implications for Academic Librarians. A Master's Paper for the M.S. in L.S degree. April, 2016. 45 pages. Advisor: Paul Jones

Instruction librarians are often expected to promote academic integrity. However, the content and implementation of institutional academic integrity policies may vary greatly from one university to another. This study employed a mixed methods approach, combining content analysis of policies and a survey of librarians involved with instruction. The policies analyzed and the librarians surveyed were from UNC and its fifteen peer institutions. The results of the document analysis identified at least three distinct types of policies defined by their length, use of legal language, and overall purpose. The survey results suggest that although academic librarians understand and are cognizant of their universities' academic integrity policies, they are not strongly influenced by these documents. This study contributes to the existing literature on academic integrity policies while also beginning to bridge the gap between that body of literature and our understanding of the roles played by librarians in supporting academic integrity.

Rachel C Goatley. Documenting Tragedy: Collection Development, Material Culture, and Collective Memory (A Case Study of the Virginia Tech April 16, 2007, Condolence Archives). A Master's Paper for the M.S. in L.S degree. April, 2016. 99 pages. Advisor: Denise Anthony

In the present era, archivists are increasingly tasked with documenting the aftermaths of tragic events. This paper explores the development of the April 16, 2007, Condolence Archives at Virginia Tech, following a mass-shooting at the university in 2007. It covers topics such as the objective and scope of the collection, archival appraisal, and exhibition of materials. It also examines examples of items in the collection, as well as the personal experiences of staff involved. Finally, this paper analyzes this collection in regards to general archival collection development, material culture and memorialization, and the development of collective memory.

Meredith L. Hale. Searching for Art Records: A Log Analysis of the Ackland Art Museum's Collection Search System. A Master's Paper for the M.S. in I.S. degree. August, 2015. 88 pages. Advisor: Diane Kelly.

Search log data from the Ackland Art Museum's online

collection search system was analyzed in order to determine the search categories most frequently employed by users of the system. The data consisted of a total of 16,729 actions and 3,459 search sessions. It covered a three-month time period from February 19 to May 19, 2015. Analysis of actions associated with the Ackland's advanced search feature suggest that the department, classification, and artist fields have the highest usage while searchers rarely submit queries relating to a work's particular medium (2.55%). Review of the most common queries submitted by users reveals that search terms most commonly relate to representational subjects visually presented in a work of art rather than formal titles. Investigation into how users alter the queries they submit throughout a search session indicates that users often do not change categories during a search session, but primarily make parallel changes (68.11%).

Rachel J Hinrichs. Perceptions and Knowledge of Privacy Risks in Mobile Apps. A Master's Paper for the M.S. in L.S degree. April, 2016. 43 pages. Advisor: Brad Hemminger

Consumers often have little knowledge about the extent of privacy risks taken when using mobile applications (apps) on their smartphones, and are unlikely to be informed by federal regulations or privacy certifications. A survey was distributed to smartphone users to determine their perceptions and knowledge of privacy risks in mobile apps, and if these perceptions vary in different contexts (i.e., a health app vs. flashlight app). This study found that people appear to see privacy in mobile apps as contingent and context-dependent. While smartphone users were found to have a good understanding of privacy risks, they considered user rating and price to be more important factors to consider than privacy when selecting a mobile app. Presentation, clarity, and context all influence people's decisions to install and use mobile apps. This study has important implications for how privacy permissions and ratings can be presented to best inform consumer decisions.

Wei Hu. Medical Data Signature Extraction Using Modified TF-IDF in DataBridge Project. A Master's Paper for the M.S. in I.S degree. April, 2016. 40 pages. Advisor: Arcot Rajasekar

This project is a part of the DataBridge project, where we try to find similar datasets among a large number of medical datasets stored in the DataBridge server using key words extraction and similarity algorithms. In this project, a sample of 1,000 datasets were randomly chosen from the 18,000 datasets corpus. Modified TF-IDF was used in the sample data to generate key words for the 1,000 datasets

and similarity analysis was followed. According to the results, we find that the key words extraction works fine in calculating similarities between different datasets.

Alex S. Japha. Digital Preservation and Access of Three Dimensional (3D) Resources in Cultural Heritage Organizations. A Master's Paper for the M.S. in L.S degree. April, 2016. 58 pages. Advisor: Helen Tibbo

This study describes a series of interviews with individuals at seven cultural heritage organizations that work with 3D digital objects. It examines the resources, preservation policies, storage, file formats, software, metadata, and access methods employed by these virtual heritage organizations.

