

**ALISE 2012 Doctoral Poster Session Abstracts**  
(In alphabetical order by last name --  
including poster number and classification number)

## **Danielle Allard (18 – Classification 52)**

University of Toronto

### **Title**

Living “here” and “there: Exploring the transnational information practices of newcomers from the Philippines to Winnipeg, Canada

### **Abstract**

This study investigates the role that transnational information practices play in the “everyday life information seeking” of immigrants from the Philippines who have recently immigrated to Winnipeg, Canada. I consider how Filipino newcomers navigate global (and local) social networks, information providing institutions, and other relevant web based and print resources at the points of departure from the Philippines and reception into Canada in order to find information to settle and live in Canada.

Everyday life information seeking (ELIS) suggests that individuals require and seek information in complex ways from a variety of sources in order to manage their daily lives [2]. My research begins from the premise that the ELIS of newcomers must be examined through a transnational lens, which takes as its starting point that immigrants live their lives simultaneously “here” and “there” [1]. Immigration is a process of “ties and connections” whereby many immigrants will maintain sustained ties and ongoing communication with their home country while developing a new life in a new country. This has significant implications for the information practices of immigrants in terms of the sources (human, institutional, and other) they consult, as well as how they imagine and navigate their information environments.

Previous research on information practices has tended to focus on how individuals typically find information in relatively static contexts. During immigration however, newcomers must operate in an unknown “alien information environment” [1]. Applying a transnational lens therefore, requires three conceptual shifts to the investigation of information practices.

1. A shift in our understanding of “practice” – I explore how newcomers navigate both known and unknown environments, potentially relying on both old and habitual practices and sources as well as developing new strategies to address information requirements during the migration process.
2. An emphasis on time/space – I explore how newcomers’ practices shift during the immigration process and within different locations.
3. An emphasis on social networks – Because social networks are the glue of transnational practices and a critical information resource for most human beings, I explore how newcomers make use of both global and local network ties in their information practices.

A method that draws out the priorities brought into focus through the application of a transnational lens has been instituted. In-depth interviews are being conducted with a small sample of Filipinos newcomers who have arrived to Winnipeg within the last 5 years. Interviews include: 1) eliciting a migration timeline; 2) eliciting examples of critical incidents of information seeking; 3) collecting data about information resources including basic social network data, and; 4) respondents are asked to “map” their information source preferences and routes on an information horizon map [3].

Early findings suggest that transnational information practices are a critical component of how newcomers find information immediately before and after migration. While planning migration, potential immigrants rely on other immigrants already arrived to Winnipeg for information about how to migrate, employment referrals, local information, and perhaps most importantly, assurance and support. Once arrived, newcomers use social media, Filipino media, and communicate with their social networks in the Philippines for daily “mundane” information and support. Previous research in the fields of immigration and information studies has not acknowledged the crucial role that such mundane and routine (information) exchanges plays in the adjustment of newcomers to their new environments.

## REFERENCES

- [1] Mehra, B., and Papajohn, D. 2007. ‘Glocal’ patterns of communication-information convergences in internet use: cross cultural behaviour of international teaching assistants in a culturally alien information environment. *International Information & Library Review*, 39,1, 12–30.
- [2] Savolainen, R. 1995. Everyday life information seeking: approaching information seeking in the context of “way of life.” *Library & Information Science Research*, 17,3, 259–294
- [3] Sonnenwald, D. H., and Wildemuth, B. M. 2001. A research method to investigate information seeking using the concept of information horizons: an example from a study of lower socio-economic student’s information seeking behaviour. *New Review of Information Behaviour Research*, 2, 65–86.
- [4] Smith, M.P. 2001. *Transnational urbanism: locating globalization*. Blackwell Publishers, Malden, MA.

## Christine M. Angel (31 - Classification 58)

University of South Carolina

**Title** An assessment of inter-indexing consistency among library, archive and museum professionals

### Abstract

The goal of all information professionals is to find ways to share their useful, meaningful, descriptive metadata via the World Wide Web. However, with current indexing practices the language used when describing information objects is often highly specialized, rendering resources inaccessible among the various information professionals and their respective institutions (Trant, 2009).

According to Taylor and Joudrey (2009), identifying the subject matter of information objects “...has been one of the most challenging aspects of organizing information. Even with the most traditional information resources, determining and identifying what an item is about can be difficult and time consuming” (p. 303). Indexing activities via descriptive metadata within the online environment could enable library, archive, and museum professionals to describe and share their information objects if the three groups had substantial agreement in the application of descriptive metadata.

However, the main problem is that many information professionals “...have only had instruction in the application of various controlled vocabularies and not in the process of determining

aboutness” (Taylor & Joudrey, 2009, p.304). This has led to confusion among information professionals when populating descriptive metadata elements “...that deal with what an object is... what it depicts or [what it] means” (Marty, 2009, p. 109). As such, the quality of information representation has suffered because information representation has not been adequately done. This is because “[t]hose who lack an understanding of the multiple components and approaches to determining aboutness may not identify key concepts and consequently may omit useful controlled vocabulary terms when describing an item” (Taylor & Joudrey, 2009, p. 304).

Thus, the question this study considers in depth is: What are the similarities and differences in the descriptive metadata practices of library, archive, and museum information professionals when tagging the same sample of digital objects?

“Retrieval performance suffers when information representation is not properly done” (Chu, 2010, p. 51). The lack of training in the application of descriptive metadata practices in the representation of digital information objects has had a negative impact on information retrieval. This is partially evident when one considers the current standards and practices that each has evolved for assigning descriptive metadata to digital objects. The purpose of this study is to empirically assess the similarities and differences among library, archive, and museum professionals when assigning terms to represent the *aboutness* of an object and the relationships between those assigned terms. More specifically, the first purpose of this study is to determine the extent of the similarities and differences among library, archive, and museum professionals when assigning descriptive metadata to a wide variety of objects that may be found in any one or all three types of institutions.

These variations were determined via measures of inter-indexer terminological consistency to compare frequencies in descriptive tagging outcomes. The second purpose of this study was to determine the frequency of co-occurrence of term-use applied to the description of digital objects by three different groups of information professionals to determine the extent of agreement or disagreement on the pairing of terms used among these information professionals.

## **Matthew Bouchard (37 – Classification 67)**

University of Toronto, Faculty of Information

### **Title**

Bad menus in good games: exploring interaction design in sports simulations

### **Abstract**

My poster will critically examine the design of in-game menus in sports simulations, and I will begin to explore the ways popular games often ignore basic interaction principles to the detriment of player enjoyment. This problem can be best explained with a detailed example.

NHL 12 (Electronic Arts) was released on September 13, 2011, and at the time of this writing (three weeks later), it has already sold more than a quarter of a million copies. To contextualize that information, NHL 12 has ranked in the top 20 in worldwide sales every week since it was released. When arranging team rosters in NHL 12, the game player (or user to avoid confusion with the virtual hockey players represented in the game) is provided with a simple table of information containing (hockey) player names,

their positions, and a two-digit number representing their overall hockey ability. From an information perspective, the user is missing critical information on these hockey players including their age, the value of their contracts, and more specific information like skating speed (for building a fast team) and toughness (for building a rough team). Further, the interface provides columns of information, but they are not sortable. By default, these columns are sorted alphabetically by last name which is not helpful if the users is looking for all players with an above 80 rating or a player whose last name starts with the letter “z”.

For this poster, I will outline similar interaction design failures from various current sports simulations such as NHL 2k11, Madden NFL 12, FIFA 12, Pro Evolution Soccer 2012, and others. The poster will illustrate some of the worst examples of information and interaction design. At this stage of the project, I will make suggestions as to the reasons that basic principles of design have been ignored, and I look forward to feedback from my colleagues on my methods and future explorations.

**Amber L. Cushing (46 – Classification 91)**

University of North Carolina-Chapel Hill

**Title**

Possession and self extension in digital environments: Implications for maintaining personal information

**Abstract**

In a world of cheap digital storage, individuals can easily *accumulate* vast amounts of digital items, but *maintaining* those digital items requires more time and effort. Research has shown that individuals rarely need or want to maintain every digital item they create, save, and /or download. Currently, there is little guidance about how to go about maintaining personal digital items for our lives and beyond, or our digital legacy. My dissertation study explores individuals’ maintaining behavior of personal information that they desire to maintain for a digital legacy, at different ages of their lives. I applied the psychological concept of possession and self extension to possessions, to the digital environment in order to understand how individuals conceive of and define digital possessions.

Related to the concept of possession, self extension to possessions dictates that individual possessions can reinforce one’s identity and can serve as a vehicle to extend and display his identity to others (Sivadas & Machleit, 1994). In studies of physical possessions, possessions to which the self has extended hold more meaning for the individual. I aimed to discover if a similar situation exists with digital possessions.

Twenty three subjects were interviewed about their opinion and understanding of their digital possessions and 48 subjects conducted three Q sorts related to the desire to maintain 1) digital possessions that reflect their identity back to themselves, 2) the desire to maintain digital possessions that display their identity to others, and 3) the desire to maintain digital possessions for a digital legacy.

Invented by William Stephenson in 1932, Q method is the study of human subjectivity and thus, allows for the study of individuals’ points of view (McKeown & Thomas, 1988). Q method allows one to understand how individual points of view cluster, which can allow for the

emergence of patterns of subjective behavior. As a quantitative method, Q method also allows one to obtain information from many individuals, while using qualitative methods to obtain information from the same amount of individuals would be much more time consuming. While individuals accumulate many digital items in their digital space, not all digital items qualify as digital possessions. Four main characteristics of a digital possession emerged from the interview data:

1. Digital possessions provide evidence.
2. Digital possessions represent the individual's identity to others.
3. Digital possessions have value.
4. Individuals perceive a sense of bounded control over their digital possessions.

While the concept that digital possessions can provide evidence, can represent the individual to others, and have value is not new, the concept that individuals perceive a sense of bounded control over their digital possessions relates to Furby's (1978) work, but also contributes to an understanding of how individuals manage personal information in an online environment. Subjects understood that they did not have complete control over their personal information online, especially when Facebook was considered. However, interview data suggests that individuals do not specifically think of Facebook as a digital possession, but rather the digital *items* in Facebook were the digital possessions because the individuals were able to exert control over these possessions by allowing who to share them with, moving them around, and adding contextual information to them. Therefore, when considering digital possessions, Facebook is like a digital storage locker that houses the digital possessions.

Several key characteristics emerged from the Q method data. Sort topics 1 and 2 mapped to self extension to digital possessions and sort topic 3 mapped to the desire to maintain a digital possession for a digital legacy. The key characteristics between these sort topics were compared, in order to determine if the same characteristics that defined self extension to digital possessions also defined the desire to maintain digital possessions for a digital legacy.

Use, utility, and remembering were all key characteristics of self extension to digital possessions (sort 1 & 2) and maintaining for a digital legacy (sort 3). Use is a descriptive term. During the interviews (that lead to the creation of the statements that were sorted in the Q sort), subjects described a digital possession as useful or that they used the digital possession often. In contrast, utility refers to the use of a digital possession to accomplish a goal or a task. Remembering refers to the ability of a digital possession to trigger remembering for an individual.

Time=identity and attachment were key characteristics of maintaining for a digital legacy only. An exploration of these characteristics can shed new light motivations for maintaining personal digital information. Subjects expressed the characteristic of time=identity when referring to digital possessions that represented a time commitment and/or digital possessions with which the subject had spent a significant amount of time. The statements representing this characteristic were ranked highly in many of the factors revealed by Q factor analysis.

Attachment, or possession attachment, can be considered an extreme form of self extension to possessions. According to Kleine and Baker (2004), possession attachment is defined as self extension to a possession as well as a personal history with the possessions and an emotional connection to the possession. Attachment to digital possessions has yet to be thoroughly explored, but could more strongly correlate with the characteristics of digital possessions that individual would most like to maintain for a digital legacy.

