Recent Dean’s Achievement Award Winners

# 2014

Arledge, Curt. Filled-in vs. Outline Icons: The Impact of Icon Style on Usability. Advisor: Capra. MP 4105.

This study sought to determine whether single-color, "flat" icons would be more quickly and accurately selected by users when presented in either a filled-in or outline style. An application was developed that allowed participants to take a test measuring their speed and accuracy in selecting prompted icons from an array of distractors. The test was made available on the web and was completed by 1,260 participants. Averaged across the 20 unique icon forms used in the test, the outline style led to slightly longer task times, but only when icons were displayed in white against a black background. For individual icons, the effects of icon style were inconsistent and, except for a few exceptions, quite small. This study concluded that one icon style is not objectively better than the other.

Lewis, Meredith. Learning styles, motivations, and resource needs of students enrolled in a massive open online class. Advisor: Pomerantz. MP 4153.

Massive Open Online Classes (MOOCs) have stormed the online education landscape over the past five years and show no sign of disappearing. Though studies have been done about the characteristics of online or distance education students, the characteristics of MOOC students are less known to researchers beyond demographics and participation statistics. Likewise, the implications of MOOC's for librarians who will need to support this new community of are widely unknown. A survey of learning preferences, motivations, and resource needs and uses of MOOC students in the University of North Carolina at Chapel Hill's Metadata MOOC in Fall 2013 determined that, though learning preferences exist, participants enrolled in this course were predominantly Independent and Participant with similar needs across learning styles despite different learning preferences. Participants are also motivated by professional interest and intellectual curiosity and would welcome additional materials in order to further explore MOOC topics.

# 2013

Klipfel, Kevin Michael. Authentic Engagement: Assessing the Effects of Authenticity on Student Engagement and Information Literacy in Academic Library Instruction. Advisor: Kelly. MP 4014.

This study measures the impact of authenticity - the operation of one's true self in one's daily activities - on student engagement and learning in one specific library context, information literacy instruction for English 105 classes at the House Undergraduate Library at the University of North Carolina at Chapel Hill. A classroom modeling exercise was developed to help students choose authentic topics of interest. Students then filled out a questionnaire to assess whether choosing authentic topics led to (a) increased engagement and (b) increased learning according to ACRL information literacy standards. The data collected shows that the exercise successfully helped students choose authentic topics and that these students' motivation to learn was higher than students in the control group. Students in the experimental group also on average rated their learning of ACRL information literacy standards higher than students in the control group. The study provides initial evidence for the positive impact authenticity can have on student motivation and learning in the context of information literacy instruction.

Zelko, Hilary. Reasoning about Relevance. Advisor: Kelly. MP 4055.

This study focuses on how non-expert assessors judge relevance guided by mental models of relevance developed and applied during the assessment process. Components of relevance models are identified as well as challenges and changes associated with their construction and use. Study participants evaluated the relevance of news articles with respect to an assigned search topic. They commented on their reasoning in assessing each article, challenges they experienced in determining relevance and changes in their ability to assess relevance over the course of the evaluation session. Content analysis of these comments revealed that relevance models are derived from participants' understandings of the search topic, the documents they viewed and the relationships between them. Relevance manifestations (topical, situational, cognitive) and criteria (information scope, specificity and detail) guide the development and application of the relevance models, which may also be influenced by situational, cognitive and motivational factors.

# 2012

Thompson, Cheryl. Answering the Call for Data Curation: An Exploration of the Careers of LIS Professionals Managing Data. Advisor: Marshall. MP 3912.

Since data curation is a new area of practice for LIS professionals, little is known about the existing workforce in this area. Using secondary analysis of the Workforce Issues in Library and Information Science data, the study examined the work, career stories and post-graduate experiences of LIS alumni who indicated that their work involved data work. LIS professionals performing data duties appeared in a variety of organizations and workplace settings. These professionals were also more likely to be managers, have a higher number of job functions and identify as both a librarian and information professional than other respondents. Five career pathways into data curation were identified.

Pierce, Hannah. A Content Analysis Study of the Equivalency of Publishers' Easy Reader Leveling Systems. Advisor: Sturm. MP 3900.

This study examines the book and text features and language and literary features of easy reader books. Leveled easy readers published by HarperCollins, Random House, and Simon & Schuster were analyzed. The results reveal trends in the difficulty of sixteen book characteristics. The coding scores derived from content analysis were used to compare the leveling systems employed by the publishers. The study culminated in the creation of an equivalency chart that can be used to quickly compare the difficulty of easy readers on each level assigned by HarperCollins, Random House, and Simon & Schuster. Children’s librarians, school media specialists, and parents may use the equivalency tool developed during this study to assist them in selecting books for beginning readers.

# 2011

Breece, Brooks J. Local Government Use of Web GIS in North Carolina. Advisor: Haas. MP 3675.

