

ALISE 2011

Doctoral Student Poster Abstracts

1. Cherri Shelnutt

Texas Woman's University

Title

LIS online graduate students in the 1990s

Abstract

Many American Library Association-accredited library and information science (LIS) programs currently offer some graduate courses online. LIS online distance learning course delivery as we know it today emerged out of gradual changes in educational theories and available technologies.

With the development of computer technologies such as the Internet and Web, new types of distance delivery became possible. In addition, changes in educational philosophy brought about openness to new ways for instructors and students to interact and learn together.

As these developments intersected in the late-twentieth century, individual LIS faculty explored ways to bring the tools and theories together to serve students. Early online learning formats appeared in a few LIS programs, and these innovative efforts influenced each other until widespread LIS online learning courses began to emerge during the 1990s.

The purpose of this study was to explore and describe the experiences and perceptions of LIS online graduate students in the 1990s. Sub-questions included:

- 1) What is a general description of LIS online graduate students in the 1990s?
- 2) What did LIS graduate students experience as part of this online learning?
- 3) What factors influenced the experience?
- 4) How did perceptions about whether LIS online students thought of themselves as pioneers help shape the experience?
- 5) What overall evaluations did participants give about their experiences with LIS online courses?

This historical study used closed and open-ended questions to gather data, and research participants self-selected. To reach as many potential participants as possible, invitations were posted to multiple LIS listservs and organizations. Participants were also encouraged to mention the research project to others.

The researcher developed an online questionnaire that could be completed in approximately 45 minutes. The survey included four broad sections:

- A: General Information
- B: An LIS Online Graduate Course in the 1990s
- C: Experiences with LIS Online Learning in the 1990s
- D: Concluding Thoughts

For 5.5 months, the questionnaire was available online. Based on this researcher's own experiences as an LIS student in the 1990s, it was anticipated that student stories and experiences

would be diverse but that common themes would arise. Survey data were analyzed from the perspective of the students, and preliminary results include:

- Early LIS online students who participated in this research revealed that most were between 20 and 49 at the time, most were female, and about half took no more than four LIS online courses during that decade.
- Participants found the LIS online learning experience in the 1990s to be convenient, interesting, challenging, frustrating, exciting, and innovative.
- Factors influencing student experiences with LIS online learning included available technologies, delivery tools and formats, the role of instructors, development (or lack) of a sense of community, and personal life situations of the participants themselves.
- Some participants thought of themselves as pioneers at the time of their LIS online courses in the 1990s, and others did not, occasionally resulting in different viewpoints and experiences.
- Although participants sometimes found aspects of their LIS online courses in the 1990s difficult, overall satisfaction for participants as a whole was more often positive than negative.

2. Janet L. Capps

Florida State University

Title

EL-Capstone: A tool to measure early literacy core knowledge levels of adults

Abstract

BACKGROUND: Placed strategically within communities, libraries historically provide essential children services. According to the *Public Libraries Survey* report, attendance at children's programs increased 13.9% between 1999 and 2008 (IMLS, 2010). During that time, a substantial number of libraries expanded traditional storytimes to include enriched early literacy (EL) programming to young children ages birth to 5. As described by Whitehurst and Lonigan, "Emergent literacy involves the skills, knowledge, and attitudes that are developmental precursors to conventional forms of reading and writing" (1998, p. 848). The terms *early literacy* and *emergent literacy* are used inter-changeably.

Budget cuts have affected public library (PL) services. At-risk children populations are vulnerable as operating-hour reductions force some libraries to lock doors in the evenings and weekends. Competition for funds has professionals seeking innovative ways to continue to provide important children services. An ability to demonstrate the quality, impact, and value associated with library services to long-term development of young children's conventional literacy skills is crucial when competing for funds. Research collaborations with public libraries are expanding. Documenting EL knowledge levels of adults that promote EL skills for young children is one innovative approach to demonstrate quality of services.

OBJECTIVE: The primary objective is the development of a research-based instrument (EL-Capstone) that may be used to measure EL core-knowledge levels of adults working in an environment with expectations of supporting literacy development of young children.

METHODS: Concept Inventory, Emergent Literacy, and Test theories combine to inform the framework for this assessment instrument (EL-Capstone). This research design has three distinct stages: Pre-participant, Participant, and Post-participant. The processes may be summarized by six general tasks: (1) define the content, (2) develop and select the instrument items, (3) informal informant sessions, (4) interview sessions with librarians and early literacy practitioners, (5) instrument administration, and (6) evaluation and final refinement. All of the consent-form participant activities center on improving the content validity, internal reliability, and stability of EL-Capstone.

RESULTS & CONCLUSIONS: During Task 1, the *Developing Early Literacy*, National Early Literacy Panel (NELP) 2008 Report was adopted as "EL-Expert" surrogates to bind the epistemological framework to the NELP authors' theoretical underpinnings of EL concepts. The NELP Report represents an extremely dense synthesis of the EL experimental and quasi-experimental research. By the end of the Pre-participant stage concept-mapping activity, ninety-seven potential instrument items had been constructed that fell into three categories, i.e., predictiveness, definitions, and activities.

Accompanying the refined sixty-two items presented during the interview sessions (n=10) were 3 ranking questions, i.e., strength of each concept, difficulty level, and perceived importance. The interview results informed instrument item reductions and modifications. Two alternating online versions of EL-Capstone launched on September 1, 2010 to collect data for 30 days. Item Response Theory was applied during the Post-participant stage to identify each item's difficulty and discrimination parameters. EL-Capstone, a research-based tool to measure EL-levels of adults working in an environment with expectations of supporting literacy development of young children, may be used to inform library science curriculum development and to support program evaluation.

3. Lai Ma

Indiana University – Bloomington

Title

Information in our world

Abstract

Purpose/Objective of Study

“Information” is presumably the object of study in information science research. However, epistemological assumptions and the cultural, social, and methodological implications of concepts of information and the uses of the term “information” in information science discourse are seldom examined. This study is consists in the reconstructive analysis of concepts of information for explicating epistemological assumptions and implications of the uses of the term

“information” in information science discourse, on the one hand, and for tracing the formation of research areas and the constitution of the various “turns” of information science, on the other.

By investigating the epistemological assumptions of concepts of information, this study also aims to (1) explicate the cultural, social, and methodological implications of the empiricist understanding of information, (2) suggest that the notion of information is communicatively and socially constructed through the discussion of critical epistemology and methodology, Habermas’ theory of communicative action in particular, and (3) suggest possible implications of the reconceptualization of information for information science research.

Sample and Setting

While there are myriads of concepts of information proposed and discussed, the reconstructive analysis consists in the most influential information theories, namely, the Information Theory (also known as the “Shannon-Weaver model”) and the DIKW (Data-Information-Knowledge-Wisdom) model. Other works will also be examined and discussed as appropriate.

Method

Since this study is largely conceptual, critical reconstructive analysis is used to explicate the meanings of information and the epistemological assumptions of concepts of information. The method, “reconstructive analysis” is informed by critical methodology, which involves theories of meaning, communication, cognition, and social systems. The method involves close reading of texts, reconstruction of meaning, and critical analysis.

Data Collection Techniques

Not applicable

Results

The explication of the assumptions of concepts of information shows that the conceptualizations of information in information science have largely been adhered to the empiricist theory of knowledge. Critical methodology provides the framework for reconceptualizing information as communicatively and socially structured, and thus for overcoming the empiricist understanding of information such as that in the Shannon-Weaver model and in the DIKW model.