#### • **References**

Furby, L. (1978). Possession in humans: an exploratory study of its meaning and motivation. *Social Behavior and Personality*, 6(1), 49-65.

Kleine, S. S., & Baker, S. M. (2004). An integrative review of material possession attachment. *Academy of Marketing Science Review*, 1.

McKeown, B., & Thomas, D. (1988). *Q Methodology*. Quantitative Applications in the Social Sciences. Newbury Park: Sage.

Sivadas, E., & Machleit, K. (1994). A scale to determine the extent of object incorporation in the extended self. *Marketing Theory and Applications* (Vol. 5, pp. 143-149). Presented at the 1994 American Marketing Association Winter Educator's Conference, St. Petersburg, FL: American Marketing Association.

### **Christine D'Arpa (44 – Classification 84)**

University of Illinois at Urbana-Champaign

#### **Title**

“To acquire and diffuse among the people”: Information service functions at the U.S. Department of Agriculture in the late 19<sup>th</sup> century

#### **Abstract**

Prior to the establishment of the U.S. Department of Agriculture and concurrent with the agency's development, American farmers had myriad ways of sharing and communicating agricultural information. Much was anecdotal and based on years of experience. It was passed informally and in a lively and far-reaching agricultural press. Farmers both needed and used the information they created, circulated, and consumed.

The Department of Agriculture altered the kind and amount of information farmers had access to and effectively redefined who the “experts” were. Established in 1862 during the Civil War, it was the first executive agency created in a period in which the federal government began to assert a more expansive role. It was, perhaps more than any other federal agency, a place where we see evidence of the emergence of a modern state and the exercise of a central state authority. In the late 19<sup>th</sup> century, the Department was a prodigious collector, producer and distributor of information that served complicated and complex purposes. Research and new knowledge from it focused on applied science and were intended to bolster an emerging market economy by offering farmers information on new practices, new seeds and plants, and tools that promised increased crop yields and improved the efficiency of farm production. The accuracy of that information served to assert and reinforce the authority of the federal government and its role as a source of information critical to agricultural production in a growing market economy.

The mission and work of the Department and its relationship to farmers, as well as the Land-Grant colleges, agricultural extension, and education is clearly grounded in an environment that secures and asserts power via the collection, production, and, finally the dissemination of information through its publications and particularly the annual reports. Required by Congress, these reports served as the primary vehicle for disseminating scientific knowledge about farming. The reports were long – 600- 800 pages and included diverse voices. Farmers regularly submitted information about crop yields, market prices, and soil conditions. They also wrote to request seeds and advice on new and better practices emerging from research at the Department. Each report was richly illustrated with lithographs, photographs, and maps, tables, and graphs to complement the text. With print runs that reached more than 400,000 volumes and distribution by Congressional frank, the reports of the Department suggest that no organization in the 19<sup>th</sup> century reached more individuals in every state.

## **Diane Yvonne Dechief (2 – Classification 8)**

University of Toronto

### **Title**

Naming powers: What contemporary migrants' name changes indicate about cultural pluralism in Canada

### **Abstract**

Personal name changes are common throughout North America's immigration history but their persistence in Canada, with the decades old Multiculturalism Act and current discussions of cultural pluralism, is noteworthy. Based on interviews with people who have migrated to Canada as well as second generation Canadians, and the statistical analysis of formal name changes made in Ontario between 1990 and 2010, this poster describes the significance of the *types* of changes being made to personal names.

Critical discourse analysis provides a lens to investigate the discourses and social practices that lead to name changes as they (re)produce and challenge dominance (van Dijk 1993: 249). During interviews, 23 participants describe the name-related challenges and discrimination they experience in everyday situations at schools and workplaces, and during bureaucratic processes such as applying for permanent resident cards, drivers' licenses and social insurance cards. In these sites, dominance is "enacted and reproduced by subtle, routine, everyday forms of text and talk that appear 'natural' and quite 'acceptable'" (van Dijk 1993:254). Quantitatively, the study finds that in Ontario, immigration-related name changes remain common. Partly because marriage-related name changes are in decline, shifts to names due to settlement, even by second-generation Canadians, have become the larger portion of formal name changes since the mid-1990s. In particular, the addition of an "English name" to Chinese or Vietnamese-named residents of Ontario has increased from 1% of all name changes in 1990 to 10% of all name changes made in 2009.

Although immigration-related name changes remain common in Ontario and the sites of name challenges are similar to those that took place during earlier periods of immigration to Canada, the qualitative particularities of name changes differ: current name changes tend to be subtle Anglicizations to ease pronunciation, and seldom do they result in a name being read as from another ethnicity. This is because people who have immigrated to Canada tend to be at least as concerned with how people who share their native language and culture use their name, as they are of other members of Canadian society. Significantly, this may be taken as an indicator of increased cultural pluralism.

Anglophone Canadians have become just one of multiple audiences that are considered during a name change. Other audiences include family, friends, colleagues (in Canada or in other countries), members of the same diaspora, other members of Canadian society, provincial and federal institutions, and other countries' institutions. The use of personal names by these multiple communities is theorized in terms of Star and Greisemer's "boundary object" (1989), with attention paid to the motivations of name-bearers and their communities as they choose and make use of particular personal names. While some of the study's participants use different versions or portions of their names with each of their audiences, others maintain a single name for use by all audiences.

Taken together, this study's findings indicate that the trends in contemporary name changes for newer residents of English Canada indicate a desire for efficiency *and* recognition, not assimilation.

**Kathleen De Long (43 – Classification 76)**

Simmons College

**Title**

Journeys in leadership: Women library directors in Canadian academic libraries

**Abstract**

Purpose/Objective of Study:

Women library leaders are fairly common at the beginning of the 21st century but this has not always been the case. Today there is a generation of Canadian women administrators who came up through the ranks of libraries that were overwhelmingly led by male librarians and who may have been perceived as less desirable than their male colleagues for promotion into leadership positions. Nonetheless, these women were able to attain leadership roles and account in some part for the reversal in numbers of males and females in leadership and administrative positions. This senior cohort of women is also likely to retire within the next five to ten years. Many lessons in leadership can likely be learnt from the current generation of women leaders. As women have made the decision to become library leaders, they will have had individual experiences of developing themselves in the role. At the same time it is possible that there are common experiences that have influenced the professional development of women in senior library positions. No studies have examined the professional lives of current women library directors to determine how their expectations, perspectives and experiences shaped their development as leaders. The purpose of this study is to uncover and describe the professional lives of women in leadership positions in Canadian research/academic libraries. When and why did they make the decision to apply for positions as managers or directors of libraries or to take a leadership role? What is their definition of leadership and has it changed over time? Are there stories, conversations, interviews or critical incidents in their development as leaders that have been documented or that they can identify? Who or what influenced them and their career progression?

Sample and Setting:

The study population is composed of four women CARL (Canadian Association of Research Libraries) Directors who graduated from library school in the 1960's and 1970s and have at least five years experience in the Director role.

Method and Data Collection:

Data was collected using a highly qualitative narrative inquiry research methodology. This involved semi-structured, in-depth, interviews with study participants in order to determine 'critical incidents' in their development as leaders. Data was analyzed using a holistic-content perspective.

Results and Relevance:

Findings focus on early experiences, mid-career events, decisions and relationships, and development of authentic leadership capability in the four women library directors. Critical incidents have been identified and re-storyed. These critical incidents are usually change experiences that could not be predicted and that served to affect study participants' development

as leaders and change their definition of leadership over time. The study will be of interest to those who seek to understand the role of women in librarianship and how their leadership has influenced the development of libraries and of the profession.

**Loretta M. Gaffney (7 – Classification 14)**

University of Illinois

**Title**

Intellectual freedom and the politics of reading: Conflicts between conservative activist and librarian views of youth, literature, and libraries

**Abstract**

Purpose/Objective of Study:

This study explains why libraries became a major battlefield in the culture wars of the 1990s and 2000s. It places challenges to library materials and policies within the context of the larger “pro-family” movement, and illustrates the symbiotic relationship between grassroots campaigns and national organizations. It identifies areas of conflict and overlap between conservative activists and librarians in library controversies, including how and why children read, the meaning of diversity, and the importance of information access. It also critically examines how librarians’ professional literature has advised practitioners to respond to conservative activist challenges, assessing which strategies and policies best serve librarians dealing with pressure groups.

Sample and Setting:

Data sources include conservative activist periodicals, handbooks, videos, online publications, and other resources published during the height of “pro family” library activism (1989-2008). Some of the organizations identified include Family Friendly Libraries, Parents Against Bad Books in Schools, Focus on the Family, and the American Family Association. Sources were selected based on whether they were directed at activists or potential activists, and by identifying organizations that have targeted youth reading and/or libraries as political issues. They were also selected to represent a range of different kinds of organizations, including local and national organizations, and varied foci for activism (gay and lesbian children’s and YA books, parental/taxpayer rights, and mandating Internet filters in libraries). Other data sources include handbooks and manuals written for librarians dealing with library challenges.

Method (Qualitative, quantitative, historical, etc):

This study employs discourse analysis to understand how conservative activists and librarians frame youth, literature, and libraries through the narratives, metaphors, images, analogies, and other literary/rhetorical devices they use in their arguments about library materials and policy. Discourse analysis situates and contextualizes pro family and librarian writings within larger cultural conflicts over reading and information.

Data Collection Technique(s) (Interviews, questionnaires, focus groups, etc.) :

Data was collected through archival research, using the State Historical Society of Wisconsin’s Social Movements collection, and by acquiring each organization’s relevant print and online publications.

Results :

Handbooks advise librarians to respond to materials challenges with appeals to diversity, access, and tolerance for multiple viewpoints. However, contemporary challenges to library materials often target these ethics themselves, politicizing library policy in an effort to advance a different worldview about youth, reading, and information. While the two camps overlap in their belief in reading’s transformative powers, and the need for libraries to serve their communities, they

diverge in their assessment of those powers and in how they understand community. Pro family activists' views of libraries and their role presume a homogeneous community, a conventional collection, and a narrowly defined service role for the librarian. They contest "access" as always potentially pornographic, and argue that diversity and tolerance are liberal strategies to push political agendas. Thus, the root quarrel between conservative activists and the library profession is not about whether or not certain materials belong in libraries, but about the purpose of the library and who shall have the right to determine it.

**Amelia N. Gibson (19 – Classification 52)**

Florida State University

**Title**

Community, place, and information behavior: A case study of parents of children with Down Syndrome and government-sponsored information and services

**Abstract**

There exists a dichotomy between recent information theory and practice regarding geography and physical, place-based communities. While a good part of daily face-to-face life is organized by locality (Bauman, 1998), there is, within LIS, only a tenuous theoretical connection between place and information behavior. This study seeks to examine whether a case can be made for strengthening that connection. The purpose of this grounded theory study is to better visualize the community of resources and information (particularly those funded by local, state and federal governments) available to parents of people with Down Syndrome within two place-based communities within the state of Florida, to understand the underlying social and geographical structures of the study communities, and to determine whether those structures influence information access and/or behaviors of community members. Additionally the researcher will seek to use data to determine whether (and how) those information sources/services can be made more accessible to parents/information providers. Theoretically, the study seeks to explore possible intersections between theories of place and place-based community (in LIS and Human Geography) and information behavior, access and practice.