William W. Knauth. 3D Digital Imaging & Cultural Heritage Institutions: An Examination of Utility and Practices. A Master's Paper for the M.S. In L.S. Degree. April, 2016. 63 pages. Advisor: Dr. Ronald E. Bergquist

3D digital imaging is becoming a more and more approachable technology for cultural heritage professions. A variety of institutions have enacted projects making use of the unique affordances and opportunities presented by this technology. These include preservation, outreach & access, and research. This research seeks to examine the nature and potential value of 3D digital imaging in this context. This piece will seek to determine practical and effective approaches to 3D digitization programs centered on cultural heritage. This has been accomplished through interviews with domain specific professionals synthesized with data from academic literature and salient 3D projects. The result will form a resource for understanding and demonstrating the usefulness of this technology and its possibilities.

Sharon L Kolling-Perin. What It Means To Use Gender to Guide Readers' Advisory. A Master's Paper for the M.S. in L.S. degree. March, 2016. 60 pages. Advisor: Sandra Hughes-Hassell

Readers' advisory is a central job of librarians who work with youth, and it is especially critical for youth who are struggling or reluctant readers. Readers' advisory is often conducted based on gender, partially due to the fact that boys are more often seen as reluctant readers, and score lower on reading measures. As there is growing awareness that not all youth fit into the classic definition of a gender binary, librarians must reconcile the needs of reluctant readers and the needs of gender non-conforming youth.

This study examined what youth librarians in school and public libraries understand about using gender in

readers' advisory. The study consisted of four semi-structured interviews with youth librarians, exploring the issues of readers' advisory, gender, and gender non-conformity.

Bailey A. Jones. Exploring Salient Thumbnail Generation for Archival Collections Online. A Master's Paper for the M.S. in I.S. degree. April, 2016. 67 pages. Advisor: Robert Capra

This study developed and evaluated a method for generating thumbnails for archival documents utilizing open source image saliency software. Salient thumbnails were evaluated against a baseline by running a lab study that assessed the thumbnails' usefulness during finding and re-finding tasks. Results did not find any significant difference in time, user confidence, or user preference of salient thumbnails compared to the baseline. However, salient thumbnails resulted in improved accuracy during re-finding tasks, suggesting that they may offer some advantage for representing archival correspondence.

Justin P. Kreft. Measuring the Impact of Body Worn Cameras (BWC) on Data Management and Record Retention for Law Enforcement Agencies. A Master's Paper for the M.S. in I.S. degree. April, 2016. 78 pages. Advisor: Cal Lee

This study examines the rates of data production for US law enforcement agencies deploying Body Worn Camera and DashCam systems. Analysis estimates that local law enforcement agencies can reasonably expect to produce 33.9 individual video files, totaling 11.1 hours of video, and (depending on the video capture quality) requiring between 10-20 gigabytes of storage space per officer, per month. The study also demonstrates that video file production rates from existing DashCam systems can be an effective benchmark when considering the implementation of a Body Worn Camera system. Finally, the study finds that of all implementation policies examined, only two policies demonstrated significant positive impact on video capture rates: 1) if officers were required to inform citizen of camera in operation, and 2) if officers were allowed to view footage prior to making a shift report.

Jyotsna Krishna Sastrula. Analysis and Visualization Methods for Data-Driven Longitudinal Patient Summary. A Master's paper for the M.S. in I.S. degree. May, 2016. 35 pages. Advisor: David Gotz

Digitization of health records has opened avenues for intensive research in the fields of health informatics. Power of machine learning, statistical analysis and visual analytics could be utilized to make optimal use of this information.

The proposed project is to develop an interactive visualization tool that summarizes a patient's medical history, highlighting all his/her important events based on the knowledge of similar patients. Given a set of patients with common conditions, statistical analysis can be used to develop models that prioritize features based on associations between features and condition-specific outcome measures.

This manuscript in particular describes the model developed to prioritize a patient's events from his medical history. The model is trained with the population of patients and their events. Their correlations with the outcome variable are calculated to identify the important events in a specific cohort. This correlation score can be used to prioritize the events associated with an individual patient. This model is one of the models that will be used to summarize an individual patient's medical data via interactive visualization methods.