The reconceptualization of information as discursive construct then opens up question concerning information in relation to communication structure (e.g., language use, norms, etc.), organizational rules, economic and political conditions, and so on. In other words, questions concerning the *constitution* of information and related phenomena may be raised. For example, how certain types of information are produced and *not* produced? What are the norms, rituals, beliefs, and ideologies that afford certain information behavior? What are the roles of information in professional communities, organizations, and societies? Moreover, the explication of the epistemological assumptions may also explain the affordances of the various “turns” of information science.

4. John T. F. Burgess

The University of Alabama

Title

Librarianship in light of existential risk: A philosophical analysis

Abstract

An existential risk is any threat which has the potential to end intelligent life on Earth. Some existential risks are naturally occurring, and beyond the scope of human intervention. Others are the result of human activities. With leadership and sufficient effort, these could be avoided. The question this study pursues is how can librarians mitigate existential risks? This study argues that since the establishment of public libraries, the telos of libraries in society has been risk mitigation. These risks have been to community, country or culture rather than existence. However, an analysis of existential and societal risk will demonstrate that they differ in terms of scope not in kind. The same philosophies, principles and praxes librarians developed as solutions to societal risks make librarians critical to any effort to mitigate existential risks. In a democratic society, avoiding existential risks requires clarity of thought, access to available relevant knowledge, a means of evaluating experts and space for public discourse. Each of these falls squarely within the domain of library practice. The method of this study is philosophical analysis, as the best means of examining the concept of librarianship in light of the mitigation of risks. There is a rich tradition of inquiry into the ends of librarianship as seen in the foundational work of Jesse Shera and in recent scholarship by John M. Budd and Charles Osburn. One criticism of philosophical analysis is its pretense to timelessness, so this study's sample is three periods in the history of American librarianship when the profession adapted its philosophy to deal with a risk to society. In each of these selections, the subject of study is not the time period but the change in philosophy arising as a result of societal risk. The first historical period covers the early history of American public librarianship, examining the perceived erosion of moral standards and fears of class warfare. The second looks at World War I, the library profession's collaboration in information control for the war effort and subsequent codes of professional ethics. The third is post-World War II through the implementation of the Library Services Act, when the Cold War and the Civil Rights movement tested the lessons from the previous time periods. The results of this study are that in times of instability, powerful institutions within society are motivated to create an acculturated, more docile electorate. Librarianship has pragmatically adapted to resist those institutions while not alienating them completely as benefactors. The greater the fear of social instability is, the greater the exercise of institutional power will be. Shades of that in the War on Terror can be seen today. Librarianship must adapt preemptively in order to prevent the erosion of our society's ability to participate in questions of existential risk. This means less emphasis on maintaining the status quo, and greater emphasis on the viability of a free and informed electorate. A wide range of possible solutions, both internal to the profession and external among progressive institutions is considered.

5. Sheng-Cheng Huang

The University of Texas at Austin

Title

A large-N survey of 500 stimuli of visual information

Abstract**Purpose/Objective of Study**

Icons, pictures, and texts are major elements of visual information in information systems. Studying how users read and interpret meanings of visual information is important to understanding human information processing. The purpose of this large-N survey is to investigate how well icons represent semantics of objects and concepts in contrast to pictures, English words and Chinese characters. Two objectives of this study include 1) to examine how these four different types of stimuli are perceived semantically in a quantified scale (i.e. being a concrete stimulus by representing an object versus being an abstract stimulus by representing a concept), and 2) to select statistically concrete and abstract stimuli for future studies.

Sample and Setting

The study employed an online questionnaire that surveyed 500 stimuli including 135 icons (69 concrete and 66 abstract), 125 English words (61 concrete and 64 abstract), 113 pictures (52 concrete and 61 abstract), and 127 Chinese characters (64 concrete and 63 abstract). The survey was held online from 1/29/2010 to 7/4/2010 and open to the general public by advertising the questionnaire via six private e-mail lists, two academic websites and one social website. Subjects included 78 students that were recruited via the subject pool program in the Psychology department at the University of Texas at Austin. The questionnaire response rate is 66.8% (211 valid questionnaires out of 316 participants in total.)

Method and Data Collection Technique

Subjects (N=211, 135 English readers and 76 Chinese readers) were recruited and asked to rate each stimulus by four scales: very concrete (1), concrete (2), abstract (3), and very abstract (4). There was also an option of “N/A (0)” if the subject could not determine the rating. All 500 stimuli’s rating scores are means of 211 subjects’ rating scores except Chinese characters’ rating scores are means of those 76 Chinese readers. All means are calculated by excluding scores of “N/A (0).”

Results

Descriptive statistics and analysis of variance (ANOVA) were performed on the mean rating score of each stimulus to determine if there were significant disparities among these four types of stimuli of visual information. Results suggest that there is a statistical demarcation between graphical representations and language-based representations of visual information. Under the conditions of this study, pictures and icons are more “ambiguous (i.e. having statistically significantly higher rating scores in both concrete and abstract categories)” than English words and Chinese characters in term of conveying the immediate semantics of objects and concepts. Results of this study challenge the conventional contention in human-computer interaction (HCI) that suggests icons provide better access to universal interpretations than texts (c.f. Caplin, 2001; Horton, 1994).

References

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6. Anne Marie Casey

Simmons College

Title

Use of academic library strategic priorities during severe budget reductions: A study of leadership and management

Abstract

This dissertation explores how academic libraries that set strategic priorities, use those priorities during a recession. Do they maintain them, alter them or abandon them? Using a multiple case-study method, the investigator visited three public academic libraries with published strategic priorities located in states with high unemployment and conducted personal and focus group interviews to learn about the use of priorities. In all three cases, managers maintain priorities and use them as a guide for decision-making, especially when dealing with budget reductions. In addition to the information obtained about the use of priorities, the investigator also found similar conditions in all of the cases, such as strong channels of communication and employee participation. This dissertation may serve as a guide to other libraries dealing with budget reductions or other effects of the recession.

7. Lucia Cedeira Serantes

The University of Western Ontario

Title

Faster than books and more involved than movies: Understanding the contemporary reading experience of young adult readers of graphic novels and comic books

Abstract

Purpose/Objective of Study

Wayne Wiegand in his seminal piece "Out of Sight, Out of Mind" alludes to the tradition in librarianship of "slighting certain kinds of reading." Historically, one of these kinds of reading involved comic books. Wiegand points to the lack of information about the readers as a problem that sustained pejorative behaviour by library professionals. Nowadays, graphic novels are reviewed in library journals, library programs are built around these materials, and comics are a key material to attract to the library the evasive teenage population. However, the knowledge about these readers' experience is scarce. This study seeks to explore and understand the role of comic books and graphic novels as reading material for young people with an emphasis on the experience of the readers themselves and shifting the perspective from previous research focused on fans and fandom. This overarching purpose takes shape through four research questions: how readers define and understand the medium and what knowledge they have about the peculiarities of the industry; how readers describe the experience of reading a comic book or a graphic novel; how comic book and graphic novel reading fits in the overall reading practices of these readers; and finally what cultural role graphic novels play in the life of teenagers and young adults.

Sample and Setting

The population I have focused my study on are teenagers and young adults, from fifteen to twenty-five years of age, and the sample reflects the different experiences in this range including beginning readers, occasional but interested readers, and expert readers. In order to construct a rich sample, I have combined three sampling techniques: purposeful sampling, theoretical sampling and snowball sampling. Also, to strengthen diversity within the sample, I am recruiting participants and collecting data in three different sorts of sites: public libraries, comic book stores and a university with a large undergraduate population. I have completed, transcribed, and analyzed nine interviews (from an expected sample of 15-20 participants).