This multi-method study involves a combination of interview, public participation mapping, social network visualization and questionnaire. A purposive sample of 30 parent participants and 10-15 service and information providers have been selected from two communities in Florida – one in urban South Florida, and one in rural North Florida. Parent participants answer interview questions about information practices related to information seeking on behalf of their children (including adult children) who happen to have Down Syndrome, including information about birth, health-related issues, education and development, financial assistance, and others as indicated by data. Providers have been interviewed regarding practices providing information and/or services to families of people with Down Syndrome, about resources available within the local community and methods of conveying information to parents. Parent participants also complete demographic surveys, and assist in the creation of community and social network maps. A grounded theory approach is being taken toward interview data analysis.

This study is based on three major assumptions, and a number of minor assumptions. The first assumption is that people seek information everyday, and wherever they are (Burnett, 2000; Pettigrew, 1999; Savolainen, 1995). The second assumption is that people organize themselves with like others in places (Nation, Fortney & Wandersman, 2010; Smith, 1999; Sunstein, 2006). The third main assumption is that place affects how people interact with information (Taylor,

2001). These three basic assumptions provide the basis for the idea that there are situations in which place and information behavior are connected.

For the study populations/communities, this study presents a possible improvement in information access. For the LIS community, a strong theoretical connection between place and information behavior provides a foundation for discussing information behaviors within and of communities, and a theoretical language for discussing inconsistencies in information access (whether inequalities or inequities) that are currently associated with types of places.

**Peter A. Hook (38 – Classification 67)**

Indiana University

### **Title**

The quest for the structure of law: Domain maps from 30,000 course-coupling events and a history of an academic discipline (1931-1973)

### **Abstract**

The structure of the academic discipline of law in the United States has never been empirically determined and mapped spatially. While it has been described in essays (Kennedy, 1983) and other writings on the history of law school education (Stevens, 1983), it has never been revealed through the exploration of large datasets and determined through replicable, objective means. This work determines the similarity of legal course subjects in terms of their topical relatedness and employs multi-dimensional scaling (MDS) to distribute those course subjects in a two-dimensional mapping so that they may be quickly perceived by the viewer using the distance-similarity metaphor.

This work seeks to answer the question of whether spatial distributions of course subjects based on course-coupling networks reveal the structure of law from an academic perspective. Course-coupling is defined as the same professor teaching multiple, different courses over some period of time. In this instance, the period of time is one academic year as captured in the annual directories of the American Association of Law Schools (AALS) (AALS, 2010). The explanatory power of course-coupling networks is premised on the assumption that in the aggregate, law professors teach courses that are conceptually and topically similar to one another. The use of course-coupling networks to make structural claims about a domain is supported by the numerous uses of co-occurrence data that have been used to create domain maps (Doyle, 1962; Marshakova, 1973; Schubert, 1962; Small, 1973; Thurstone & Degan, 1951).

Utilizing a relational database, this work harvested and organized data about courses taught and the school affiliation of the faculty members that taught them from the annual directories of the AALS. Spatialization techniques (MDS) were used to create domain maps from five different sampled academic years of course-coupling networks (1931-32; 1941-42; 1949-50; 1961-62; and 1972-73). The map created from the most recent academic year (1972-73) constituted the base-map and was used to visually assess changes in the adjacencies of course topics as compared to the earlier academic years.

Domain maps should be validated (Börner, 2010, pp. 50-51) in order to verify their structural accuracy. Validation has traditionally occurred in one of two ways: (1) examination by experts in the domain, and (2) consistency with extrinsic (from outside the data or technique) sources of structure of the domain (McCain, 1985). For this work, validation techniques included a card-

sort of the most recent 104 ‘controlled’ AALS course subjects by eighteen legal education experts, interviews with those same legal experts about the accuracy of the relationships portrayed in the domain maps, and comparisons to external indicia of topical relatedness. These external sources of topical relatedness include commentators’ writings about the structure of the law school curriculum, groupings of law school courses by legal commentators and the *Current Index to Legal Periodicals*, and the syndetic structure (‘see also’ statements) contained in the AALS list of course subjects.

**Keisuke Inoue (14 – Classification 38)**

Syracuse University

**Title**

An investigation of digital reference interviews: Dialogue act annotation with the Hidden Markov Support Vector Machine

**Abstract**

The rapid increase of computer-mediated communications (CMCs) in various forms such as micro-blogging (e.g. Twitter), online chatting (e.g. digital reference) and community-based question-answering services (e.g. Yahoo! QA) characterizes a recent trend in web technologies, often referred to as the social web. These trends showcase the importance of supporting linguistic interactions in people’s information-seeking process in daily life – something that the web search engines still lack of, because of the complexity of the human behavior. The poster will present my dissertation research, which investigates linguistic properties of informationseeking.

CMCs and examines the possibility of automatic identification of the properties.

The study consists of two stages: 1) discourse analysis, wherein human annotators analyze linguistic properties of digital reference transcripts and 2) machine-learning experiments, wherein different algorithms and attributes (parameters) are examined for automatic annotation of the dialogue acts. The discourse analysis will identify communicative functions and domains of information exchanges, as well as socio-emotional functions that appear in the informationseeking communication, based on a discourse analysis framework called dialogue acts. The machine-learning experiments will attempt to identify appropriate algorithms and attributes for learning dialogue acts of digital reference interviews.

The outcomes of the study will contribute to three streams of research: 1) theories of information-seeking behavior, 2) development of information retrieval systems, and 3) advancement of digital libraries. First, the study will provide an enhanced understanding of human information-seeking behavior, by refining the existing models and theories of information-seeking behavior, and thus contribute to the field. Second, the study will build a foundation for applications of the linguistic constructs to information technology development. I believe further development will enable information retrieval systems that incorporate interactive user interfaces and/or contain archives of CMCs in the document collection. And lastly, libraries have been the place for information-seeking conversations throughout their history. The study will contribute not only to the evaluation and improvement of the current digital reference services, but also to the rethinking of the role of libraries involving the new social phenomena and advances of web technologies, by bringing constructs and methodologies from different disciplines and analyzing human behavior through digital reference services.

Currently, the study is at the end of the first stage, discourse analysis. Three students from the Master of Library and Information Science program, Syracuse University, collectively annotated over 200 digital reference transcripts. The data was provided by the OCLC. The results were evaluated with standard statistical measures, and the study is moving onto the machine learning experiments. The author aims to finish the machine learning experiments in the fall 2011 semester and present the results at the ALISE Doctoral Student Research Poster Competition.

## **Tina Inzerilla (11 – Classification 16)**

### **Title**

Academic faculty's teaching social networks: How can library faculty's role be more integral?

### **Abstract**

Collaboration between academic and library faculty is an important topic of discussion and research among academic librarians. These partnerships between academic and library faculty are vital for enabling students to become lifelong learners through their information literacy education. This research will develop an understanding of academic collaborators by analyzing the teaching social networks of academic faculty. A teaching social network is comprised of people and their channels of communication that affect academic faculty when they design and deliver their courses. Academic faculty will be interviewed to gain insight into how library faculty can become an integral part of their teaching social networks. This research asks 'What is the nature of the teaching social networks of academic faculty?' This study would supplement the existing research on collaboration and information literacy. It provides both academic and library faculty with added insights into their relationships.

This research was undertaken using mixed methods. Social network analysis was the quantitative data collection method and interview method was the qualitative technique. For the social network analysis data, a survey was sent to full-time academic faculty at Las Positas College, a community college, in California. The survey gathered the data to describe the teaching social networks for academic faculty. Semi-structured interviews were conducted following the survey with a sub-set of survey respondents to understand why the channels of communication were included in their teaching social network and to learn of ways for library faculty to become an integral part of the teaching social network.

Initial findings from the survey indicated the channels of communication including people, groups, scholarly communications, and professional development) affected academic faculty more in their teaching method than in their content taught. Input from students and professional development (workshops, conferences, and webinars) affected academic faculty the most in how they designed and delivered their courses. The preliminary findings of the main study interviews showed multiple roles for the channels of communication as they influenced academic faculty in their teaching method. Some of the roles were exchanging ideas, collaborating, and suggesting techniques for teaching. Motivating factors for collaboration were better explanations of how to do research were provided by library faculty and students produced better research projects. Challenges of collaboration illustrated poor teaching techniques by library faculty may lead to exclusion of them from academic faculty's teaching social networks. Evidence suggested ways of making library faculty a more integral part of academic faculty's teaching social networks. Some of the suggestions were library faculty should communicate proactively with academic faculty about teaching, market themselves as consultants, and provide more workshops on how

to use the library resources. Academic and library faculty in higher education may discover practical applications of the findings.

**Ji-Hyun Kim (20 – Classification 52)**

Florida State University

**Title**

Cross-cultural differences in the perception and recall of information

**Abstract**

Information in general is congruent with the values of culture because a culture consists of transmitted social knowledge. Data are collected, organized, and communicated within a cultural context. Cross-cultural research demonstrates that audience who were fostered by different cultures may have different understandings of information. This study focuses on the internal cognition of individual users in a cultural context even though most research in information behavior has concentrated on the external behavior of people and the interactions with an information system. By using a theory-based dimension already identified in previous cross-cultural research, this study captures meaningful cultural differences in perception and recall of information.

The purpose of this study is to examine whether people in individualistic and collectivistic cultures differ in how they perceive and recall information. The theoretical frameworks of interest in the study are two cultural theories: Hofstede's (1980) individualism vs. collectivism and Hall's (1976) high context vs. low context. Hofstede explains that people in individualistic culture view the individual as the center of the society, while people in collectivistic culture tend to consider themselves as part of the larger social context surrounding the individual. Hall demonstrates that people in high-context culture prefer perceptible, indirect, and ambiguous messages, while people in low-context culture tend to use explicit and articulated messages. Hofstede (1980) suggests the differences between the cultures of the United States and Korea in terms of individualism and collectivism. The United States ranked at the top with a score of 91 as the most individualistic culture, whereas Korea ranked 43rd with a score of 18, indicating a more collectivistic culture.

The hypotheses were tested using a  $2 \times 2$  factorial between-subject experimental (individualism/collectivism and high context/low context) design in which subjects was exposed to low- or high- context condition. The low-context condition employed facts and direct information in a test advertisement, while a high-context condition included indirect messages (e.g. images, moods, and symbols) in a test advertisement. The responses of experimental groups were compared and analyzed after they are exposed to two different stimuli. The subjects consisted of 82 American students and 82 Korean students. To check two subject groups' cultural difference, this research employs the Oyserman et al.'s (2002) individualism and collectivism scale. The test results indicate that American subjects are classified as individualistic culture, with the Korean subjects being classified as collectivistic culture.

The experiment results indicate that students in individualistic and collectivistic cultures respond differently to information in high- or low-context designs. Koreans tend to be more familiar with high-context culture that uses indirect and ambiguous messages. The Korean subjects showed higher ratings for perceptions of information in a high-context condition than the American subjects. The American subjects perceived more information than Korean subjects in low-context condition, but this result was not statistically significant. There is no statistically

significant difference in recall of information from high- and low-context condition between American and Korean subjects. The findings obtained in this study suggest several exciting opportunities for future research to explore cross-cultural differences in perceiving and recalling information.

**Sarah Kim (47 – Classification 91)**

**Title**

Personal digital archives: Preservation of documents, preservation of self

**Abstract**

Personal archiving is a practice through which people manage and preserve documents that have particular meanings to them over a long period of time. The pervasive use of digital technology in everyday life changes ways that people interact with such documents, so that individual archiving practices are influenced by values that extend beyond mere preservation.

Researchers in Personal Information Management (PIM) studies have investigated long-term personal digital information preservation behavior, while scholars and practitioners in archives and digital preservation have discussed the function of personal documents in individuals' lives. Based on a review of previous research and related literature, this study identifies six values that motivate people to keep personal documents beyond their primary purposes of use: emotional and sentimental value, evidential value, historical value, identity formation value, personal legacy value, and sharing value. As a whole, these values suggest that personally preserved documents play a role in assisting people to reflectively review their past experiences, share memories with others, understand who they are and where they come from, and continuously form their self identities over a lifetime.