Rita Kundu. Visual Analytics System Implementation in ICISS environment. A Master's Paper for the M.S. in IS degree. April 2016. 45 pages. Advisor: David Gotz

The paper describes the process involved in implementation and evaluation of an existing visual analytics tool on Integrated Cancer Information and Surveillance System environment. Dataset from the system contains information about breast cancer patients of North Carolina, which includes age, demographics, Medicare, and procedure reports of patients. The tool will enable researchers to compare different aspects of data thus minimizing the effort spent on getting sample data for their study. User feedback has been analyzed to understand the pros and cons of the tool and if it is suitable for the new dataset.

David Y. Lee. A Case Study of Workforce Development Programs in the Cumberland County Public Library System. A Master's Paper for the M.S. in I.S. degree. April, 2016. 56 pages. Advisor: Mary Grace Flaherty

This paper examines the workforce development programs implemented at the Cumberland County Public Library. The case study focuses on the specific initiatives and evaluation methods implemented by the library for workforce development programs. Analysis indicates that the efforts and initiative of library personnel is a key factor in successful implementation and evaluation of workforce development programs in addition to in-depth research and innovative approaches to data collection. Funding plays an important but supplementary role in supporting initiatives. Finally, job fairs are key workforce development initiatives which illustrate the findings in the paper.

Stephen L Levin. Evaluating clinics' use and adaptation of technology to the unique barriers faced by at-risk, HIV-positive individuals in the development of medication adherence plans. A Master's Paper for the M.S. in I.S. degree. 04, 2016. 48 pages. Advisor: Mary Grace Flaherty

This research reports on a case study of Whitman-Walker Health, an urban clinic that serves at-risk patients who are HIV positive. Interviews were conducted with administrators and clinicians to gain insight into the medication adherence barriers faced by their patients, and also study the methods and technological adaptations the clinic employs to help overcome the barriers faced by their patients. The study found a welldeveloped workflow and adept use of technology to create and keep patients on a path of medication adherence.

Mingyu Li. The Implementation and Evaluation of a Simple Online Reservation System for Local Sports Game Meet-ups. A Master's Paper for the M.S. in I.S degree. May, 2016. 48 pages. Advisor: Hemminger, Bradley M

Scheduling and coordinating a sport game with multiple participants is increasingly complicated. It is particularly difficult to account for participant's travel schedules, and to accommodate those participants from different places to go to the same event. A simple online reservation system that allows people to sign up for recurring sports events is in demand. This project implemented a high-efficiency and user-friendly online reservation system for local sports game met-ups. The features included creating events, joining existing events, search events, cancelling events, and communicating between group members. We conducted a usability study to test the system and concluded that the system is helpful in improving user experience.

Dong Liang. Predicting Stock Price Changes with Earnings Call Transcripts. A Master's Paper for the M.S. in I.S degree. April, 2016. 43 pages. Advisor: Arcot Rajasekar

This paper adopts sentiment analysis approaches to predict stock price changes of 14 major U.S. airlines, using 325 earnings call transcripts from year 2007 to 2015. We combined machine learning classification techniques with Loughran and McDonald Sentiment Word Lists (Master Dictionary), and built the Python program from scratch. Text transcripts as well as stock prices were captured online. Transcripts were labeled according to sentiment scores defined by us. After a three-way data split, all six algorithms

failed to result in an ideal accuracy. The results suggest that earnings call transcripts are not informative enough to predict stock price changes.

Huiying Ma. Implementation of An Event-based Business Document Indexing and Retrieving System. A Master's Paper for the M.S. in I.S degree. April, 2016. 40 pages. Advisor: Ryan Shaw

This paper presents a business event-based indexing and retrieval system that enables searching for business articles and journals based on not only their full texts but also business events detected through natural language processing(NLP). The system was implemented using Apache Solr as the indexing and searching platform, on top of which I built my own algorithms and methods for document indexing and retrieving. The development of this system involved source document collection and tagging, indexing algorithm design and implementation, and system evaluation. Progress to date has shown that both precision and recall have been improved when searching using event-relevant key words and this also provide a way to retrieve entities combine with events.