Method

I situate myself as a researcher and this project in the tradition of qualitative inquiry. Among the different traditions that follow under the qualitative research umbrella, hermeneutical phenomenology has allowed me to explore the significant and unique experiences of these readers (Cohen, Kahan and Steeves 2000). This approach offers to the researcher “plausible insights” that get her closer to the richness and multifaceted reading experience.

Data Collection Technique(s)

I have implemented this method through semi-structured interviews (Kvale and Brinkmann 2009) and a think-aloud activity where the readers will explain to me on-site how they choose the books they enjoy reading. The data will be analyzed following a three step process: coding, condensation, and interpretation of meaning. (Kvale and Brinkmann 2009)

Emerging Results

Emerging results show that readers perceive this medium as more experimental and riskier than other mass media. At the same time, they are aware of the move towards the mainstream with the emergence and establishment of the term “graphic novel” as well as the movie adaptations from comics materials. About the reading experience, comics allow for a quick immersion in the plot without compromising the thickness or challenge of the storytelling. Finally, the library has a role of extremes, inexistent for some, crucial for others.

8. Eric C. Cook

University of Michigan

Title

The virtual home mode: Photography and biography work

Abstract

Purpose/Objective of Study

Persistent debates exist both in popular discourse and the academic literature about the relationships between technology use and wellbeing, with little resolution in sight. In my dissertation research, I investigate these issues within a particular set of practices: personal and everyday digital photographic production and sharing. In so doing, I provide a more detailed

description of the dynamics between technology and wellbeing within a specific context. I frame the activities and participants of interest to my study through use of anthropologist Richard Chalfen's model of the "home mode" of photographic production and pictorial communication (1987), as well as later work that responded to this model.

The concept of the home mode emphasizes that snapshot media serve not primarily as containers of information, but instead as both support for and a location of sociality. I draw a connection between the evidentiary and locative aspects of the home mode with the rich and broad literature describing biography, personal narratives and life stories, as well as literature describing biographical trajectory maintenance, and multi-faceted views of psychological wellbeing. Each of these literatures underscores the need for individuals to build and maintain a sense of coherence and continuity in their biographies.

Focusing on a Straussian sense of "biography work" (1993), the research questions of this project are:

RQ1) What practices do virtual home mode (VHM) participants deploy in their biographical work?

RQ2) How is VHM biography work impacted by the socio-technical contexts in which it takes place?

RQ3) How does VHM biography work support participants' sense of personal and familial wellbeing?

Sample and Setting

The context of these research questions is the production, dissemination and social use of virtual home mode media, as well as the meanings ascribed to these activities by home mode participants; I attend to activities in both physical and computer-mediated spaces. The primary data for this study consists of semi-structured in-home interviews and observation sessions, conducted with 24 photographers in Michigan and Ohio.

Method

I approach these issues through qualitative methods, with a specific goal of highlighting the participant's view of the virtual home mode. Interview and observation data has been analyzed via iterative open coding and qualitative memoing.

Data Collection Technique(s)

I structured the interview sessions primarily through a series of photo-elicitation tasks, using the participant's own photographs to contextualize and focus their responses. Interview and observation data has been analyzed via iterative open coding and qualitative memoing.

Results

In response to RQ1, I was able to highlight five primary conceptual categories of biographical work among study participants: Procedural work, Representational management work, Connection work, Introspective work, and Interest/Hobby work. As this research project

proceeds to completion, I use these work categories to organize the findings in RQ2 and RQ3.

Ultimately, I use my analysis of this particular setting of the virtual home mode to argue that our conceptions of technology and well-being should be viewed through the lens of ecological affordances rather than deterministic relationships.

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9. Hong Zhang

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Title

Personal information organization and re-access in computer folders: An empirical study of information workers

Abstract

The current hierarchical folder system on personal computers has long been criticized for its limitations that can cause difficulties when people try to organize and re-find information, e.g., the inability to do multiple classification [7], and folders can hide information [11], among others. As the result, new and sometimes radically different prototypes such as topical, temporal, and spatial metaphors have been proposed as alternative systems (e.g. [1] [8] [12]). On the other hand, many empirical studies over decades have shown that people prefer browsing and use searching only as a last resort (e.g. [2]), even when new advanced technologies are available (e.g., [3; 4]). Recent studies also found that there are some advantages with the current folder system, and certain features usually deemed as drawbacks sometimes seem to be beneficial to users. For example, the stable folder structure provides a familiar environment for personal information organization, and the hiding function of folders is good at clearing the clutter that would distract the user's attention (e.g., [6; 11]).

All these seemingly contradictory findings demonstrate the complexity and subtlety, as well as our limited understanding of personal information organization and retrieval behavior in computer folders. Improved understanding is needed on how people use the hierarchical folder systems and "where and how it is inadequate" [9] "before we discard folders as an outdated relic" [11]. Personal information organization and retrieval behavior deserves further investigation especially at this point when personal information management has entered the public domain of general information management with the social computing technology, and at the same time traditional information organization systems are questioned both within and beyond personal computers.

The overall study was aimed to deepen the understanding and identify both efficacies and limitations of folders in the four stages of organization, i.e., keeping, organizing, maintaining,

and re-finding, and provide implications for system design. Several of the research questions include:

- a) What cause the messy Desktops and folders on some people's computers?
- b) Is there an overarching pattern behind idiosyncratic folder organizations, and what is it if there is?
- c) What are the commonalities and differences between folders and general knowledge organization?
- d) What are the tasks and strategies of re-accessing information on personal computers, and what are the reasons for the re-access difficulties?

The participants include six PhD students and six administrative staff in an academic institution, with one represents the end of "research" and the other one close to the "administrative" end in the activity spectrum proposed in [5]. The study adopted multiple data collection instruments which include two rounds of in-depth semi-structured interviews, information re-access experiments, disk scan of several folders, and emails reporting re-access difficulties. The use of the two distinct groups of participants together with the multiple channels of data collection provided richer and varied data and increased the opportunity to do triangulation in data analysis. The poster will report the part of findings on the commonalities between personal information organization & retrieval in computer folders and general information organization systems, which mainly include: the epistemological views [10] in information organization; the effect of context and critical relationships between information items on the organization and retrieval in digital preservation systems; FRBR tasks in information re-access on personal computers; and consistent re-access strategies.

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10. Dana Hanson-Baldauf

University of North Carolina at Chapel Hill

Title

Exploring the everyday life information needs, practices, and challenges of young adults with intellectual disabilities

Abstract

This dissertation research identifies and addresses a gap in the information and library science literature related to understanding and meeting the information needs of young adults with intellectual disabilities (ID). Recent studies evidence significant everyday life challenges and obstacles encountered by young adults with ID as they transition into adulthood. These challenges contribute to lowered quality of life and suggest enumerable information needs. Employing a case study approach, this study explores the everyday life information needs, practices, and challenges of four young adults with intellectual disabilities. Central to this research is the active participation and consultation of the young adults, themselves, as experts of their own lives. Primary questions explored include:

1. What are the everyday life information needs of young adults with intellectual disabilities?
2. What are the everyday life information practices of young adults with intellectual disabilities? What tools/resources/strategies do young adults use to address their everyday life information needs?

3. What challenges do young adults with intellectual disabilities encounter in their attempt to address an information need?