Viewing personal archiving as a self-reflective practice that involves psychological and social processes of reviewing, understanding, and presenting life and self, this dissertation research aims to explore the practices of digital archiving of ordinary individuals relative to the construction of self.

This dissertation uses in-depth case studies to gain a holistic understanding of how people conduct and experience archiving in a digital environment by examining as closely as possible participants' own perspectives. Narrative data were collected through semi-structured interviews (1-3 hours) with 20 individual participants from various backgrounds. Four participants also provided lists of digital materials they hold in their personal computers or on storage devices. Thematic coding of collected data is in process.

Each participant presents a wide variety of different patterns of digital archiving. While many participants tend to keep all digital materials, as a default encouraged by the increasing capacity of digital storage, their actions related to selection and/or prioritization are embedded in their digital archiving practices. Initial findings of this study suggest that how people evaluate their past and current life experiences - including relationships with others, how they see their roles in social settings, and personal philosophy of life - have an influence on the formation of personal digital archives and decisions for retention of digital materials for posterity. Findings of the present study will eventually contribute to development of a theory or a model of personal digital archiving, which can have implications for research on digital documentary heritage preservation and personal information management/archiving tools and services design.

## **Emily Knox (8 – Classification 14)**

Rutgers University

### **Title**

The discourse of censorship: Understanding the worldview of challengers

### **Abstract**

Book challenges, in which an individual or group asks library administrators to remove, restrict or relocate materials within a library, occur with some regularity in the United States. The American Library Association's Office for Intellectual Freedom, which monitors challenge cases throughout the United States, logged 348 challenges in 2010. Challenged books run the gamut from young adult fiction (*The Hunger Games*, *Twilight*) to classic literature (*Huckleberry Finn*, *Of Mice and Men*). The reasons for challenging books are also wide ranging and include complaints regarding sexual content, religious viewpoint, and violence. Challenges are initiated in all 50 states and involve the collections of many different types of libraries. Despite the ubiquity of challenges, library and information science research tends to focus on institutional responses to challenges and there are few studies of challengers themselves.

The primary purpose of this study is to better understand the worldview of challengers in the United States. The term worldview is defined here as one's normalized approach to understanding the world. A worldview is the interpretive lens that provides individuals with both a framework for comprehending everyday life events and a roadmap for action. In particular, the study focuses on challengers' construction of the practice of reading and argues that challenge behaviors are rooted in assumptions regarding the effects of reading. Three qualitative data sources are used for discourse analysis: observations and recordings of public hearings convened by library or government officials concerning the removal or relocation of library collection materials, interviews with individuals who are or have been substantially involved in requests for removal or relocation of materials, and documents that are produced during the course of challenge cases.

The study has four objectives related to identifying and understanding the worldview of challengers, particularly their understanding of the practice of reading. First, the researcher identifies common themes used by challengers in their requests to remove or relocate materials in libraries. Second, by analyzing the discourse of challengers, the researcher identifies the similarities among people who wish to remove or relocate materials within libraries. Third, the study demonstrates that the concepts of intellectual freedom and censorship as well as the status of libraries in communities are strongly intertwined with how people construct the practice of reading. Fourth, it is also hoped that challengers' discourse elucidates a particular understanding of the practice of reading inherent in their worldview. Challengers are considered to be part of an "imagined community" who share common interpretive strategies and discourse regarding the written world. On a practical level, it is hoped that the study helps librarians better understand and engage in dialogue with the people who bring challenges against materials in public and school libraries.

## **Kyungwon Koh (21 – Classification 52)**

Florida State University

### **Title**

Proposing a theoretical framework for digital age youth information behavior building upon Radical Change Theory

### **Abstract**

Contemporary young people are engaged in a variety of information behaviors, such as information seeking, using, sharing, and creating. The ways youth interact with information have transformed in the shifting digital environment; however, relatively little empirical research exists and no theoretical framework adequately explains digital age youth information behaviors from a holistic perspective. In order to bridge the empirical and theoretical gaps in the field of Information Behavior, this study seeks to create a theoretical framework of digital age youth information behavior by applying and further developing the theory of Radical Change. Adopting the Theory to Research to Theory strategy, Radical Change Theory guided development of the research questions and the research design incorporated the theory to provide structure to the systematic data collection and analysis; finally, the theory was informed and modified by the study results. The two-phase research design included Phase I: content analysis of research literature and Phase II: Sense-Making Methodology (SMM) group and individual interviews with youth.

In Phase I, the researcher conducted Directed Qualitative Content Analysis using Radical Change Theory, a technique that attempts to minimize potential bias by the pre-selected theoretical framework. Phase I results identified key patterns of contemporary youth information behavior reported in 40 cross-disciplinary research literature that covers a range of contexts. Phase II was implemented to test the findings from Phase I and to add new insights from the perspectives of youth. In Phase II, 12 young adults who engage in active digital media practices using Scratch, a graphical programming language, participated in either group or individual interviews. The SMM interview technique elicited innovative information behaviors embedded in the participants' collaborative information creation practices in the digital environment, such as interactive magazine production and youth initiated development of both an online media library and a Wiki website.

The study findings deepen current knowledge on the ways contemporary youth who have grown up immersed in digital media culture interact with information. The primary result of the study is the development of a typology of digital age youth information behavior that refines and further develops the original Radical Change Theory. The typology suggests a holistic perspective for observing youth information behavior as an interplay between various factors, including (1) intrapersonal processes, (2) identity formation and value negotiation, and (3) social interactions. It also presents 14 specific characteristics related to these factors that operationalize key concepts of Radical Change Theory.

The exploratory study provides theoretical, empirical, and practical contributions to the field. It suggests that the enhanced Radical Change Theory with the newly added typology serves as a holistic framework that explains dynamic digital age information behaviors. The typology created in this study will become an instrument that can be utilized in future research further investigating digital age information behavior. Also, by expanding knowledge about the changing nature of youth information behavior, the potential impacts of the study include developments of relevant library and information services and other educational approaches that better match digital age young people's unique patterns and approaches to information.

## **Joung Hwa Koo (22 – Classification 52)**

Florida State University

### **Title**

Adolescents' information behavior when isolated from peer groups: lessons from new Immigrant adolescents' everyday life information seeking

### **Abstract**

#### **Problem Statement**

Peers are important to adolescents. This salient feature of teenagers—the strong dependence on peers and the relative independence on the adult world—is a natural and important phenomenon in the process of completing their developmental tasks (Scholte & Aken, 2006). In addition, research in the field of Library and Information Studies [LIS] shows that teens regard their peers as their favorite and most valuable information source to acquire necessary information (Fisher, Marcoux, Meyers, & Landry, 2007; Hughes-Hassell & Agosto, 2007; Meyers, Fisher, & Marcoux, 2007).

However, for many reasons, adolescents can find themselves isolated from their peer groups. For example, new immigrant adolescents in the U.S. may experience difficulties in joining established social groups. Thus, this can result in a transitional period in which a peer group is unavailable to them. When this happens, how do they compensate for this lost information source? Previous research has shown that peer groups are an important source for young people. How then, do new immigrant adolescents compensate for this lost information source and seek information to cope with the period of transition and their daily life problems?

**Purpose of the Research** To answer the above the questions, the research explores new immigrants' everyday life information seeking with particular interest in the period of transition before new peer groups are established. The research provides a preliminary understanding of isolated adolescents' information world by describing immigrant teens' information need, and how they seek and utilize information.

#### **Method**

To achieve the goal of the research, the researcher conducted surveys and an in-depth interview with new Korean immigrant adolescents. Twenty Korean immigrant adolescents (12-18 years old) who have arrived in the U.S. recently (three years or less) and who currently live in Tallahassee, Florida were selected. Using the snowballing sample method, the participants were recruited using adult informants, referrals, and recruitment flyers at local churches and public libraries.

A demographic questionnaire to describe subjects' information use environments [IUEs] (Phase I: Survey) and three kinds of scales for measuring subjects' isolation status (Phase II: Survey) were used for the surveys. The concept of isolation was operationally defined according to the degrees of each scale (Table 1). Intensive interviews with the selected subjects explored new immigrant adolescents' everyday life information world (Phase III: In-depth Interview). The survey data were analyzed using methods of descriptive statistics and content analysis. Interviews were digitally recorded and transcripts were analyzed using the grounded theory—constant comparative method.

## **Title**

The e-Science data environment

## **Abstract**

Preserving scientific digital data by ensuring its continued access has emerged as a major initiative for both funding agencies and academic institutions. Digital preservation, the study of the processes, organizations, and technologies needed to maintain scientific digital data over time, is a multidisciplinary field that draws on the literature from library and information science, informatics/computer science, and domain sciences such as biology, geology, astronomy, and environmental sciences. This research develops and tests a new theoretical model for the preservation of scientific data concerning the research practices of scientists, the lifecycle of research data, and the antecedents, and barriers to preservation.

## **Methodology**

This research is based on a mixed methodology approach. An initial study using semi-structured interviews of eleven research laboratory directors and grounded theory was used to develop a model of the e-Science Data Environment. A broad-based quantitative survey of National Science Foundation awardees (with 879 responses) was conducted to test and extend the components of the model.

## **Results**

The e-Science Data Environment lifecycle is a complex interaction of research methodology, content, formats, context, quality control, and technologies. Research data is created via a variety of methodologies that dictate the mode of data creation; that is, the requirements of the research methodology determine whether the researcher generates new data, uses existing data, or needs a combination of newly generated data along with existing data. As data is assembled via the multiple modes and methodologies described above, researchers invest significant amounts of time and effort to ensure the quality of both their data and their science. Quality control is a cycle within the larger lifecycle. Scientific quality requirements inform the data quality criteria which inform the processes that are required to ensure the quality of the data which takes time and resources which impacts the process of the science. The research process adds value to the original data, creating content. Content is ultimately added to a data collection: a research collection, the output of a single researcher or lab; a community collection, which serves a domain or other well defined area of research; or a reference data collection, which is broadly scoped and supports the research needs of many communities (National Science Board, 2005). Throughout the lifecycle, the antecedents to preservation, the ability of researchers to find adequate access to or support for data management, contextual metadata, standard data and metadata formats, and preservation technologies, are significant indicators of the likelihood of preservation. When access and support are not available, these antecedents become barriers to preservation. This research describes the antecedents and barriers at each state of the lifecycle indicating the implication for the long term preservation of digital research data.

## **Reference**

National Science Board. (2005). *Long-Lived Digital Data Collections Enabling Research and Education in the 21st Century*. Arlington, VA: National Science Board Committee on Programs and Plans, NSB-05-40. Retrieved from [http://www.nsf.gov/pubs/2005/nsb0540/nsb0540\\_1.pdf](http://www.nsf.gov/pubs/2005/nsb0540/nsb0540_1.pdf)

**Chris Landbeck (32 – Classification 58)**  
University of South Florida

## **Title**

Indexing editorial cartoons: An exploratory study

## **Abstract**

While access to images in general has improved in the last 20 years, due to both advances in electronic storage and dissemination and to improvements in the intellectual provisions of them, access to political cartoons lags behind access to other types of images. While there have been piecemeal or ad hoc efforts to organize large cartoon collections, these efforts have been based on the wants and needs of the organizers, publishers, or collectors. The Library of Congress provides uneven access to the largest collection of editorial cartoons in the world. The Doonesbury collection provides access to series of strips, the New Yorker collection of cartoons is described on an ad hoc basis, and the CNN archive of political cartoons provides access only by date. Compare these to ARTstor, Corbis Images, and the Getty and the Guggenheim image bases, and a gap in coverage, treatment, and research become evident. We know little concerning the habits and expectations of users vis-à-vis editorial cartoons, and there has not been an organized, user-based approach to providing access to these kinds of images. The gap in knowledge to be addressed in this study is that which exists between what we know about describing images in general and describing editorial cartoons in the specific.