This study examines the use of online geographic information systems (GIS) by North Carolina county governments. The study was conducted to investigate what web GIS services North Carolina counties offer, to determine how much these services are used and by whom, and to uncover how offering these services has impacted agency functioning. The counties examined were Wake County, Lee County, Guilford County and Robeson County. Methods employed over the course of the study included analyzing trends in web traffic statistics and interviewing staff members of participating agencies to uncover organizational changes occurring post-deployment of a web GIS. Trends in web GIS use were not consistent across counties. The chief impact of offering a web service was a decrease in walk-in traffic to agencies. This has freed up staff members to work on other projects. Employees also have taken on new roles as technology educators for web GIS users.

Dorner, Elizabeth S. Motivation of Undergraduate Student Employees in Academic Libraries. Advisor: Moran. MP 3717.

This study seeks to explore what motivates undergraduate student employees in academic libraries. The literature contains many anecdotal accounts of motivation programs and incentives employed in academic libraries but very few empirical studies concerning these employees. This study explored student employee motivation within the framework of self-determination theory: measuring levels of intrinsic motivation, internalized regulation, introjected regulation, and external regulation. A questionnaire was distributed to student employees at seven ARL member libraries. The questionnaire gathered demographic data and used the Motivation at Work Scale (MAWS) to measure their motivation. The study found that students showed higher levels of intrinsic motivation and external regulation, and while students' majors do not have a notable effect on their motivation, the task they perform at work does impact their motivation. The results of this study can be applied to design and implement more effective motivators and incentives for student employees in academic libraries.

Hirsh, Kimberly A. The Transformational Leadership Practices of National Board Certified School Librarians in North Carolina. Advisor: Hughes-Hassell. MP 3732.

This study describes a questionnaire survey of school librarians in North Carolina who have received advanced certification from the National Board of Professional Teaching Standards. The survey was conducted to identify the transformational leadership practices of these school librarians and assess their ability to implement professional leadership guidelines. School librarians’ leadership practices were assessed using the Leadership Practices Inventory, 3rd Edition (LPI). School librarians perceived themselves as possessing a high level of transformational leadership in the five exemplary practices identified by the LPI: Modeling the Way (MTW), Inspiring a Shared Vision (ISV), Challenging the Process (CTP), Enabling Others to Act (EOA) and Encouraging the Heart (ETH). They perceived themselves as being very strong at MTW and EOA. They were less successful at ISV and CTP. Overall, they were very successful in implementing professional leadership guidelines. Successful implementation of these guidelines was highly correlated with ISV and CTP.

# 2010

Long, Allison M. Career Choice of Young Adult Librarians in a Public Setting: A Narrative Analysis of Motivations with Implications for Recruitment. Advisor: Hughes-Hassell. MP 3613.

This study examines the career motivations of young adult librarians working in public libraries. Qualitative interviews were conducted with three practicing young adult librarians whose life stories were written in narrative form and analyzed using the principles of Career Construction Theory. Comparisons across the life stories of the participants revealed that young adult librarians share many career motivations with librarians in other specializations. The research also identified career factors specific to young adult librarians, including a young age, fondness for young people, and influences from their personal adolescent experience. The implications of these factors in the recruitment and employment of young adult librarians are discussed.

Walker, Shannon A. From Science to Librarianship: Career Motivations of the Scientist-Turned-Librarian. Advisor: Marshall. MP 3644.

Why might someone with science training pursue an information career? This secondary analysis of the Workforce Issues in Library and Information Science (WILIS) study compares those who earned a natural science degree prior to the LIS program with others who did not. The results point to more similarities than differences. All LIS graduates showed broad agreement on job motivations, values, and satisfaction; however, some differences were found. Science majors were less interested in school libraries and more in special libraries. Scientists were more likely to self-identify as “information professional” alone or in tandem with “librarian” and more likely to cite computer interest as one motivation. Science graduates were significantly more likely to claim responsibilities for academic research and publications, database development, and “other” IT and consulting. Very few entrants to LIS programs have science degrees, but the potential exists to attract more.

# 2009

O’Neill, Laura Carey. A Usability Study of E-book Platforms. Advisor: Barreau. MP 3512.

While e-books offer great potential for academic libraries, research has shown that usability issues can prevent readers from reading e-books or from using certain ebook functions. This study presents the results of usability testing on the platforms of three of the largest aggregators of academic e-books: ebrary, MyiLibrary, and Ebook Library. In addition to learning about the usability of these specific platforms, this research provides greater insight into the usability issues that students encounter while reading e-books and a deeper understanding of how e-books can meet the academic needs of students. Five undergraduate and five graduate students participated in testing, completing a series of tasks in each platform. Testing revealed several usability issues. Students want flexible navigational options, including the ability to scroll. Additionally, students enjoy certain e-book features, such as annotation and highlighting tools, but they were not sure that they would use these tools.

Westmoreland, Laura. The Environmental Protection Agency and National Institute of Environmental Health Sciences Libraries Internship Program: Its History and an Analysis of Former Interns’ Careers. Advisor: Moran. MP 3535.