Alexandria C Mesa. Forms of Patient Empowerment in an Anxiety Discussion Forum. A Master's Paper for the M.S. in L.S degree. April, 2016. 72 pages. Advisor: Dr. Barbara Wildemuth

The U.S. Department of Health and Human Services defines health literacy as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions". One of the antecedents of health literacy, patient empowerment, has seen an increase from the participation of patients in online health communities. In this study, 4367 group forum posts from 215 users of Anxiety Connect, a moderated online health community, were analyzed using the patient empowerment processes and outcomes of Bartlett and Coulson. Patient empowerment was evident in the forum posts. Every post contained evidence of at least one empowerment process; X% of the posts contained evidence of at least one empowerment outcome. The empowerment process most prominent in the Anxiety Connect forum was sharing experiences, included in 57.6% of Total Posts. The empowerment outcome most prominent was increased acceptance, included in 5.1% of Total Posts, closely followed by optimism and hope for the future and increased social well-being, included in 4.5% and 4.7% of the Total Posts respectively. These findings have implications for the design of moderated online health communities.

Jonathan B. Moore. Evaluating the spectral clustering segmentation algorithm for describing diverse music collections. A Master's Paper for the M.S. in L.S degree. May, 2016. 104 pages. Advisor: Stephanie Haas

This paper presents an evaluation of the spectral clustering segmentation algorithm used for automating the description of musical structure within a song. This study differs from the standard evaluation in that it accounts for variability in genre, class, tempo, song duration, and time signature on the results of evaluation metrics. The study uses standard metrics for segment boundary placement accuracy and labeling accuracy against these song metadata. It reveals that song duration, tempo, class, and genre have a significant effect on evaluation scores. This study demonstrates how the algorithm may be evaluated to predict its performance for a given collection where these variables are known. The possible causes and implications of these effects on evaluation scores are explored based on the construction of the spectral clustering algorithm and its potential for use in describing diverse music collections.

Jennifer B. Parks. Learning in Middle School Library Makerspaces: A Makerspace Collaboration Guide for School Librarians. A Master's Paper for the M.S. in L.S degree. April 11, 2016. 99 pages. Advisor: Dr. Sandra Hughes-Hassell

This paper establishes an argument for the beneficial roles makerspaces can provide in school library programs. It builds a bridge between formal and informal education by grounding it in current accepted educational theories and frameworks including constructivism, constructionism, inquiry-based learning, and Backward Design. The paper stresses the importance of understanding adolescents and how they learn in a school library makerspace. It also addresses the role of school librarians as collaborators and their responsibility to conduct evidence-based practice. The final product resulting from this work is a makerspace collaboration guide intended for use by school librarians. It provides tools for facilitating productive collaborations between the school librarian, teachers, students, and community members. A version of this collaboration guide is available for download and modification at jennythelibrarian.wordpress.com.

Sara C. Paschal. "No Enjoyment Like Reading!" Pride and Prejudice Fan Fiction as Resources for Libraries and Readers. A Master's Paper for the M.S. in L.S. degree. April, 2016. 68 pages. Advisor: Melanie Feinberg

This paper introduces the concept of fan fiction and identifies distinctions between professionally published fan

fiction, self-published fan fiction and online fan fiction as a way of presenting online fan fiction as a useful tool for reader's advisory and creative writing education. Using a sample of five texts for each of these three categories, this paper analyzes the works' contents for characters, settings, plots and themes from the original novel on which they are based, Jane Austen's *Pride and Prejudice*, as well as the type of sequel and genre. The findings describe what distinctions are found in the samples as respect these concepts and support the use of online fan fiction as resources for readers and writers.

Hannah L. Pope. Make-ing the Difference: Makerspace Instruction and the Student Perspective. A Master's Paper for the M.S. in L.S degree. April, 2016. 44 pages. Advisor: Chad Haefele.

This study describes the perceptions of students who have attended makerspace workshops at the Kenan Science Library Makerspace at UNC-Chapel Hill. Interviews were conducted with undergraduate students to determine the instructional and technological impact of the makerspace.

A group of five undergraduates who had attended a library session were interviewed. Instruction in the Kenan Science Library Makerspace covers emerging technologies such as 3D printing, 3D scanning, Introduction to Arduino, and Introduction to Tinkercad. The makerspace and its instruction sessions was found to be beneficial to students, increasing their knowledge of emerging technologies.