This research will use content analysis to derive categories of descriptors from both a tagging activity and a simulated query activity. The cartoons of the five most recent usable Pulitzer Prize-winning cartoonists will be used. Participants will be drawn from academic professions that are presumed to have an interest in the description of cartoons. Both of the activities will use a customized version of the `steve.tagger` software. The analysis will be based on Jørgensen's 12 Classes, although the possibility of additional classes will be left open. Interviews with both editorial cartoonists and image professionals will then be conducted to assess the degree to which this work conflicts with the expectations of those fields and in what ways this research might influence perceptions and practices in real-world situations.

Results from the pilot study show that some modifications to the 12 Classes may be necessary, as the Class "Abstract Concepts" became the de facto "Miscellaneous/Other" place for descriptions that did not fit well in other places. The Class "People" may need to be modified to include organizations, such as government agencies or corporate entities; in fact, it may need be that this Class – for the purposes of describing editorial cartoons – should be renamed "Actors", as both the human and corporate forms both serve to drive the action in such images. A more definitive separation of Object, Location, and Event may also be necessary; pilot data shows that "9-11", "twin towers", and "ground zero" are sometimes synonymous, a headache for indexing. The full research should be comparable to similar research, while showing that editorial cartoons require certain changes to the rules by which the Classes are applied.

## Lysanne Lessard (33 – Classification 62)

University of Toronto

### Title

Designing for value cocreation in knowledge-intensive business services through Agent-Oriented Modeling.

### Abstract

**Problem statement.** Knowledge-intensive business services (KIBS) such as information services, computing, and research and development services are important factors of performance and innovation in industrialized economies [1, 2]. While current literature on KIBS helps us understand their core characteristics and patterns of innovation [1], it has rarely addressed how best to support their design. The understanding of service as a process of collaborative value creation, or value cocreation [3], could provide a framework guiding KIBS design. It allows us to understand parties engaged in KIBS relationships as service systems - collections of specialized resources (people, technology, information, etc.) organized in a manner that enables value cocreation [4]. However, a full understanding of the value cocreation process has yet to be developed [4]; moreover, this understanding needs to be transformed into design tools in order to provide practical design support to KIBS professionals. Our work thus aims to identify key mechanisms of value cocreation in KIBS, and express them through a modeling technique that can support KIBS analysis and design.

**Methodology.** We use a design science research (DSR) methodology, which aims to develop practical solutions that can be used by professionals in their field [5]. The research design for this study includes a multiple-case study [6] of academic research and development service engagements as a type of KIBS. Data are collected through key stakeholder interviews, observations during meetings, and relevant documentation, and are analyzed using grounded theory coding procedures [7]. Inductive categories are then interpreted through key concepts of value cocreation, giving empirical support or modifying mechanisms already identified in literature; the inductive coding of data also enables us to identify mechanisms that have not been accounted for in current literature. Preliminary results provide empirical support to mechanisms currently proposed in literature, as well as identifying mechanisms that had not yet been accounted for. They also allow us identify and adapt a relevant modeling technique so as to express key mechanisms of value cocreation and relationships among them.

**Results.** Mechanisms of value cocreation supported by our study include the *creation of value propositions* where actors commit to *organizing the necessary resources*, in particular operant resources (e.g., knowledge and skills), in order to produce something that is *perceived as beneficial* by others [3, 4]. Our data also show however that these benefits are perceived as important only insofar as they meet an actor's *high-level interests*. These mechanisms of value cocreation are in line with current literature [e.g., 4, 8], but emphasize the intentionality driving value cocreation. We thus propose to conceptualize service systems involved in service engagements as intentional agents who form interdependent relationships as they try to reach their goals; this is achieved through *i\** (short for distributed intentionality), an agent-oriented modeling technique [9].

In  $i^*$ , agents are viewed as social entities that depend on each other to reach their goals [9]. Figure 1 illustrates the use of  $i^*$  in a simplified model of an information service engagement.  $i^*$  constructs are used to express key mechanisms of value cocreation, to show resulting interdependent relationships between agents, and to support the analysis of service systems' *determination of value*. In this example, the high-level interests of a government client (Promote parks to youth) were only partially met despite having its main goal satisfied (Receive educational material), because the information service provider failed to fully accomplish one of its tasks (Get feedback from students and teachers).  $i^*$  models can represent and support the analysis of the relationships between the resources and activities involved in the service engagement process, and the expected benefits and high-level interests pursued by collaborating actors. Current service-specific modeling techniques such as Service Blueprinting support the sequential design of service activities [10], but are unable to link those to expected benefits and high-level interests.

**Contributions.** This research is a first step toward a KIBS-specific theory of value cocreation. It also has practical applications for KIBS professionals, who could use our adapted modeling technique to analyze alternative ways of meeting the interests of their clients, suppliers, and third-party collaborators. Resulting models could also be used to design information systems supporting KIBS relationships. Further work will modify the modeling technique in order to account for aspects such as the adaptability of value propositions, which are not pre-defined but formed through interactions.

## References

- [1] Muller, E. and Doloreux, D. 2009. What we should know about knowledge-intensive business services. *Technology in Society*, 31, 1 (2009), 64-72.
- [2] Sheehan, J. 2006. Understanding service sector innovation. *Communications of the ACM*, 49, 7 (2006), 42-47.
- [3] Lusch, R. F., Vargo, S. L. and Wessels, G. 2008. Toward a conceptual foundation for service science: Contributions from service-dominant logic. *IBM Systems Journal*, 47, 1 (2008), 5-14.
- [4] Vargo, S. L., Maglio, P. P. and Akaka, M. A. 2008. On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26, 3 (2008), 145-152.
- [5] Van Aken, J. E. 2005. Valid knowledge for the professional design of large and complex design processes. *Design Studies*, 26, 4 (2005), 379-404.
- [6] Yin, R. K. *Case study research: design and methods*. Sage, Thousand Oaks, 1994.
- [7] Charmaz, K. *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. Sage, Thousand Oaks, CA, 2006.
- [8] Spohrer, J. and Kwan, S., K. 2009. Service Science, Management, Engineering, and Design (SSMED): An Emerging Discipline - Outline & References. *International Journal of Information Systems in the Service Sector*, 1, 3 (2009), 1-31.
- [9] Yu, E. *Agent-Oriented Modelling: Software versus the World*. Springer, City, 2002.
- [10] Bitner, M. J., Ostrom, A. L. and Morgan, F. N. 2008. Service Blueprinting: A practical technique for service innovation. *California Management Review*, 50, 3 (Spring 2008), 66-94.

## **Tracy Liu (23 – Classification 52)**

University of Michigan

### **Title**

Crowdsourcing with All-pay Auctions: a field experiment on Taskcn

### **Abstract**

In a field experiment on Taskcn, a large Chinese all-pay auction crowdsourcing site, we systematically vary the size of the reward, with or without a reserve in the form of the early entry of a high-quality submission. Consistent with theory, a higher reward induces significantly more submissions, and marginally higher quality. Unpredicted by standard theory, however, users with prior winning experience are significantly less likely to enter tasks with a reserve than those without. Consequently, the soft reserve results in significantly lower quality in subsequent submissions.

### **Purpose/Objective of Study:**

Crowdsourcing sites, such as Amazon's Mechanical Turk and Topcoder.com, have been changing the way people work by enabling collaboration between geographically dispersed workers and the outsourcing of tasks to individuals across the globe. In particular, some crowdsourcing sites, such as Topcoder.com and Taskcn.com, implement all-pay auctions as their exchange mechanisms. On these websites, askers post a task (such as designing a company logo), offering a certain amount of money as a reward and then anyone can submit a solution. After receiving several responses, askers select the best solution and reward the person who provided this solution. In this process, every answerer contributes his/her effort and time, but only the winner gets the reward; hence, the name "all-pay". The purpose of this study is to investigate the impact of different design features on all-pay auction crowdsourcing sites. Specifically, I am interested in evaluating both the reward and the reserve effect on users' participation and the quality of solutions they submit.

### **Sample and Setting:**

148 tasks were posted on Taskcn.com between June 3 and June 22, 2009, eight tasks per day (one translation and one programming task from each treatment). After a task was posted, any user could participate and submit a solution within seven days. At the end of the seven-day period, one winner was selected for each task. During the experiment, 988 users participated in the translation tasks, submitting 3,751 solutions, and 82 users participated in the programming tasks, submitting 134 solutions.

### **Method (Qualitative, quantitative, historical, etc):**

To derive the hypotheses for this study, I used mathematical modeling. A field experiment was then implemented to evaluate the impact of different design features. Statistical analyses were conducted in order to examine the significance of the results.

### **Data Collection Technique(s) (Interviews, questionnaires, focus groups, etc.) :**

I implemented a 2x3 factorial design. To investigate the reward effects, half of the tasks were posted with 100 CNY and the other half were posted with 300 CNY. To study the reserve effect, I varied the reserve conditions for each reward level, including No-Reserve, Reserve-without-Credit, and Reserve-with-Credit. In the Reserve-without-Credit treatments, each early

submission (the reserve) was posted by a user without a winning history on the site, whereas in the Reserve-with-Credit treatments, the reserve solution was posted by a user with four credits.

Results :

First, tasks in the high-reward treatments received significantly more submissions and higher quality solutions compared to those in the low-reward treatments. Although the early entry of a high-quality solution did not affect the total number of submissions, it did deter the entry of experienced users. Consequently, the average quality and the quality of the best solution were significantly lower in the reserve treatments than in the no-reserve treatment. In addition, experienced users submitted their solutions significantly later than others when task difficulty and reward size were controlled. Since answerers who submit their solutions later are able to observe the content of earlier submissions, this finding suggests that these experienced users may behave more strategically in terms of their participation on this site.

### **Yaqi Liu (10- Classification 15)**

Wuhan University

#### **Title**

Identify the characters of challenges in LISE: China LIS chairs' contemporary conception--  
Based on the survey of 32 university

#### **Abstract**

Since the first library science school established by Ms. Mary Elizabeth Wood, the Library and Information Science Education (LISE) has developed for over 9 decades. Although significant improvement has been achieved, new challenges have emerged since the new century. However, what the most serious challenges are and what characteristics they have are still not clear. There are still no consensuses of the problem above for the researchers from the library and information education, practice, and professional organizations. Obviously, the cognition of these challenges is the base of the revolution of Library and Information Science (LIS). The cognitions of the LIS chairs directly affect the direction of the improvement of LISE and the final decisions for the revolution of LISE. Therefore, the study of Chinese LIS chairs' cognitions of the challenge faced by LISE has practical sense for the developing of LISE.

In the research, a questionnaire based on the challenges faced by LIS in China is designed. In the questionnaire, less than 10 challenges, which are the most serious according to the responders' opinion, should be chosen from 24 provided challenges. 45 chairs of LIS from 32 Universities in China are surveyed and 42 valid questionnaires are returned. The questionnaires are analyzed based on different personal background variables such as age, academic background, professional background, research skills, and their respective departments in a specific context. Meanwhile, 24 option challenges are divided based on: (1) teaching or learning; (2) in or out of the discipline; (3) in or out of the institution. Each category contains 12 questions. Based on the classification mentioned above, the questionnaires are analyzed using agreement scale analysis, multidimensional data analysis and principal component analysis with the statistical software SPSS. Some significant results of the attention bias of Chinese LISE deans have been obtained.