The study incorporates traditional and nontraditional data collection methods to elicit participant engagement and response and utilizes grounded theory for analysis. Non-traditional data collection methods include artwork, technology integration, and photography. Preliminary results indicate a shared desire and initiatives by all participants to engage in their information world as social and active information consumers and providers. Everyday life information needs are divided into two categories, those identified by participants and those identified by parents and teachers. Information needs identified by participants include information to support interpersonal relations, personal interests, hobbies, activities, and schedules. Information needs identified by parents and teachers include information to support self care, employment, and personal safety. Participants employ multiple resources to address their information needs including the consultation of trusted individuals, web searches, TV, radio programs, newspapers, magazines, and books. Although personal limitations inhibit full engagement in information worlds, societal and technological barriers are equally restrictive and exclusionary.

11. Melissa P. Johnston

The Florida State University

Title

School librarians as leaders in technology integration: Enablers and barriers to enactment

Abstract

Despite the abundance of literature that has suggested the need for and the importance of the school librarian to be a technology integration leader, this role is one that has been ignored in the research arena. Therefore this research, based on a distributed leadership theoretical foundation, investigates the enablers and barriers that accomplished practicing school librarians experience in relation to enacting a leadership role in technology. The purpose of this research is to identify, categorize, and explicate the enablers and barriers that accomplished school librarians experience to serve as a foundation on which to build research-based strategies to support practicing school librarians seeking to overcome barriers, and conversely, distinguishing those factors that enable this vital role to be achieved in practice.

Original survey research rarely uses all of the data collected and this unused data can provide answers or different perspectives to other questions (Stewart & Kamins, 1993), therefore this research utilizes secondary analysis method to analyze unused data resulting from the open-ended questions from the *School Library Media Specialist Technology Integration Survey* (PALM, 2009). Once the variable of interest, the enablers and barriers school librarians experience when enacting technology integration leadership, had been defined, the researcher determined that pre-existing data would adequately address the research questions and serve the purposes of this research. The researcher in this case had the benefit of serving as part of the team that worked on the background research and construction of the survey and therefore was aware of unanalyzed data.

Participants in this study include National Board Certified (NBC) school librarians practicing in schools across the United States. These participants were selected due to their documented accomplishment in meeting the rigorous standards of the National Board of Professional Teaching Standards (NBPTS), including technology integration and leadership, and are uniquely positioned to define and differentiate leadership roles in technology integration for school librarians. The respondents were solicited by sending invitations to NBC school librarians whose email addresses could be ascertained from information available on the NBPTS organizational website. This resulted in a sample of approximately 35% of the population of 2100 NBC school librarians.

The data acquired was from the responses to the two open-ended questions that ask respondents to think back about the activities rated in the survey and to state what enables them to be involved in these activities and to tell about any barriers that hinder their involvement (PALM, 2009). The researcher evaluated the original dataset by examining the purpose of the study; who was responsible for data collection; what data was collected; and when and how information was obtained (Stewart & Kamins, 1993). The researcher developed a coding scheme based on the framework *Domains of Supports and Barriers to Teacher Leadership* (Zinn, 1997) because this research assumes that, school librarians, as teachers, will experience the same enablers and barriers that teacher leaders experience enacting leadership. Content analysis was performed on the responses to the two open-ended questions. The results presented in this poster include the identification, classification, and frequency of the enablers and barriers. The resulting frequency tables will be utilized to determine if there is a relationship between specific enablers or barriers and a higher level of involvement in technology integration leadership.

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12. Sung Jae Park

The Florida State University

Title

Journey to public libraries: A behavioral analysis of travel diary

Abstract

The purpose of this study is to gain a finer-grained picture and better understanding of the travel patterns of library users, and the activities, demographics, and other factors that affect library

access. Previous studies of physical accessibility of public libraries, which have focused on library users' single-destination trips and their travel distance, do not provide a full understanding of library use patterns in their full temporal and spatial environment. By analyzing individuals' daily travel activity, this study modeled library access patterns of users and suggested ways to improve library access.

Sample and Setting

The Puget Sound Region in Washington was selected as a study area. For this study, activities of individuals who visited a public library(s) were analyzed, and librarians in this area will be interviewed.

Method

This study employed a mixed methodology including two-phases, quantitative and qualitative research. In the first phase, pre-existing quantitative household travel survey data were analyzed using Geographic Information Systems (GIS). Even though secondary data analyses allow researchers to analyze social phenomena in inaccessible settings, the interpretations of a secondary analysis can be limited due to a researcher's lack of knowledge of the setting. In the second phase, therefore, qualitative approaches will be pursued to ensure the credibility of interpretations of secondary data analysis.

Data Collection Technique

The core data of this study are daily travel diaries of public library users, including both spatial and temporal aspects of activities. The data set for analysis was collected from the Metropolitan Travel Survey Archive, which stores 79 household daily travel data sets. Daily activities of 417 people who visited public libraries were extracted from the Puget Sound Region data set. During interviews with librarians from the area of study, questions intended to elicit corroboration of conclusions drawn from the secondary data analysis will be asked. Also, the interviews will be conducted to collect the perspectives of public librarians on their users' access patterns.

Results

In the secondary analysis, four library access patterns were identified: single-destination, en-route, base camp, and trip-chaining trips. Only 20.8% of library users made a single-destination trip, while 79.2% were types of multi-destination trips, the remaining three patterns. In particular, 60% of the activities fell into the trip-chaining travel pattern, which is composed of discretionary activities including a library visit. Even though privately owned cars were used for almost all activities (75%), in the case of base camp activities in which library visits start from such obligatory activities as work and school and end at the starting location, 84.6% of these activities were made on foot. Half of en-route type users, who visit the library on their way to obligatory activity places, spent less than 10 minutes for library visits. Based on the characteristics of each travel pattern, public libraries may develop service plans to increase library access, such as, for example, providing services for employed workers during lunch time. Also, considering the time users spend in the library, libraries may set drop-off boxes on roadways rather than in parking lots to decrease the travel time and distance required to access the library.

13. Cameron Tuai

Title

The organization of public service collaborations

Abstract

The libraries, like the academy as a whole is increasingly looking towards external collaboration as a means to cope with environmental change. For library managers, external collaborations likely represent a novel organizational structure lies outside their past experience. As such, the challenge for library managers lies in not only achieving partner integration, but doing so efficiently. My dissertation addresses this challenge by first, extending theories of integration into the library setting, and second, by providing an empirically derived model for assisting library managers in optimizing the integration process. Looking at collaboration from a broader perspective, library managers must be mindful of seeking short term operational success, at the cost of the long term values that legitimize the libraries within the academy. To manage this complex relationship, library managers must begin to rely more upon the science versus the art of library management. This dissertation contributes this shift by contributing to both theory and practice, and to the empirical materials that allow library educators teach the idiosyncrasies of managing the “library” in library management.

Analysis of the dissertation’s data confirms that an empirical approach to library management can extend managerial certainty beyond that gained from reliance on past experience and intuition. Through a qualitative analysis of 70 library case studies, pre-test interviews, and statistical refinement, the dissertation customized instruments drawn organizational theory for the setting of the information commons. Using 240 surveys drawn from 36 sites, the dissertation found that, (a) while the basic direction of the organizational relationship were as expected, correlative strength were greater than previously documented and (b) while socio-cultural forces did affect organizational structure, they only occurred under highly specific conditions. These findings support that while managers will correctly intuit the type of coordinative structures needed for integration, they will in general, over or under estimate the degree of complexity required. In other words, they will expend more resources than necessary to achieve integration.