Daniel J. Pshock. Usability Heuristic Evaluation of 80 North Carolina Public Library Websites. A Master's Paper for the M.S. in I.S. degree. April, 2016. 52 pages. Advisor: Ronald E. Bergquist

This study discusses the results of a heuristic evaluation of 80 public library websites in the state of North Carolina. Each public library website (PLW) was evaluated using a usability heuristic questionnaire, with questions covering criteria taken from humancomputer interaction literature. Development of this questionnaire allowed a broad evaluation of 80 North Carolina PLWs to be conducted. The purpose of the study is to understand the extent to which PLWs in North Carolina meet basic usability heuristics. Developing a method of evaluation that can cover many PLWs of a specific locale allows librarians to use shared governance in future opportunities for investigation and improvement of websites in North Carolina public libraries. Results show that North Carolina PLWs meet some usability heuristics but not others, and that most North Carolina PLWs are more usable than they are unusable.

Mark T Riddle. 'Do they look different?' An exploratory eye tracking study of whether the scanpaths of Novice and Familiar readers of graphic novels differ on the dominant/inset page. A Master's Paper for the M.S. in L.S degree. April, 2016. 81 pages. Advisor: Brian Sturm

Graphic novels, a large and growing part of the popular culture, are found across society from private homes to University Libraries. They have been found to be of benefit to early and reluctant readers and are also used for other tasks in the private and business sphere. As graphic novels become more popular, new forms of page layout are appearing. This exploratory study examined how university undergraduate's eyes traveled across specific 'dominant/inset' page layouts. Participants' eye tracking data were collected using a Tobii Pro X2-30 Eye Tracker. Participants' scanpaths were analyzed using visual analysis techniques to determine how closely they corresponded to the Chronological Sequence Path set by creators. This study found that readers more familiar with graphic novels read these pages in a smoother fashion and were less likely to revisit text than novices.

Joseph Sanders. Audiobook Collection Development in North Carolina Public Libraries. A Master's paper for the M.S. in L.S. degree. April, 2016. 40 pages. Advisor: Ericka Patillo.

This study describes a questionnaire survey of librarians responsible for audiobook selection in the public libraries of North Carolina. The survey was conducted to determine the selection criteria employed by those librarians for audiobook selection, how they differed from print, and how technological change affected the process. The criteria used by public libraries to select audiobooks vary, but are largely similar to that of print materials. Responses show that patron demand is the most influential factor in audiobook selection, and that budgetary restrictions heavily shape the collection. The trend towards digital media has had a significant effect on the way that libraries build their collections, but a consensus on providing digital audiobooks in public libraries has not been reached. Currently, audiobook selection is based primarily around popularity.

Rachel C. Sanders. Hispanic and Latino Students and Their Library Experiences and Attitudes at a University in the Southeast. A Master's Paper for the M.S. in L.S degree. April, 2016. 52 pages. Advisor: Claudia Gollop.

This study describes a survey of Hispanic and Latino students at a major research university in North Carolina.

The purpose of the survey was to determine students' satisfaction with and use of the university's libraries. The study also included six interviews with students, which discussed more in-depth their attitudes toward library use at their university and their research processes.

Hispanic and Latino students are at a higher risk for dropping out of college during their first few years than many of their counterparts. There are a number of factors which influence this dropout rate; among them is a lack of support on campus. When students do not identify with their librarians they become less likely to approach librarians for assistance with coursework. The interviewees' feedback supports the literature which claims that Hispanic and Latino students are hesitant to approach librarians and are not necessarily confident in their research abilities.

Bess P. Schrader. Cross-Language Citation Analysis of Traditional and Open Access Journals. A Master's Paper for the M.S. in I.S degree. April, 2016. 43 pages. Advisor: Bradley Hemminger

This study examines the differences in the proportion of non-English language citations given to English language articles published in open access and traditional library and information science journals. It compares the average percentage of foreign language citations to total citations between 207 open access articles and 196 traditional articles published between 2011 and 2012. An independent, two-tailed t-test found no statistically significant difference between the foreign language citation percentages of open access and traditional articles. An analysis of variance also found no significant difference in the proportion of citations given by each non-English language according to journal type.

Elizabeth F. Shulman. An Exploratory Study on Undergraduate Archival Searching Behaviors. A Master's Paper for the M.S. in L.S degree. April 2016. 59 pages. Advisor: Helen Tibbo.