According to the survey, the most 5 serious challenges faced by LISE are: (1) Student enthusiasm and interest in professional learning, (2) the teaching content, (3) education model and goals of the discipline, (4) quality of new students and the number of candidates, (5) the level of academic level of teachers. The least chosen challenges are "institutions' attention to information, technology and cross-cutting areas of human needs", "leadership", "the competition with other industries to

services market”. The factors belong to different class are also calculated. The factors belong to “teaching” and “learning” has been chosen 180 times and 175 times respectively, which indicated that Chinese LISE leaders attach importance to teaching process and methods. The factors belong to “in the discipline” and “out of the discipline” have been chosen 226 times and 129 times respectively, and the factors belong to “in the institution” and “out of the institution” have been chosen 224 times and 131 times respectively. It shows that the LISE leaders pay more attentions to the challenges in the discipline and institution than the challenges out of the discipline and institution. The multi-dimensional analysis results shows that the challenges in the discipline and institution are of most importance, and the challenges in “learning” and “teaching” have equal importance.

The final conclusions of the research are as list below:

- (1) Deans show great interests on the discipline challenges, which is different from the opinion from practice experts. More attention should be paid to factors out of LIS discipline;
- (2) Different from the value advocated by the iSchool movement, Chinese deans pay more attention to the challenges in the institution and should pay more attention to the challenges out of the institution;
- (3) Deans are aware of the importance of teaching / learning. In the future, more attention should be paid to the challenges from the new information technology environment.

### **Kun Lu (34 – Classification 63)**

University of Wisconsin-Milwaukee

#### **Title**

Assessing systematic topic difficulty based on query and collection features

#### **Abstract**

Researchers have observed in earlier experimental studies that system performance varied significantly by topics. Even for those systems that had performed well on average, the results for some topics were still poor. From a system design perspective, it is desirable to have a robust retrieval system which can respond reasonably well even for those difficult topics (the topics that will have low retrieval performance in a given collection). As a result of these observed outcomes, TREC held three consecutive robust retrieval tracks from 2003 to 2005 which emphasizes the performance on hard topics. Several conclusions drawn from these tracks include (Voorhees, 2005; Voorhees, 2006): (1) Expansion based on current collection like pseudo-relevance feedback, which had been proved to be generally effective (Buckley, et al., 1995), degraded the performance of difficult topics; (2) Top runs for difficult topics were obtained by expanding the queries with external resources other than the current collection (e.g. the Web); (3) Optimizing the average performance for standard evaluation measures may degrade the poorly performed topic further. Evidence from the robust retrieval tracks has demonstrated that difficult topics should be treated differently in order to achieve optimal results. This point has been confirmed by the findings from the retrieval failure analysis in Reliable Information Access (RIA) workshop in which the investigators suggested that it may be even more important to discover what current techniques should be applied to which topics than to develop new techniques (Harman & Buckley, 2009). One prerequisite research problem for such discriminative treatment is how to identify difficult topics. However, this problem has not been fully addressed in robust tracks. This dissertation research is motivated by the need to study the intrinsic mechanism of the systematic effect of topic difficulty to better detect or identify the difficulty level of a topic for a given collection. Building on the contributions of previous research, this study will:

1. Propose two new predictors based on the vector space model and compare them with the probabilistic language model based state of art predictors.
2. Introduce a domain specific collection from the Genomic track of TREC to explore the specifications of the prediction task in a domain-specific environment.
3. Attempt to combine the individual predictors in a statistical framework with a multiple regression technique and test the effectiveness across the selected data collections.
4. Examine the effect of a topic model on the prediction task. The Latent Dirichlet Allocation (*LDA*) technique will be used to train the topic model.

To be more specific, the research will compare nine existing predictors that were identified from literature together with two new predictors on a number of different test collections including Genomic 2006 and 2007, WT10G, TREC 6, TREC 7 and TREC 8. Then combine the individual predictors with multiple regression technique. In addition, topic model will be applied on top of the unigram model and effect of topic model will be examined. More details on experimental design and results will be presented in the poster.

## **Reference**

Harman, D., & Buckley, C. (2009). Overview of the Reliable Information Access Workshop. *Information Retrieval*, 12(6), 615-641.

Voorhees, E. M. (2005). The TREC robust retrieval track (Vol. 39, pp. 11-20): ACM.

Voorhees, E. M. (2006). The TREC 2005 robust track (Vol. 40, pp. 41-48): ACM.

## **Lai Ma (1 – Classification 2)**

### **Title**

Objective, subjective, and normative information: An epistemological examination

### **Abstract**

When we use the term “information” in our day-to-day conversation or professional discourse, there is usually an implicit assumption that someone may be informed. Yet, the term “information” does not have a fixed or permanent referent and it does not have a self-evidential quality. In other words, “information” is usually used to refer to other things, expressions, and events, but not the things, expressions, and events themselves. Reading the concepts of information proposed and discussed in library and information science often leaves us with the question: What is information?

Since “information” refers to different concepts or things in different situations and contexts, the ambiguous nature of the term “information” may lead to misunderstanding or misrepresentation by the connotations of the term. Hence, it is important to clarify the meanings of the term and their epistemological assumptions in influential texts in library and information science, for these meanings and assumptions may be explicitly or implicitly related to the theories deployed and the research methodologies employed.

This study begins with a critical reconstructive analysis of the concept of information in influential texts, including Weaver (1964), Bateson (2000), Brookes (1980), Ackoff (1989), Buckland (1991), Bates (2005, 2006), Hjørland (2007), and Ekbia and Evans (2009). The analysis shows that there are two main categories of the concept of information in library and

information science: empirical information and situational information. The former characterizes “information” as objective entities as having causal power upon human minds; the latter conceptualizes “information” in terms of informativeness and situational constituents.

Is “information” necessarily either objective or situational, however? The study investigates this problematic in terms of the three formal ontological categories developed in critical methodology (Carspecken, 1996), initially discussed in Habermas’ (1984, 1987) theory of communicative action. The formal ontological categories provide the framework for analyzing, first, the characteristics of objective, subjective, and normative-evaluative validity claims in the study of social action; second, the criteria of validating truthfulness in each category; and third, research methods that are best suited for studying each type of phenomena.

Analyzing “information” in terms of the three formal ontological categories shows how and why information may be objective, subjective, and normative-evaluative in different situations and contexts. Based on the analysis, practical methods for differentiating and analyzing “information” may be considered, particularly when the three formal ontological categories are referenced simultaneously in language and meaningful action.

In this poster, the three formal ontological categories will be explained and illustrated in relation to different types of information. Implications for research methodology will be discussed.

#### References

Ackoff, R. L. (1989). From data to wisdom: Presidential address to ISGSR, June 1988. *Journal of Applied Systems Analysis*, 16, 3-9.

Bateson, G. (2000). Form, substance, and difference. In *Steps into an ecology of mind*. (pp. 454-71). Chicago: The University of Chicago Press.

Bates, M. J. (2005). Information and knowledge: An evolutionary framework for information science. *Information Research*, 10(4).

Bates, M. J. (2006). Fundamental forms of information. *Journal of the American Society for Information Science and Technology*, 57(8), 1033-1045.

Brookes, B. C. (1980). The foundations of information science: Part I philosophical aspects. *Journal of Information Science*, 2, 125-133.

Buckland, M. K. (1991). Information as thing. *Journal of the American Society for Information Science*, 42(5), 351-360.

Carspecken, P. F. (1996). *Critical ethnography in education research: A theoretical and practical guide*. New York: Routledge.

Ekbia, H. R., & Evans, T. P. (2009). Regimes of information: Land use, management, and policy. *The Information Society*, 25, 328-343.

Habermas, J. (1984). *The theory of communicative action (vol. 1): Reason and the rationalization of society*. Boston: Beacon Press.

Habermas, J. (1987). *The theory of communicative action (vol. 2): Lifeworld and system: A critique of functionalist reason*. Boston: Beacon Press.

Hjørland, B. (2007). Information: Objective or subjective/situational?. *Journal of the American Society for Information Science and Technology*, 58(10), 1448-1456.

Ma, L. (forthcoming). Meanings of information: The assumptions and research consequences of three foundational LIS theories. *Journal of the American Society for Information Science and Technology*.

Weaver, W. (1964). Recent contributions to the mathematical theory of communication. In *The mathematical theory of communication*. Urbana, IL: University of Illinois Press.

**Susan MacDonald (41 – Classification 75)**

University of Toronto

### **Title**

Public libraries, partnerships and politics in immigration and settlement, Ontario, Canada (1947-2011)

### **Abstract**

Public libraries offer critical resources, and programs and services in multi-lingual formats that help newcomers find information needed to cope with the experience of settling into life in their host country. Scholarly research further suggests that public library spaces help immigrants to develop social networks and participate in the broader society (Audunson et al., 2011, Caidi & Allard, 2005; Fisher et al., 2004). While public libraries are increasingly being recognized as playing important roles in newcomer settlement and integration (Ashton & Milam, 2008; Frisken & Wallace, 2000; Holt, 2009), however, this has not always been the case.

This study examines how the public library's approach to providing services to newcomers in Canada has shifted significantly in the last several decades. It is framed by my interest in the changing role of the public library in the communities they serve and in particular, in providing services to newcomers to Canada. Understanding the changing role of the public library, however, requires an in-depth understanding of its socio-political context as constituted by the national political agendas through which libraries are implicated (directly or not). I argue that in this sense, change in library policy has been driven, at least in part, by Canada's national immigration policy.

Using critical discourse analysis (Fairclough, 2001), this study examines public library policy in Canada and in Ontario in relation to government policy on immigration and settlement in the post-war era – defined here as 1947 to 2011. Library documentation includes briefs to parliament, submissions to federal and provincial government departments and royal commissions, program evaluations, and annual and strategic reports. Public policy documents include parliamentary policy statements, white and green papers, immigration legislation, government reports, and program evaluations.

Preliminary data collection and analysis reveals that while public library understandings of immigrant needs reflected assimilationist attitudes of the early post-war era, professional values and practices shifted over time suggesting a progressively more nuanced understanding of the particular needs of newcomers in settlement and integration. However, this research will further investigate the influence of neoliberal ideology in relation to library policy and programs for newcomers, which from the late 1970s emphasized free market principles in, among other things,

the delivery of public services (Harvey, 2005). For example, the research asks: What are the particular manifestations of 'roll-out neoliberalism', such as partnerships (Geddes, 2006), in library policy in providing services to newcomers?

#### REFERENCES

- Ashton, R. J., & Milam, P. (2008). *Welcome, Stranger: Public Libraries Build the Global Village* (Report). New York: Urban Libraries Council.
- Audunson, R., Essmat, S., & Aabo, S. (2011). Public libraries: A meeting place for immigrant women? *Library & Information Science Research*, 33, 220-227.
- Caidi, N., & Allard, D. (2005). Social inclusion of newcomers to Canada: An information problem? *Library & Information Science Research*, 27(3), 302-324.
- Fairclough, N. (2001). *Language and Power* (Second ed.). Essex, UK: Pearson Education Limited.
- Fisher, K. E., Durrance, J. C., & Hinton, M. B. (2004). Information Grounds and the Use of Need-Based Services by Immigrants in Queens, New York: A Context Based, Outcome Evaluation Approach. *Journal of the American Society for Information Science and Technology*, 55(8), 754-766.
- Friskin, F., & Wallace, M. (2000). *The Response of the Municipal Public Service Sector to the Challenge of Immigrant Settlement*. Toronto: Citizenship and Immigration Canada, Ontario Region.
- Geddes, M. (2006). Partnership and the limits to local governance in England: Institutional analysis and neoliberalism. *International Journal of Urban and Regional Research*, 30(1), 76-97.
- Harvey, D. (2005). *A Brief History of Neoliberalism*. New York: Oxford University Press.
- Holt, G. (2009). Library Services for Immigrants, an Abridged Version. *Public Library Quarterly*, 28(2), 120-126.
- Newman, J., & McKee, B. (2005). Beyond the New Public Management? Public services and the social investment state. *Policy and Politics*, 33(4), 657-674.
- Richmond, T., & Shields, J. (2005). NGO-government relations and immigrant services: Contradictions and challenges. *Journal of International Migration and Integration*, 6(3-4), 513-526.