Well into the foreseeable future, library managers will continue rely upon past experiences to intuit the means to integrate collaborative partnership. However, the dynamic nature of the library environment calls into question the long term viability of an approach that is more art than science. To begin to address the problems inherent in the art library management, library managers must begin to turn towards the more broad and robust predictive powers of managerial science. For library management researcher to realize this opportunity, they must first identify other high value situations by extending the dissertation’s context into additional library units, library types, or information intensive organizations. Second, they must lower of the cost of managerial science by continuing to refine and develop methodologies that are easy to implement and sensitive to the libraries idiosyncrasies. These steps will both solidify the study and practice of library management, and improve the teaching of library management as a specialization of general management.

14. Ellen Pozzi

Rutgers, The State University of New Jersey

Title

The public library in an information neighborhood: A case study of Italian immigrants in Newark, (NJ), 1889-1919

Abstract

At the end of the 19th century and beginning of the 20th the number of public libraries and the number of immigrants entering the United States were both increasing. The history of the relationship between the American public library and immigrants to the United States has not been explored systematically or extensively, and what little research has been done has largely been told from the top down perspective of the institution, focusing on the experience of libraries and librarians with immigrants, usually in the context of citizenship or Americanization. Fields outside librarianship ignore the institution of the library as part of immigrants' experience. This study seeks to fill a gap in the literature and to develop approaches to the historical study of immigrants' reading and information use. Using a case study approach, this research focuses on Newark (NJ) at a time when the city was in its golden age, and a large percentage of its population was foreign-born. The Newark Public Library's archives are plentiful and understudied, and one of its directors at this period, John Cotton Dana, was a prolific writer on many aspects of librarianship. Italian immigrants were one of the largest foreign-born populations in Newark; by 1920 the city Newark had the fifth largest Italian population in the nation.

The frameworks for the study were provided by the Subaltern Studies Group and Michel deCerteau. Subaltern Studies provided the metatheoretical foundation for examining power structures and provided a methodological framework for reading official archives against the grain to uncover the subaltern mentality in the language of the archives (Guha, 1982). Certeau's (1984) concepts of 'ways of using', 'reading as poaching' and 'strategies and tactics' provided frameworks for examining the everyday use of information. The concept of an information neighborhood, defined as the entirety of the information sources available in an individual's or a group's circuit of everyday living, was developed to understand the dynamics of immigrants' use of formal and informal information sources.

Archival research was the primary data collection technique. Official records of the Newark Public Library, which included annual reports, publications produced by the library, correspondence of the library staff, staff notebooks, as well as local newspapers, and official records of national and community

institutions were read critically to uncover evidence of information use. Sources created by immigrants such as the ethnic press, letters, diaries, autobiographies (both published and unpublished) and oral histories were also examined.

The result is a thick description of the information neighborhood of Italian immigrants living in Newark, New Jersey at the end of the 19th and beginning of the 20th century. This study offers new approaches for examining the role of the library in immigrants' information neighborhoods. It begins to add 'history from below' to fill the gap in library history on this subject and makes immigrants the subject of their own history of interaction with public libraries in the United States.

15. Brooke Shannon

University of Missouri

Title

Exploring discourse through photography: How Kenyan women university students make meaning in their daily lives

Abstract

Purpose/Objective of Study: The primary purpose of this research is to explore the dominant discourses in which Kenyan university women's information practices are embedded. The social constructionist view defines information practice as the set of institutionalized or recurrent information seeking, searching, use, evaluation, and production activities of a particular group or community. Information practices are embedded in dominant discourses. To reveal dominant discourses, this research explored the meanings participants attached to photographs they collected. Research questions include: What information do Kenyan women university students identify as relevant to their daily lives? What information do they share with people inside and outside the community? How are daily experiences described and communicated to people inside and outside the community? How do participants acquire, use, evaluate, create, and communicate meaning of information?

Sample/Setting: 20 Kenyan women students at United States International University (USIU), a private university in Nairobi, Kenya, were recruited by posting fliers that outlined research topic, eligibility requirements, and contact information. First 20 eligible respondents were selected. Research setting included 3 types of environments. Group discussion took place in a secluded area on campus. Interviews between research and participants were considered a multi-cultural setting. Third setting was a global, online photography forum.

Methodology: Qualitative design focused holistically on participants' experiences and was aimed at uncovering the discourses that guide participants' conceptions about information.

Data Collection: During weeks 1 and 2, participants photographed 2-3 events, places, or objects per week they identified as relevant to their daily lives at that time. For weeks 3 and 4, participants identified a concept and took 2-3 photographs that represented how they get information about that concept. For week 5, participants identified 3 concepts about which they

would all take 2-3 photographs that represented how they get information about those concepts. Participants met as a group each week to discuss photos. Prior to discussion, they wrote a 2-3 sentence description of each photograph stating what they intended to capture and the relevance and listed keywords. Open-ended interviews were held to gain insight and receive feedback about preliminary findings. Finally, participants uploaded images, keywords, and descriptions to an online photography forum. Discussions and interviews were transcribed.

Data Analysis: 3 types of data analysis were used to reveal meaning. Content analysis was used to explore themes in text and code data. Phenomenological analysis was used as a method to explore how each participant expressed the meaning of their photographs, identify essential meanings, explore intentionality, and identify themes. Hermeneutical analysis helped gain insight into the geo-historical social context and provided a context in which tension and absences of information in the text could be further explored.

Findings: Objects that signified information included tangible and intangible reality. Most common sources of information were people, followed by books and, then, Internet. Prevalent concepts were beauty, money, environment, and culture. Meaning for 65% of photographs had transcendental quality not accounted for in text. Instances of explicit and implicit intertextuality linked discourse to national and international policies. Absences of information on multiple layers of self and identity emerged.

16. Wayne Buente

Indiana University – Bloomington

Title

Modeling information behavior, citizenship, and the Internet

Abstract

The cornerstone of democratic systems rests on the notion of an informed public (Kranich, 2001). Acquiring credible information allows citizens to interact with other citizens and their governing institutions. Although library and information science has recognized the importance of information to citizenship, we know little about the relationship between information seeking and democratic action. This research provides a persuasive link between understanding citizen information seeking and information use.

According to a recent Pew report, 59% of Americans get offline or online news on a typical day (Purcell et al., 2010); however only 19% of Internet users become politically active online (Smith et al., 2009). What this suggests is that rich information environments do not necessarily lead to political action. An important question is why increased citizen online information practices have not resulted in greater information use for political action. Savolainen (2006) argues that information use is not well-studied and has largely focused on information seeking; there is a “dearth of theoretical and methodological approaches to information use” (p. 1116).

Sample and Setting

This research models citizen information needs and use and online political action. It applies an interdisciplinary approach that integrates and extends current research in information behavior as

it relates to citizenship and political participation in the United States. A research model was developed that explains how citizens become politically active in an online context. Standard linear models of the antecedents of political behavior (Bouillane, 2009; Mossberger, Tolbert, & McNeal, 2007) and the comprehensive model of information seeking (Johnson, 2003) are applied to inform a heuristic model that assumes that having political information and knowledge leads to politically active citizenship. In other words, political information is the “currency of citizenship” (Delli Carpini & Keeter, 2003) that links citizen information seeking and information use.

Method and Data Collection

Two national surveys conducted by the *Pew Internet and American Life Project* are used to test the heuristic model. Surveys utilized a random digital sample of telephone numbers selected from exchanges in the continental United States. These surveys represent national probability samples of more than 1000 respondents which are rare in information behavior research (Case, 2007).

Logistic and ordinal regression procedures using maximum likelihood estimates comprise the secondary analysis of the survey data. Findings reveal three important antecedents for understanding online citizen information needs and use: frequency of Internet use, political beliefs, and political interest.