The purpose of this paper is to explore whether students with experience using archives search finding aids differently than students no experience. A usability study was conducted using four different finding aids from four institution with eleven undergraduate students from the University of North Carolina at Chapel Hill. The participants were recorded completing the tasks and were asked to describe their searching methods and the challenges they faced while completing the tasks during a stimulated recall session. The results found that students used a multitude of searching methods in their attempts to answer the

questions. The experienced users used more advanced techniques to find the answers but were less successful than the inexperienced participants on most of the tasks. The participants also struggled with archival terminology as well as the websites themselves while searching for materials. However, the participants were mostly successful in searching the library websites and locating finding aids.

Cassandra P. Stanco. Identifying the Information Needs of Biomedical Equipment Technicians in the Developing World. A Master's Paper for the M.S. in I.S. degree. April, 2016. 50 pages. Advisor: Clifford Missen.

This study describes a digital survey of Biomedical Equipment Technicians (BMETs), biomedical engineers, and managers in the biomedical field that work in the developing world. The survey was conducted to determine the information needs and preferences of this community regarding digital libraries and digital information seeking. A digital survey was distributed via email, posted to the online forums Infratech and HIFA, and posted to the homepage of Engineering World Health's BMET Library (<http://library.ewh.org>). The survey indicated information seeking behavior centered on print technical information, search engines, and technical forums. It illuminated specific information needs such as a desire for visual materials, specific technical information, and stable formats for digital resources.

Jeanne Stroud. The Reality of Providing Professional Development in the Work Responsibilities of School Librarians. A Master's paper for the M.S. in L.S. degree. April, 2016. 47 pages. Advisor: Sandra Hughes-Hassell.

This study describes a survey given to school librarians regarding their provision of professional development opportunities for teachers. Librarians who are members of AASL Forum and LM_NET were emailed the survey. The purpose of this study was to investigate the time allocated and/or spent by school librarians on staff development related activities and to identify the variables within the school community which inhibit or contribute to those activities.

School Librarians' professional development activities were assessed using the AASL's Empowering Learners: Guidelines for School Library Programs. The survey results of 230 participants showed that librarians provide large group PD about 0.57 times per month and one-on-one PD about 5.3 times per month; however, most librarians would ideally provide more PD opportunities than they

currently provide. Responses also showed that the most common factors contributing to and inhibiting the provision of PD were teacher cooperation and lack of time, respectively.

Sara Thomas. Plagiarism: Don't. Plagiarism As a Skill Deficiency, and Building a Better Plagiarism Tutorial. A Master's paper for the M.S. in L.S. degree. April, 2016. 76 pages. Advisor: Jonathan McMichael

Academic integrity education is often framed in the context of plagiarism, which is typically taught to undergraduates through teaching citations. While this has generated attention and conversation on college campuses, issues of plagiarism and academic integrity have remained largely unaffected. High rates of academic integrity issues in specific demographics, such as international and transfer students, suggest that our definitions of plagiarism and academic integrity are potentially culturally bound and cannot be simply transferred through submitting to an honor code. UNC-CH's R.B. House Undergraduate Library and the Office of Student Conduct have partnered to create a plagiarism tutorial that better meets the challenges of changing information uses in education and offers a more inclusive approach to academic integrity education. This tutorial focuses on skill development and uses methods and concepts prevalent in pedagogical theory to help students develop a better understanding of the issues surrounding plagiarism.

Ashlyn Velte. Activist Social Media Archiving: Practices, Challenges, and Opportunities. A Master's Paper for the M.S. in L.S. degree. April, 2016. 84 pages. Advisor: Stewart Varner

Social media has played a significant role in recent activist movements. It empowers activists to organize and communicate their experiences. Archival efforts to document narratives that are historically silenced makes activist material an attractive collecting area. However, archives trying to preserve digital ephemera like social media from activist movements face digital preservation challenges as well as ethical considerations. By conducting online surveys and semi-structured interviews with archivists working on projects collecting activist social media this study found that activist social collecting projects: 1) face ethical and collection development challenges, 2) usually follow traditional models for acquisition, description, and access, and 3) increase donor and user engagement with collections. This suggests that in the future the profession would benefit from the development of best practices surrounding ethical collection development and use of activist social media.