This study describes the history of the Environmental Protection Agency and National Institute of Environmental Health Sciences Libraries Internship Program contracted through the University of North Carolina’s School of Information and Library Science. It also explores former interns’ current careers and their perceptions of how the internship affected their careers. Historical information about the internship program was gathered through a review of historical literature and interviews with individuals who played key roles in the internship program over the years. Information regarding former interns’ careers and perceptions of the internship program was gathered through a web-based survey. The findings of this study are useful in documenting the history of a program that has played a major role in the School of Information and Library Science at the University of North Carolina at Chapel Hill. Results of the web-based survey indicate that the majority of interns felt very positively about their experiences as interns. More than two-thirds of respondents believed the internship program had either a strong impact or very strong impact on their careers.

# 2008

Irvine, Ann K. Natural Language Processing and Temporal Information Extraction in Emergency Department Triage Notes. Advisor: Haas. MP 3378.

Electronic patient records, including the Emergency Department (ED) Triage Note (TN), provide a rich source of textual information. Processing clinical texts to create important pieces of structured information will be useful to clinicians treating patients, clinicians in training, and researchers and practitioners in biosurveillance. This work applies natural language processing (NLP) and information extraction (IE) techniques to the TN genre of text. In particular, it presents the Triage Note Temporal Information Extraction System (TN-TIES), which combines a shallow parser, machine learned classifiers, and handwritten rules to identify, extract, and interpret temporal information in TNs in preparation for the automatic creation of a timeline of events leading up to a patient's visit to the ED. The success of TN-TIES suggests that NLP and IE techniques are appropriate for the genre and that the automatic production of a timeline of TN events is a realistic application.

Johnson, Nicholas A. An Investigation of the Aesthetic Fidelity of Live Websites. Advisor: Wildemuth. MP 3380.

The idea of "aesthetic fidelity" was developed to measure the degree to which affective messages and emotions intended by interface designers are communicated to users through the aesthetics of an interface. Until now, however, aesthetic fidelity research has been confined to highly artificial experiments. This study investigates the aesthetic fidelity of live, "real-world" interfaces. Two web designers were interviewed to discover the processes they use when designing websites and to compile a list of affective messages they tried to send in specific sites they created. A small user study was then conducted to find out how strongly these affective messages were received by users. Results from both phases of the research are used to draw conclusions on how the idea of aesthetic fidelity can be applied to real-world interfaces, how future aesthetic fidelity studies can be conducted and what tools designers can use to increase the aesthetic fidelity of their interfaces.

# 2007

Barwick, Laura Elizabeth. The Opinions of Literature Faculty and Students on Back-of-the-Book Indexes in Fiction. Advisor: Greenberg. MP 3141.

Back-of-the-book indexes are usually only printed in non-fiction books. This research investigated the opinions of literature faculty and students on including indexes in fiction books. Publishers may claim that an index for a fiction book is not worth the cost. However, no empirical studies have been conducted which try to assess demand. In order to begin to fill this gap in the literature, a survey was distributed to literature faculty and students at the University of North Carolina at Chapel Hill in order to assess their opinions towards the usefulness and value of fiction book indexes. The results suggest that there is a demand for indexes in fiction but some concerns may need to be addressed first. The results of this study may serve as a starting point for gauging market interest in buying fictional works printed with indexes that could potentially lead to a new field in indexing.

Binkowski, Philip J. The Effect of Social Proof on Tag Selection in Social Bookmarking Applications. Advisor: Wildemuth. MP 3245.

The growing popularity of social bookmaking applications like flickr and del.icio.us present new challenges to system designers because the effects of social psychological factors on users' tag choices have not been examined. The social psychological principle of social proof is particularly applicable to social bookmarking because it predicts that the tags applied by users will be more similar to each other if they are provided with a list of suggested tags. This study examines the effect of social proof on tag selection by comparing the degree of similarity between tags provided by a sample group and a collection of suggested tags provided to the treatment group. The results indicate that social proof can have an effect on users' tag selection. The conclusion briefly examines the beneficial effect of social proof on the quality of social bookmarking applications and other collaborative tagging applications.

Perez, Megan Z. From New Graduate to Competent Practitioner: Rethinking the Architecture of Post-MLS Residency Programs in ARL Libraries. Advisor: Wisser. MP 3282.

Library residency programs can be valuable recruitment, development, and retention strategies. This study describes supplemental design elements in the development, implementation, and management of post-MLS residency programs in ARL libraries. It compares workforce issues and student demographics in academic librarianship and in the nursing profession. To determine the current recruitment and development strategies of active library residency programs, a survey was sent to personnel officers of ARL libraries. The results of the survey are compared to the practices of five successful nursing residency programs. The survey findings offer valuable information for libraries who currently host a residency program or who are considering hosting one in the future. The study concludes with suggestions and recommendations for library residency program administrators, LIS faculty and practitioners, and professional library associations.