Results

Socioeconomic states (SES) variables and frequent Internet use contribute significantly for acquiring political information online. Political beliefs constrain citizen information seeking and lead to increased evidence of information avoidance. Political interest is the strongest predictor for explaining citizen political information use and political action. Based on this empirical analysis, the road to becoming an Internet user to a well-informed citizen to an actively engaged citizen is a challenge. The Internet does reduce the cost of citizen political information seeking but other factors such as motivation and beliefs need to be included if the ideals of an informed public are to be realized through information use and political action.

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17. Ellen Rubenstein

University of Illinois, Urbana-Champaign

Title

“It’s a microcosm of life”: Weaving a web of information and support in an online breast cancer community

Abstract

Purpose/Objective: This study sought to understand how the interactions among members of an online breast cancer support group impact the ways that people exchange and use information, provide social support, and form community. Related issues include why people seek online help for breast cancer; how participating in an online group helps people navigate through illness; what kinds of information and social support exchanges occur; and what the meaning of the group is in relation to participants’ everyday lives and for the long term.

Sample & Setting: The setting for this study is an online community, The Breast Cancer Mailing List (www.bclist.org). This unmoderated space primarily serves breast cancer patients and survivors; however, relatives, friends, medical professionals, caregivers, and researchers are also welcome. The archives are freely available on the Internet for anyone to read. I interviewed 36 women and one man, identified through theoretical sampling based on their longevity with the group, relationships that had formed, and the information processes that I observed. I selected subsequent interviewees to gain deeper understanding as themes emerged from the research.

Method: Using methodological triangulation, I took a qualitative, ethnographic approach that included participant-observation, interviews, and analysis of the online archives. This approach made it possible to harness a rich picture of the lived

experiences of breast cancer patients and survivors as they interacted with each other and navigated through various stages of their breast cancer journey.

Data Collection Techniques: I began data collection with six months of participant-observation of the group's online interactions, which facilitated my ability to understand the day-to-day conversations through the eyes of someone who is a member of the group. Through my observation, I began to identify potential interviewees. The interviews were semi-structured and open-ended in order to glean insights into participants' experiential thoughts and beliefs about the group and how the online community is integrated with people's daily lives. I also analyzed the archives to obtain broad historical information related to both daily online occurrences and participants' descriptions of past events.

Results: Initial findings show that online interactions with others who have experienced similar illness trajectories have a profound impact on how people approach health care problems as well as other aspects of their lives. Among the participants in this online community, there is an inextricable connection between information and social support that allows people to build up trust and become comfortable with each other in multiple ways. While other research has noted both the importance of personal relationships in information seeking as well as the health benefits derived from participating in online health communities, this research shows that online health information exchanges in supportive environments can evolve into friendships that transcend information exchange. In this case many participants ultimately meet face-to-face and engage with each other beyond the parameters of the online space. Thus, the group is not solely a place where people talk about illness, nor is it purely an online community. While the interactions in which participants engage have an impact on health care decisions and health information literacy, they also illustrate how lasting, supportive friendships can form through participation in an online forum.

18. Beth St. Jean, Doctoral Candidate

School of Information, University of Michigan

Title

A longitudinal exploration of the information behavior of people with Type 2 Diabetes

Abstract

The ways in which people diagnosed with a chronic, serious health condition look for and make use of information across time can significantly influence their experience with their health condition, their ability to make informed health-related decisions, and eventually their health outcomes. This poster introduces my dissertation research, which entails a longitudinal investigation into how people diagnosed with type 2 diabetes learn about this condition, what motivates them and what impedes them in this process, and how the ways in which they look for, evaluate, and use diabetes-related information change as their health condition and related information behavior evolve.

The research questions driving this study are:

- (1) How do people diagnosed with a chronic serious health condition construct an information seeking path in order to obtain information about their condition?
- (2) What are the factors that motivate or impede information seeking and use by people diagnosed with a chronic serious health condition and how do these factors and the nature of their influences transform across time?
- (3) How do people's information seeking and use practices change as their knowledge about, and experience with, their health condition change across time?
- (4) How do people's perceptions about the usefulness of different types of information change as their knowledge about, and their experience with, their health condition change across time?

As these research questions seek to elicit rich, multifaceted accounts of participants' experiences across time, data collection takes place within a series of two 90-minute interview sessions. Although the primary data collection method is semi-structured interview, other methods are also being implemented in order to contextualize and enhance the comprehensiveness and validity of the data. Questionnaires collect basic demographic information, as well as some quantitatively analyzable data about participants' health, feelings about their health, and health-related information behavior. Through interviews, detailed descriptions of participants' experiences with diabetes in their own words are being gathered. A series of card sorting exercises assess participants' perceptions about the usefulness of various types of information content and sources. During follow-up interviews, participants are asked to think aloud while constructing a timeline of their experience with diabetes. These timelines illuminate how participants' experiences developed over time and what participants deem to be important in this process. Preliminary data analysis reveals findings related to the following themes: The potential danger of being unaware of crucial diabetes-related information; the emergent nature of perceived relevance and comprehension; the evolving nature of people's perceptions about the relative usefulness of different types of diabetes-related information; and the crucial role of information in enabling participants to cope with diabetes.

A longitudinal design has been chosen for this study because of the lifelong nature of type 2 diabetes and the need to carefully manage it across time. This study can lead to original contributions to both practice and theory within LIS. With a better understanding of people's evolving health-related information behavior and experience, we can identify ways in which we can best support people's medical decision-making processes at various points in time.

19. Rachel Kirk

University of Tennessee, Knoxville

Title

How students are taught to write and what they are expected to read in general education courses

Abstract

Purpose: The purpose of this study is to explore the relationship between how students are taught to write in first-year English composition classes and what they are expected to read as part of the general education requirements of the undergraduate curriculum at Middle Tennessee State University (MTSU), and then to determine whether a gap exists between the two. If a gap is found to exist between the preparation of students in their English composition courses and the

ability to read and understand material that has been assigned by the teaching faculty, then these students are less likely to be considered information literate by any rubric.

Sample and Setting: In this study, examples of texts from differing disciplines were evaluated in light of their similarities and dissimilarities in composition structure and readability. The readings represented writing instruction examples used in English Composition at MTSU and assigned journal articles from the syllabi of two general education courses: American History and Introduction to Psychology. Thirty-one texts were analyzed.

Method: This study uses a mixed-methods approach where content analysis is employed to examine the assigned readings students encounter, and interviews are conducted to explore how students perceive and make sense of the academic writings assigned to undergraduates in general education classes. Specific research questions included (1) What are the overall structures of both (a) instruction composition and (b) scholarly journal articles assigned for reading in subsequent general education classes in the disciplines of psychology and history at MTSU. (2) How can these structures be best identified? (3) What are the top-level structural patterns of composition within these two academic disciplines and how do they differ? and (4) Do these differences, to the extent they exist, create contradictions in how students are taught to write in freshmen composition courses and the composition of the journal articles they are expected to read in their required general education classes?

Data Collection Techniques: Thirty-one texts taken from general education syllabi were analyzed by the author and a second coder for incidence and placement of specific structural elements such as topic sentences and signal words.

In addition, this study explored perceptions of these differences from the standpoint of college students. Interviews of twenty-two students were conducted using Dervin's Sense Making Methodology. These interviews were analyzed in terms of situations, gaps, bridges, outcomes, as well as thematic concepts that consistently arose during the interviews.

Results: Significant differences existed between readings from English Composition classes and assigned scholarly journal articles in American History and Introduction to Psychology in incidence and placement of topic sentences, use of signal words or phrases, and readability. In addition, thematic analysis of the interviews of students found that they experienced gaps between their expectations of text composition and their experience reading assigned journal articles.