Sarah M. Vlasity. *The Cabinet of Curiosities: Recreating the Renaissance Experience. A Master's Paper for the M.S. in L.S degree. April, 2016. 32 pages. Advisor: Denise Anthony*

The cabinet of curiosities, or collection of the exotic and the obscure, was a product of the Renaissance. Efforts by the elite to acquire and display natural and man-made marvels served a dual purpose: to illustrate prestige and to support intellectual pursuits. In regard to the latter, this paper suggests three uses of the Renaissance cabinet: as a refuge, conducive to creativity and critical thinking; as a laboratory, facilitating experimentation via the arrangement or observation of objects; and as a forum, to inspire intellectual conversation. Linking the historical cabinet to its contemporary counterparts, this paper examines similar attributes in three modern exhibits on display, or displayed, at the University of Colorado Boulder, the University of Minnesota Twin Cities, and the Canadian Museum of Civilization. It concludes that the cabinet of curiosities remains a relevant model for exhibit design, that the appeal of the unexpected is timeless.

Elizabeth M. Wachiaya. *Accessibility Analysis and Redesign of the Durham County Library Website to Serve the Needs of Visually Impaired Users. A Master's paper for the M.S. in I.S. degree. April, 2016. 60 pages. Advisor: Dr. Ronald Bergquist*

When it comes to web accessibility, two sets of guidelines are commonly used – Web Content Accessibility Guidelines (WCAG) and Section 508, however due to constant technology changes some rules in these guidelines become obsolete. This study seeks to add a new perspective in evaluating web accessibility – user interface/experience professionals who keep their ears on the ground for user and technology trends and focusing on users with visual impairment. It examines the Durham County Library website to find its inadequacies in catering for visually impaired users using recommendations from professional articles combined with the current guidelines (WCAG and Section 508). Results from analysis show that layout, content and navigation are the areas most lacking in accessibility while images, tables and frames are the more conforming elements. Finally, this study makes suggestions on improving the website so it is easier for the visually impaired user to access information.

Yiqi Wang. *Pattern Based Information Extraction System in Business News Articles. A Master's paper for the M.S. in I.S. degree. April, 2016. 45 pages. Advisor: Jaime Arguello*

Business news journals provide a rich resource of business events, which enable domain experts to further understand the spatio-temporal changes occur among a set of firms and people. However, extracting structured data from journal resource that is text-based and unstructured is a non-trivial challenge. This project designs and implements a Business Information Extraction System, which combines advanced natural language processing (NLP) tools and knowledge-based extraction patterns to process and extract information of target business event from news journals automatically. The performance evaluation on the proposed system suggests that IE techniques works well on business event extraction and it is promising to apply the technique to extract more types of business events.

Eleanor H. Weston. *Online Collections for Natural History Museums: A Heuristic Analysis. A Master's Paper for the M.S. in L.S degree. April, 2016. 49 pages. Advisor: Diane Kelly*

This study analyzes the websites of fifty-nine natural history museums accredited by the American Alliance of Museums in order to determine current practices in online collection information for natural history museums and its relationship to institutional qualities.

Using a heuristic content analysis, this study looks at what collection information museums put on their own websites and external websites, search and browsing features for collection information, and whether they include written policies about loans and research visits using collection materials. Using a chi-square test, this information was analyzed in relation to demographic information, such as whether the museum is a nonprofit, affiliated with a college or university, government operated, or charges for admission. The findings of this study indicate no significant relationship between these demographic factors, but strong relationships between a museum's likelihood to put collection information online and information about lending and research policies.

Rebecca J. Williams *Who Lives, Who Dies, Who Tells Your Story: A Global Content Analysis of Privacy Legislation and National Archive Policies in a Digital Age. A Master's Paper for the M.S. in L.S degree. April, 2016. 50 pages. Advisor: Rebecca Vargha*

This study is a content analysis examining both privacy legislation and national archives policies regarding privacy to determine global understandings of privacy in a digital age. The analysis was conducted on the laws and policies of twenty nations sampled for geographic diversity. The results show that while significant amounts of legislation

regarding data protection have been passed around the world in the past decade; however the policies of these national archives have yet to fully adjust to a new reality of recordkeeping in the digital age.