#### **Lauren H. Mandel (16 – Classification 51)**

Florida State University

#### **Title**

Lost in the labyrinthine library: A multi-method case study investigating public library user wayfinding behavior

#### **Abstract**

Wayfinding is the method by which humans orient and navigate in space, and particularly in built environments such as cities and complex buildings, including public libraries. In order to wayfind successfully in the built environment, humans need information provided by wayfinding systems and tools, for instance architectural cues, signs, and maps. This is true of all built environments, including public libraries, but the issue is all the more important in public libraries where users already enter with information needs and possibly anxiety, which may interfere with the ability to wayfind successfully. To facilitate user wayfinding, which in turn facilitates user

information seeking, public library facilities need to be designed with users' wayfinding needs in mind, along with consideration of users' information seeking and other library-specific needs.

The public library facility design literature identifies the importance of understanding user wayfinding behavior and designing around it, and this dissertation is a step toward answering that call. A single-method pilot study utilized unobtrusive observation to investigate library users' initial wayfinding behavior from the two entrances of a medium-sized public library, with the data analyzed and displayed using Geographic Information Systems (GIS) software (Mandel, 2010). The pilot study found that certain routes were more popular than others and suggested that such information could be gathered relatively easily and then used by a library to improve its wayfinding system and to market library materials in high-traffic areas. However, the pilot study lacked the ability to ascertain any user opinions regarding their wayfinding behavior in the library.

To overcome this limitation, the dissertation replicates the original unobtrusive observation and adds a document review of the library's wayfinding tools such as maps and signage, intensive interviews with library users, and an expert review of findings with library staff, architects, and library designers to gain a more comprehensive view of library user wayfinding behavior. Guided by Passini's Conceptual Framework of Wayfinding that lays out five strategies and two styles of wayfinding, this multi-method case study dissertation investigates library user wayfinding behavior from the entrance of a medium-sized public library facility. The researcher chose the case study design to guide this dissertation because of the ability to analyze data gathered from different methods, thereby mitigating the limitations of a single-method dissertation, strengthening the overall findings, and providing a more comprehensive view of library user wayfinding behavior than could be obtained from a single method approach.

Data analysis is extensive and includes contextual review of the wayfinding system in the library (i.e., the document review), GIS mapping of nodes and segments from observed routes, content analysis of intensive interviews, and contextual analysis of expert review interviews. Findings are organized according to the six research questions, two of which relate to observed user wayfinding behavior and four of which relate to users verbal descriptions of their wayfinding behavior, including examination of the degree to which they mention using Passini's five strategies and two styles of wayfinding.

**Laura Haak Marcial (35 – Classification 63)**

University of North Carolina – Chapel Hill

**Title**

Moving beyond the desktop: Searching for information with limited display size and interaction technique

**Abstract**

Increasingly, users are performing more sophisticated types of tasks, like information search, across computing platforms including desktops/laptops, tablets, and smartphones. While much research has been done to improve efficiency for each of these devices in the area of information search, few investigations have taken a pragmatic approach to determining the real efficiency costs across current state of the art devices and searching paradigms (typically browser based). We examine comparative task execution times for within document searching tasks under three different conditions: varying screen sizes, varying interaction devices (mouse & keyboard and

touchscreen), varying interaction techniques (scrolling and paging for within document searching) and varying types of search. Our aim is to inform current practice on user efficiency across these variables and future design in improving efficiency on the small screen device. This study is divided into two parts: a within document analysis on its own and a search study looking at four different levels of search: known item, faceted, forms based (advanced query) and exploratory. Both studies use a within subjects (n=24 and n=36, respectively) design comparing task execution time across three devices: a desktop, a tablet (iPad) and a smartphone (iPod). Subjects are randomized to device presentation order, given training for each device-interaction or device-search type combination and asked to perform multiple (5) repetitions of each task using balanced task blocks (all tasks are unique for each user).

**In sum, our research questions are:**

**RQ:** To what extent is information searching (web and document) typical of the desktop environment inhibited by display size and/or interaction style.

**RQ1:** How do display size, interaction technique and task complexity affect task execution time?

**RQ2:** How do display size, interaction technique and task complexity affect task load?

**RQ3:** How do display size, interaction technique and task complexity affect usability?

Our focus is on evaluating specific information retrieval tasks built within a work task context (health information search). We evaluate time to complete the search as a quantitative measure. We measure the perceived task load associated with each device-task combination across participants. For all tasks we evaluate the usability of the devices qualitatively with a post-study survey, semi-structured interview and review of video recorded observations.

We expect to see the desktop to remain the ‘gold standard’ for display size and interaction and we expect the tablet to be close behind. For some tasks, the smartphone will be nearly commensurate with the tablet (with display size being the limiting factor). In terms of task load and usability, we do expect the smartphone to be the least favored device condition but remain uncertain about how this will vary among the different tasks. Importantly, we expect to be able to make both quantitative and qualitative recommendations about improving efficiency of searching across the three devices.

**Tammy L. Mays (24 – Classification 52)**

University of Wisconsin-Madison

**Title**

Making the connection to student athletes of color: Athletic coaches and school nurses as health information intermediaries for athletes of color

**Abstract**

This poster will examine how middle and high school athletic coaches and school nurses serve as health information resources in the lives of adolescents, particularly adolescent athletes of color. This research study seeks to understand two key elements: (1) the questions students of color ask athletic coaches and school nurses; and (2) the information sources sports coaches and school nurses use to answer the questions. The study is important because of adolescents’ propensity for engaging in high-risk behaviors, such as substance abuse and risky sexual behaviors, underachieving in school, maintaining a sedentary lifestyle, and eating unhealthy foods (Abrantes et al., 2009; Buck & Ryan-Wenger, 2003; Caminis et al., 2007; Hair et al., 2009).

According to the 2007 National Youth Risk Behavior Survey (YRBS), many U.S. high school students engaged in alcohol, tobacco and other drug use, and unhealthy dietary and sexual practices. Black students were 16.3% more likely than Hispanic and White students to engage in sexual intercourse before the age of 13, 27.6% more likely to have multiple sexual partners, and 24% more likely to suffer from a lifetime of asthma. Hispanic students were 12.8% more likely than Black and White students to have attempted suicide, 7.5% more likely to consume alcohol on school property, 10.9% more likely to use cocaine, and 15% more likely to have never been taught about AIDS or HIV infection. These high-risk behaviors often interfere with and become barriers to students' learning and academic performance.

#### Theory:

Elfreda A. Chatman's *Life in the Round* theory is used as a guiding conceptual framework for understanding the health information seeking behaviors of middle and high athletic coaches and school nurses and the "small world" community of which they are members. There are four concepts that are intertwined with the *Life in the Round* theory: small world, social norms, social types, and worldview. The four concepts will be used to examine athletic coaches and school nurses' *small world* and their intermediary role for student athletes of color.

#### Methods:

Fifteen athletic coaches and nine school nurses from diverse middle and high schools in one metropolitan Midwestern state participated in the current study. All interviews were conducted face to face at the participants' institutions and were audiotaped and transcribed by a professional transcription service. All of the participants for the study were selected using purposive and/or convenient sampling technique. Each participant in the study completed a three page pre-interview questionnaire that consisted of eight questions used to obtain background information. Questions included level of education, work experience, and professional coaching affiliations. The survey instrument included a combination of Likert-style scaled and open-ended questions with comments.

#### **Michael B. McNally (4 – Classification 12)**

University of Western Ontario

#### **Title**

Intellectual Property and Its Alternatives: Incentives, Innovation and Ideology

#### **Abstract**

My dissertation examines how mechanisms for incenting the production of intellectual goods including both intellectual property (IP) and its alternatives facilitate and impede innovation. Using a theoretical framework based on critical theory and specifically the works of David Harvey and the economic theories of Joseph Schumpeter the dissertation combines macro-level theorization with case study, micro-level analysis based on two specific alternatives to IP in addition to drawing on a range of empirical and statistical sources. The central thesis of the work is that expansionary IP rights alone are ineffective at encouraging innovation and pose a danger of inhibiting socially beneficial innovative activity that can often better be stimulated through alternatives to IP. The primary contribution of the dissertation to the discipline is that it critically focuses on under-examined alternatives to IP and the ideological factors behind the focus on innovation in information society discourses.

The core of the analysis is composed of five chapters. The first examines the expansionary IP regime focusing on increasing scope and duration of traditional IP rights, the creation of new *sui generis* rights and the incorporation of IP within the global trade system. The second part of the

analysis investigates incentives for producing and distributing intellectual goods. While the pecuniary incentive created through exclusionary IP rights does encourage the production of intellectual goods, it also encourages socially harmful strategic behaviour and fails to utilize the range of motives for creating intellectual works. The dissertation then scrutinizes the concept of innovation by first focusing on the role of innovation in economic theory. This chapter concludes by synthesizing numerous empirical studies that demonstrate IP rights are not integral to innovation, and notes that increasingly patents are hindering innovative activity. The dissertation then examines the rhetoric surrounding innovation. It emphasizes that a simplistic conception of the term is increasingly promoted as a neoliberal panacea to problems affecting both states and corporations, while proponents of information society discourses such as Daniel Bell and Manuel Castells often extoll the benefits of innovation without fully exploring the role of IP rights and their alternatives. The final chapter before the conclusion is composed of two case studies: the Songwriters Association of Canada's (SAC) proposal for a monthly fee on internet usage as an alternative to copyright and the use of defensive publishing as an alternative to patenting. Scrutinizing the SAC's proposal reveals that it does little to ameliorate the problems of exclusionary rights while placing undue emphasis on pecuniary incentives. The SAC proposal is sharply contrasted by defensive publishing which alleviates many of the problems of patenting while still facilitating innovation. The thesis concludes by noting that alternatives of IP are not necessarily superior to exclusionary rights for encouraging innovation; however it also suggests that policymakers place greater emphasis on carefully constructed alternatives to IP to ensure that innovative activity results in not only economic growth but political and social improvements to the quality of human life.

**Charles W. Meadows III (30 – Classification 53)**  
University of Alabama

**Title**

The effects of narrative elements and individual attributes on transportation in health communications

**Abstract**

This dissertation examined the influence of a new persuasion model, the Transportation-Imagery Model, in the context of health communications. Interest in the field of health communications has advanced rapidly over the past two decades. Both practitioners and researchers are seeking effective means of promoting healthy behaviors while discouraging potentially hazardous ones. Traditionally, health communicators have relied on statistical evidence supported by rational arguments and facts to promote positive health behaviors. However, over the past ten years a number of studies have found that narrative forms of communication, such as stories and testimonials (fictional and nonfictional), are both highly persuasive and effective means of communicating health information. The Transportation-Imagery Model (TIM) proposes that the persuasiveness of narratives result from an altered mental state identified as *transportation*. Narrative messages are more persuasive because they transport the reader into the story, thus making the narrative more similar to the real world. Currently, TIM provides a foundation for investigations into the effects of transportation on persuasion, but current research indicates opportunities for scrutiny of the mechanisms responsible for transportation. To examine the mechanism underlying transportation, this study employed a 2 narrative perspective (first-person vs. third-person) X 2 (ground vividness vs. central vividness) repeated measures design. Two individual attributes, working memory capacity and attention were potential moderators. Working memory capacity has been linked to both attention and on-task performance.