20. Hea Lim Rhee

University of Pittsburgh

Title

The relationship between archival appraisal practice and the user study in U.S. state archives and records management programs: An exploratory study

Abstract

Since the 1940s, appraisal researchers have debated employing users and use as appraisal factors. As a result, there is a lack of knowledge on use analysis, appraisal methodology, and tools for collecting user and use information. Since the 1980s, many appraisal researchers and user study researchers have agreed that utilizing user studies as tools to collect user and use information for appraisal practice is feasible and valuable. However, these two researcher groups have considered the utilization of user studies strictly from their own disciplinary perspectives: conceptually and practically, respectively. As a result, no previous studies over three decades have investigated the actual utilization of user studies in appraisal practice.

The purpose of this exploratory study is to explore the current utilization of user studies in archival appraisal practice. A literature review indicated that U.S. state archives and records management programs were the most appropriate participants for this study. This study was the first on this topic, and U.S. state archives and records management programs have been little researched. Hence, three preliminary studies, from 2006 through 2008, and one pilot study, in 2009, were conducted to gain basic knowledge on this research topic and to inform this exploratory study's online survey questionnaire, interview protocols, and operational definitions.

The full study was conducted in 2010. It employed a population survey that targeted the whole population of U.S. state archives and records management programs and the archival and records management program for the District of Columbia. Qualified participants were full-time U.S. state archivists and records managers who had appraised state government records for three years. The approximately forty-minute survey was created and operated by an online survey tool, which guided respondents to different questions depending on their answers. Forty-seven (78.3%) of sixty invited participants from thirty-three (68.8%) of forty-eight non-pilot-study states participated. Follow-up in-person and telephone interviews, using one of three protocols depending on survey answers, were conducted with twenty-eight (62.2%) survey respondents from twenty-one (67.7%) states. Statistical analysis by SPSS software calculated and interpreted survey data, and NVivo 8 software incorporated narrative survey data and interview data.

The results show that most participating programs employed users and use as appraisal factors and that many of them utilized information sources other than user studies to collect user and use information. Out of thirty-four programs, two state archives and five joint state archives and records management programs had utilized user studies in their appraisal practice once in the past 36 months. These seven programs empirically showed the benefits, necessity, and implications of utilizing user studies in appraisal practice that have been conceptually claimed by previous archival researchers. Though only seven participating programs utilized user studies in appraisal, the practice shows potential for becoming more common. The utilization of user studies in appraisal practice will continue to be affected by many institutional and individual factors.

21. Sarah W. Sutton

Texas Woman's University

Title

Identifying core competencies for electronic resources librarians in the twenty-first century library

Abstract

The purpose of this three phase study was to identify competencies for electronic resources librarians based on their appearance in job ads (phase one) and to determine which competencies are taught in MLIS programs, which are taught in continuing education, and whether significant differences exist between the two educational venues in terms of which competencies for electronic resources librarians are being taught (phase two). The study concluded with a comparison of the competencies for electronic resources librarians identified in the first phase of the study with ALA's Core Competences of Librarianship (phase three). In phase one, content analysis of 190 job ads for electronic resources librarians published between January 2005 and December 2009 was conducted. These competencies were then sought in 286 online electronic resources related MLIS course syllabi and 274 continuing education course descriptions which, in both cases, were taught between January 2005 and December 2009. Chi-square tests of independence were performed to determine whether a competency that is identified as being required or preferred in job ads is independent from whether it is associated with experience, knowledge, or ability in the context of the job ads. In the second phase of the study, Mann-Whitney *U* tests were used to identify significant relationships between the frequency with which competencies were identified in MLIS course syllabi and the frequency with which competencies were identified in continuing education course descriptions. In the third phase of the study, a set of core competencies for electronic resources librarians was developed based on the results of the content analysis conducted in phase one and then compared with ALA's Core Competences of Librarianship using word clouds for comparative analysis. Results reinforce the importance of continuing education, identify competencies taught in formal coursework and in CE courses, compare and contrast all three sets of identified competencies, and emphasize the significance of technology in ER librarianship. Abbott's theory of the System of Professions (Abbott 1988) is used as a theoretical framework for further discussion of the results.

22. Yunseon Choi

University of Illinois, Urbana-Champaign

Title

Analyzing social tagging as reflection of user needs in digital information organization: Indexing consistency and quality

Abstract

As networked information on the web continues to grow rapidly, today's digital information environments have led information professionals to organize digital resources on the web. Subject gateways have been designed to provide access to quality web resources indexed by professional indexers. Such tools use traditional knowledge organization systems based on controlled vocabulary. However, controlled vocabularies have been challenged in their ability to index the range of digital web resources. Social tagging has received significant attention since it helps organize digital information by collaborative indexing based on uncontrolled user-generated tags. Many researchers have suggested that social tagging has potential for user-based

indexing. Nevertheless, further research is needed to provide in-depth investigation on tagging. This research aims to answer whether social tagging as reflection of user needs could be utilized for the organization of digital information on the web and whether we could verify the usefulness of social tagging to obtain benefit from it.

This study chose Delicious (<http://www.delicious.com>) as a social tagging site, and investigated two major subject gateways, BUBL (<http://bubl.ac.uk/>) and Intute (<http://www.intute.ac.uk/>). Tags were extracted only if a web document was found at three locations (BUBL, Intute, and Delicious). BUBL and Intute index term strings were collected for comparison. Intute controlled keywords and Delicious top ranked tags were also collected. We collected 31,330 Delicious tags in 118 web documents.

This research examined the indexing consistency of social tagging in comparison to professional indexing. It used descriptive statistics and inferential statistics to assess the pattern and quality of tagging. The data analysis is divided into three phases: analysis of indexing consistency, analysis of tag specificity, and analysis of tag attributes. Most indexing consistency studies have been conducted with a small number of professional indexers, and they tended to exclude users. Furthermore, the studies mainly have focused on physical library collections. Accordingly, this research intends to bridge these gaps by (1) extending the scope of resources to various web documents indexed by users and (2) employing the Vector Space Model (VSM) - based indexing consistency method since it is suitable for dealing with a large number of indexers. This research elucidated obstacles in the existing VSM based method, suggested by Wolfram and Olson (2007), and adapted their formula with three different similarity measures: cosine similarity, Euclidean distance metric, and dot product similarity. An analysis of tagging effectiveness with tag specificity was conducted to ameliorate the drawbacks of consistency analysis based on only the quantitative measures of vocabulary matching. Finally, the process of identifying bibliographic attributes of tags was based on the Functional Requirements for Bibliographic Records (FRBR) model.

Collecting tags was automatically carried out with a JAVA-based program. Input data was a pair of URL and tags assigned to the URL in a JSON (JavaScript Object Notation) format, which represents name/value pairs in smaller size than Extensible Markup Language (XML).

The findings revealed that in three measures, there was consistency over all subjects among taggers while there was inconsistency over all subjects between two groups of professionals. Consistency over all subjects in tagging justified the quality of tagging in web indexing. The findings on tag specificity established the power of tags as good index terms. It was uncovered that tags have essential attributes matching those defined in FRBR. This provided a helpful understanding of unique features of tags. This research is the first necessary step to utilize social tagging in digital information organization by verifying its quality and efficacy. This theoretical and empirical research developed a new model by overcoming limitations in preexisting methods. It is a pioneering study using FRBR by combining qualitative analysis of tag attributes with quantitative approaches. This led to a clearer examination of the quality of tags.