Qiongcheng Xu. Data Mining and Visualization on Live Chat Data for Ecommerce Business. A Master's paper for the M.S. in I.S. degree. April, 2016. 55 pages. Advisor: David Gotz

The purpose of this paper is to design, build and evaluate an interactive visualization tool for data analysts to analyze as well as interact with the live chat data from a corporate website for customer relationship management. Sales lead and customer support are the major purposes of the live chat service. Data mining technologies are applied to classify the chat data into categories that can help marketing and sales teams to target their potential customers more accurately and efficiently. By interacting with the web visualization tool, data analysts will have the capability to obtain valuable information about customers' concerns and buying interests on their products and solutions. The results indicate that chat classification achieves higher accuracy on major class "Lead" but lower accuracy on minor classes due to the imbalanced distribution of dataset as well as human bias when manually labeling the training data. Based on the analytic results of chat visualization, data analysts gain the knowledge gap between customers' concern and the information provided on the corporate website, and propose new ideas to improve their digital marketing approaches as well.

Shannon M. Young. Gender Bias in the Young Adult Publishing Industry: Too Many "Girly" Books? A Master's Paper for the M.S. in L.S degree. April, 2016. 31 pages. Advisor: Brian Sturm.

This study describes a content analysis of the cover art of 175 young adult books published within the last four years. The study was done to determine whether or not there is a gender bias in favor of girls in the young adult publishing industry. Educators across the English-speaking world are beginning to notice that teen boys are falling behind their female counterparts in reading, and some claim that this gap is due to lack of reading material for boys. This sample shows that there is a slight bias in favor of girls in young adult publishing, but the difference is not significant enough to support such claims.

Chongrui Zhang. Implementation and Usability Evaluation of an Electronic Health Record system based on patients' temporal visiting data. A Master's Paper for

the M.S. in I.S degree. April, 2016. 43 pages. Advisor: Javed Mostafa

Electronic Health Record (EHR) systems have become highly important in health care and consequently in Health Informatics research. Although, some advances have been made, users' experience of modern commercial EHRs remain challenging at best and unsafe at worst. This paper implements a prototype of EHR system to visualize the history of patient visits in the context of psychiatric care. It reports on a usability study which compared the use of the simulated EHR system by subjects of various experience levels. The study has verified the importance of prior knowledge in the field of EHR. It proposes several suggestions to improve the usability of EHR systems by implementing a temporal data organization scheme to present critical data.

Wanchun Zhao. Spam Detection on Twitter: A Comparison between Content-based and Graph-based Features. A Master's Paper for the M.S. in I.S degree. March, 2016. 44 pages. Advisor: Bradley M. Hemminger

The popularity of social media has triggered the development of spammers, which produces useless information and costs normal user more time in information seeking process. In this paper, Twitter is studied as an example of spam detection in social media. Using Twitter APIs, content-based and graph-based features were extracted from datasets and analyzed with users' level of spam. Combining two kinds of features with J48, NaïveBayes and SVM classifiers, content-based features with J48 have the best performance in evaluation.

Yongsu An. The impact of the MERS Outbreak in Daily Lives: Sentiment Analysis of Korean Tweets using Time-series Methods. A Master's Paper for the M.S. in I.S degree. April, 2016. 35 pages. Advisor: Jaime Arguello

This study examines the correlation between sentiments in tweets and the number of passengers in the subway as the social index during the MERS outbreak in South Korea. The observation that motivated this study in the social context was that people tended to avoid their social lives outdoors by the fear of being infected during the situation. Two time-series datasets were processed for the purpose of getting rid of seasonal patterns. The result showed that they are correlated with each other with 169 hours. It indicates that the sentiments in social media can be a good way of mirroring people's behaviors ahead of time.

Kimberley M. Henze. Look Closely, See Creatively: Identifying Threshold Concepts for a Visual Literacy Framework for Higher Education. A Master's Paper for the M.S. in L.S degree. April, 2016. 80 pages. Advisor: Jonathan McMichael

Models for teaching information literacy have multiplied in the last decade in dutiful response to the digital barrage and increasing ubiquity of information. Meanwhile, models for visual literacy, despite an even greater proliferation of images in this same environment, have lagged behind. Although information literacy frameworks partially address the skillset for visual information, there are nuanced

competencies critical to visual literacy that are wholly unaddressed by current conceptions of information literacy. This study pinpoints and articulates those visual literacy-specific skills by activating and analyzing the pedagogical content knowledge of experienced instructors of visual media and gauges those findings against ACRL's Framework for Information Literacy. Discoveries move the author to propose two major threshold concepts, articulated through the frames Close and Critical Looking and Creative Vision, which are critical and specific to visual literacy.



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