23. Ning Yu

Indiana University – Bloomington

Title

In one fell swoop: Tackling two major problems for opinion detection via semi-supervised learning

Abstract

People are curious about what others think regarding different issues, while organizations would like to know the opinions about their products and services held by target audiences. In order to capitalize on the enormous body of opinions published on the Web, researchers have been working in the area known as opinion mining since the late 90s. Opinion detection is a fundamental task of opinion mining that seeks to determine, automatically, the presence or absence of opinions in a given text. The literature on opinion detection shows that, to capture subtle and creative opinions, a large number of opinion-labeled data are preferred for the implementation and evaluation of opinion detection strategies. However, collections of opinion-labeled data are often limited, especially at sentence level; and manual annotation is tedious, expensive and error-prone. Although the shortage of opinion-labeled data is less challenging in some data domains (e.g., reviews) than in others (e.g., blog posts), borrowing opinion-labeled data from a non-target data domain usually fails because opinion detection strategies designed for one data domain generally do not perform well in another domain.

This dissertation research investigated the use of Semi-Supervised Learning (SSL) as a possible solution for overcoming both major issues in opinion detection: the shortage of labeled data and the problem of domain transfer. SSL is a group of machine learning algorithms that can generate labeled data by learning both labeled and unlabeled data. While a limited number of studies have suggested that simple SSL methods are promising for extracting opinion features, this research went a step further and applied SSL methods directly to opinion detection. Four SSL algorithms based on different assumptions were examined: self-training, co-training, Expectation Maximization with Naïve Bayes (EM-NB) and Semi-Supervised Support Vector Machines (S3VM). These algorithms were applied to three datasets from domains with different characteristics: movie reviews, news articles and blog posts. Each dataset contained approximately 10,000 opinion and non-opinion sentences. For each dataset, 5% of the data were reserved as an evaluation set; 90% were treated as unlabeled data; and $i\%$ ($i = 1, 2, 3, 4$ or 5) were used as labeled data. Each SSL run was compared with a baseline Supervised Learning (SL) run using the same number of labeled sentences ($i\%$) and a fully SL run using all available sentences ($90\% + i\%$). SSL runs significantly outperformed corresponding baseline SL runs and approached the performance of fully SL runs. A similar trend was observed in SSL runs that used labeled data in non-target dataset, indicating that SSL can be a valuable approach to resolve the domain transfer problem.

Opinion detection is a growing research area with many potential applications (e.g., personalized search, metadata labeling, business intelligence). This research demonstrates a general approach that can be adapted in existing opinion detection or sentiment analysis system; it extends understanding of the problem space of opinion detection; and it provides evaluation baselines for later studies that apply SSL algorithms in opinion detection.

Title

Intention to buy/sell online: a model depicting the role of individual, technological, and informational factors along with the moderating function of cultural traits

Abstract

Introduction

Buying and selling of goods and services on the Web is described as online buying and selling. Currently, online buying and selling represents an important use of the Web. This use is permeating across the globe and creating new opportunities for buyers and sellers. The use of the Web for buying and selling has been a focus of many research studies. These studies have examined the actual or the intended use of the Web for buying and selling. Intended use of the Web is easier to assess and also provides good approximation of actual behavior. Intended use can be assessed using behavioral intention, which denotes the willingness of an individual to perform an action. In view of close association between intention and behavior, understanding and identifying the factors that influence intention is important. This exploration can be more fruitful if the context surrounding an intention is also given consideration. To address this demand, various studies identified the contextual factors that influence the intention to buy and sell online. Despite a plethora of studies on online buying and selling, the research on it remained fragmented. Furthermore, researchers in these studies conceptualized culture at the national level and argued that this national-level culture will influence the individual intention—an argument that led to lack of theoretical connection between culture and individual behavior.

Purpose of Study

The current study has addressed the preceding gaps by (a) proposing models (one each for online buying and online selling) which postulated that intention to buy and sell online will be influenced by individual, technological, and informational factors, and (b) suggesting that the individual cultural values will moderate the influence of the preceding factors on the intention to buy and sell online.

Sample and Setting

Data was collected using student participants at a midwestern university. A survey was distributed during class sessions.

Method

The research objective of this study was addressed through quantitative approach of Structural-Equation-Modeling.

Results

The analysis of the data has supported some of the proposed relationships. For instance, it was found that perceived usefulness, perceived ease of use, and personal innovativeness positively influence the intention to buy and sell online. Information privacy-security was found to be negatively influencing the intention in online selling; though, this influence was not significant in online buying. Regarding cultural influences, it was found that cultural values of uncertainty

avoidance (risk aversion), masculinity (need for achievement), and collectivism moderate the relationship between personal innovativeness, perceived ease of use, perceived usefulness, information privacy-security and the intention to buy and sell online. However, this influence was found to be of different magnitude and significance in online buying and online selling. The approach and findings of this study carry significance for Library & Information Science (LIS) and Information Systems (IS). By examining user behavior and intermediary (Web), this study has contributed to our understanding of user-intermediary-bibliographic records interaction—an interaction that is at the core of LIS. This study has also addressed the call for more focused research on online buying and selling, and provided a theoretical link between individual-level cultural values and intention.

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Title

Functional units for information use of scholarly journal articles

Abstract

This dissertation research aims to enhance reading effectiveness and efficiency by presenting the readers with the text in the article that is most relevant to an information task, rather than presenting the article in its entirety. This research applies the idea of the functional unit to the information use of scholarly journal articles. A functional unit is defined here as the smallest information unit with a distinct function within four major components of scholarly journal articles — Introduction, Methods, Results and Discussion. The concept of functional unit is based on Swales' CARS (Create a Research Space) model, while the way that functional units are connected is based on Sperber & Wilson's Relevance-theoretic Comprehension Procedure.

Firstly, through a review and analysis of the literature and validation through user surveys, I identified 41 functional units within four components and their relationships with 5 information use tasks, and furthermore the relationships among a set of functional units for a particular task. The functional units were classified into three categories (primary, related, additional) according to how relevant they were for each task. Based on this taxonomy, I designed and implemented a prototype journal reading environment. It incorporates a functional unit indicator to inform the reader of the function of each paragraph, and a functional unit selector to highlight functional units that are most likely to be relevant for particular tasks.

Thirty psychology undergraduate students participated in the experimental user study, which was carried out in an office at a research university from January to March 2010. Each participant was required to complete five reading tasks within 90 minutes. For each task, the participant read a psychology journal article presented in one of two interfaces, either with or without incorporating functional units, and then answered a comprehension question by highlighting the relevant pieces of text and writing a short summary. Data were collected by usability logging software Morae. I used content analysis for qualitative data collected from retrospective interview, questionnaire open questions, and screen captures, and statistical analysis for

quantitative data collected from 7-point scales, logging of time and highlights. The answer correctness was assessed first by content analysis and then by statistical analysis.

Participants using the prototype interface were significantly more satisfied with the information obtained, highlighted more relevant text, and more correctly answered the comprehension question. The use of functional units was effective in enabling people to focus on the specific information and connect pieces of relevant information across the article, but not necessarily move from the more relevant to less relevant information. Participants using the prototype interface also significantly felt more efficient in obtaining the information. The use of functional units was efficient in enabling people to narrow down their reading by simply following the system suggestions, or by selecting the information suggested by the system. The signaling of functional units showed more effective and efficient for the tasks requiring use of information scattered across the article.

The experimental results prove that an individual functional unit has varying relevance to information use tasks, and has varying relevance to other functional units in the same or another component for a particular task. The functional units can be identified, implemented and utilized to benefit the readers in the use of scholarly journal articles.