Subsequently, attention has been proposed as a key factor in TIM, although it has not been strategically examined. The experiment employed a combination of self-report and psychophysiological instruments to measure the effects of the independent variables. 81 (N = 81) individuals were randomly assigned to one of four conditions representing the manipulated variables. We hypothesized that the vividness and perspective would influence transportation. Additionally, we proposed that working memory capacity would be a significant moderator of transportation. Results from the study found that narratives manipulated with central vividness and third person elicited a greater degree of sustained attention and subsequently transportation compared narratives manipulated with ground vividness and first person. In addition, it was found that working memory capacity was a predictor of transportation. Individuals exhibiting higher working memory capacity demonstrated greater transportation scores than those individuals with lower transportation scores. Moreover the central vividness narratives elicited greater emotional arousal than the ground vividness narratives. Theoretical and practical implications of the study were discussed. Theoretically, this study introduced two new variables (vividness and perspective) that should be considered as possible constructs in future revisions of the model. Methodologically, this study was one of the first to employ psychophysiological measures in the examination of transportation. Results from the study validated the use of psychophysiological measures in examining transportation. While, this study only employed two psychophysiological measures (heart rate and skin conductance), future studies will need to examine other measures such as electroencephalography. In addition, directions for future studies were also examined. In summary, this study not only contributed to the theoretical framework of the Transportation-Image Model, but also provided health communicators with valuable insights into designing more effective health narratives.

**Kyoungsik Na (39 – Classification 70)**

Florida State University

**Title**

Exploring the effect of cognitive load on the propensity for query reformulation behavior

**Abstract**

*Introduction*

This exploratory study is to examine the effect of cognitive load on the propensity to reformulate queries during information seeking on the Web, specifically the effect of manipulating three affective components of cognitive load--mental demand, temporal demand, and frustration--will be explored to in relation to the propensity to reformulate queries.

*Purpose*

The purpose of the study is to better understand the effect of cognitive load on query reformulation behavior of information seeking process on the Web which can be used in improving the design of IR systems and understanding of what elements constitute to cognitive load.

*Research Questions*

The following research question and three sub-questions guided this study. Is there any difference in the propensity for query reformulation behavior between searchers who experience cognitive load manipulation and searchers who do not experience cognitive load manipulation?

1. Is there any difference in the propensity for query reformulation behavior when mental demand increases?

2. Is there any difference in the propensity for query reformulation behavior when temporal demand increases?
3. Is there any difference in the propensity for query reformulation behavior when frustration increases?

### *Methodology*

The study methodology will employ an exploratory research design that uses an experimental design including: (1) pre-survey; (2) experiments; and (3) post-survey. The study experimental design will also need the followings for data collection: (1) NASA-TLX; (2) 54 counterbalanced subjects; and, (3) screen-capture of transactions. To examine whether or not there is any difference in the propensity for query reformulation behavior among participants, this study will expose each of the two groups of participants to different stimuli. The experimental group will have three treatments in an attempt to increase cognitive load while the control group will not have any treatments. Three treatments in the experimental group are followings:

1. Mental demand: Subjects will have dual-tasks while they perform a task in an attempt to increase mental efforts.
2. Temporal demand: Subjects will have a time locked (5mins) while they perform a task in an attempt to feel time pressure.
3. Frustration: Subjects will use On-Screen Keyboard (provided by Microsoft Windows 7 Professional) in an attempt to increase frustration.

### *Procedure*

The experimental design consists of the following activities: Complete a pre-task survey - Complete search task1 – Complete a post-task survey – Complete search task2 – Complete a post-task survey – Complete search task3 – Complete a post-task survey.

### *Data collection and analysis*

Data will be collected, coordinated, and interpreted through following methods:

1. Pre-survey: Subjects will fill out a questionnaire about demographics and computer knowledge.
2. Search transaction: Subjects will perform three search tasks. Transaction of the information search processes will be recorded using Camtasia Software.
3. Post-survey: Subjects will fill out NASA-TLX at the end of each search task rating their cognitive load.

### *Significance*

The study expects that the findings of this study will contribute to the development and implementation of information systems and services that will lead to more effective Web searching behavior. This study also expects to promote understanding of the cognitive activities of searchers in order to be of better assistance to both searchers and system developer

## **Robin Naughton (15 – Classification 40)**

Drexel University

### **Title**

A conceptual model: Designing Public Library Websites for Teens

### **Abstract**

#### **Background & Study Objectives**

Teens use the public library to satisfy needs from information to entertainment (Agosto, 2007). Public libraries in the United States are developing websites as a representation of their online identity, offering population-specific sections to their patrons. It is now common to see sections of public library websites devoted to children, teens, or even the elderly. This study follows a user-centered approach to develop a conceptual model for the design of public library websites for teens (TLWs). It bridges a gap in the research literature between user interface design in human-computer interaction (HCI), and library website design studies in library and information science, with the goal of enabling designers and librarians to create library websites that better suit teens' information needs and practices.

#### **Methods**

In Part I of the study, users' mental models are extracted individually through drawings and semi-structured interviews from 30 teen participants (13-15 years old) recruited from three public libraries. In Part II, a web content analysis is performed on 60 TLWs stratified based on demographics. Together, the two parts combine to develop a conceptual model that will allow designers and librarians to create user interface designs that respond to the needs of teens.

#### **Problem Statement**

Compared to studies of children and adults, there are few studies of teens' use of library websites. The library literature focuses on library websites for children and adults, with little on TLWs (Large, 2005). While the HCI literature provides an abundance of information regarding user interface design, there is limited data on the teen population and their design needs. As a result, current designs of TLWs appear as varied combinations of websites for children and adults with no consistent conceptual model being used to represent the needs and user design preferences of teen users. Before building library websites that better suit teens' needs, we first need to understand their mental models of websites, their library website use practices and preferences, and the extent to which current TLWs meet teens' behaviors and needs.

#### **Theoretical Framework**

This study builds on teens' mental models of library websites to create a recommended conceptual model for improved website design. According to Johnson and Henderson (2002, p. 26), "A conceptual model is a high-level description of how a system is organized and operates." The conceptual model provides a framework for design and helps to determine whether the user's mental model will match the designer's model of a particular system (Norman, 2002). Norman (1986, p. 57) argues that "it is the conceptual models that are of primary importance in design: the design model, the system image, the user's model" and if it's not right, then not much else matters. A good conceptual model for TLWs can help to create user interface designs that respond to teen information needs. Hughes-Hassell and Miller (2003) suggest addressing the needs of teens on academic, social and recreational levels, providing a multi-level approach to the design and development of teen library websites.

#### **Preliminary Findings**

Preliminary findings suggest that it is not enough to simply assume that the needs of teens will

be met by combining the needs of children and adults when designing TLWs, but rather it is necessary to challenge design assumptions about user interface structures, features, and interactivity. Designers will benefit from using and understanding teens' mental models that reflect teens' expectations and behaviors of TLWs.

**Shannon M. Oltmann (9 – Classification 14)**

Indiana University

**Title**

Multiple motives, conflicting conceptions: Parsing the contexts of differentiated access to scientific information in the federal government

**Abstract**

Scientific information, used by the U.S. federal government to formulate and evaluate public policy in nearly every arena, is frequently contested and sometimes altered, blocked from publication, deleted from reports, or restricted in some way. This dissertation examines how and why restrictions occur through a qualitative comparative case study. Investigating cases of information restriction can suggest themes broadly applicable across other instances of censorship.

Two frameworks are typically used to analyze restrictions of science policy. Principal-Agent Theory (PAT) examines circumstances in which principals employ agents to work on their behalf. Democratic accountability explains the value of circulating information among bureaucrats, scientists, and the general public and suggests the dangers of restricting circulation.

Four cases were analyzed comparatively, based on analysis of public documents and semi-structured interviews with scientists, bureaucrats, and other key actors. Twenty-six telephone interviews were recorded, transcribed and analyzed with QSR NVivo-8. One case, from the Department of Health and Human Services, centered on breastfeeding advertisements that were replaced with less provocative ads. In another case, climate scientists at the National Oceanic and Atmospheric Administration were denied media interviews. A press release from the Bureau of Justice Statistics was not published because of political pressure. Finally, climate change documents were substantially edited by political appointees over scientists' objections.

Comparative analysis yielded several common themes. Bureaucrats and political appointees frequently explained that there were multiple inputs to the policy process; science was not the sole, or often the most significant, consideration. Thus, without using the language of PAT, policymakers indicated they were accountable to multiple principals. They also viewed scientists as their agents, conducting research to aid the policy process. In addition, these policymakers evaluated economic and political ramifications of policies; scientists, they claimed, did not understand these complexities. Finally, they said that scientists were too passionate about the science in question.

Most scientists said they were passionate about their research, which they viewed as a vital, essential component of public policy. Nearly all argued that bureaucrats did not understand the significance or urgency of the science. However, scientists also believed that science should be neutral and independent of political pressure. Scientists did not see themselves as bureaucrats' agents; instead, they positioned themselves as independent actors or agents of the public. Unlike bureaucrats, scientists frequently invoked the normative framework of democratic accountability; they were upset about restrictions which circumvented the public's participation in democratic policy making.

Scientists and bureaucrats viewed scientific research and the policy process differently. Bureaucrats and policy makers had to contend with various, sometimes conflicting motives for enacting particular policies; science was one of many inputs into a complex process. In contrast, scientists conceptualized research as the most significant input for policy, as a vital and urgent issue, and as a product for policymakers and the general public. Thus, there was disagreement about the significance and role of the information in question, as well as different conceptualizations about its broader context. Future research will investigate the applicability of these conclusions to other instances of information restriction.

**Jodi L. Philbrick (45 – Classification 86)**

University of North Texas

### **Title**

A study of the competencies needed of entry-level academic health sciences librarians

### **Abstract**

The convergence of new technologies, evidence-based medicine, and bioinformatics has created a complex information environment in which academic health sciences librarians must function, and it is important to create a comprehensive inventory of the competencies needed of academic health sciences librarians to adapt to this environment. The purpose of this study was to identify the professional and personal competencies needed of entry-level academic health sciences librarians from the perspectives of academic health sciences library (AHSL) directors, library and information sciences (LIS) educators that specialize in educating health sciences librarians, and LIS adjunct faculty/health sciences librarianship practitioners as well as compare and contrast each group's perspective on the professional and personal competencies. Three panels of experts participated in the study (13 AHSL directors, eight LIS educators, and eight LIS adjunct faculty/health sciences library practitioners), and each panel completed three rounds of the Delphi method individually without knowledge of the other panels. All three panels completed the same questionnaire for the fourth and final round. In Round 1, each panel of experts identified professional and personal competencies needed of entry-level academic health sciences librarians. In Rounds 2 and 3, each panel of experts rated and re-rated the professional and personal competencies identified in Round 1 on a scale from 5 (critically important) to 1 (not important). The ratings were analyzed using descriptive statistics, specifically medians and interquartile ranges. In Round 4, members of all three expert panels completed the same questionnaire to choose their preferred list of professional competencies and their preferred list of personal competencies of the ones developed by each of the panels. Of the 26 experts that completed the fourth round questionnaire, 23 (88.5%) chose the LIS educators' list of professional competencies, two (7.7%) experts chose the LIS adjuncts/health sciences librarianship practitioners' list, and one (3.8%) chose the AHSL directors' list. Regarding personal competencies, 14 out of 26 (53.8%) experts chose the LIS educators' list, nine (34.6%) chose the LIS adjuncts/health sciences librarianship practitioners' list, and three (11.5%) chose the AHSL directors' list. One of the major findings is that the professional and personal competencies developed by the LIS educators were preferred over the ones developed by the other two panels, indicating that they have an awareness of the competencies needed of entry-level academic health sciences librarians. Among the three panels, there were nine common professional competency areas and ten common personal competency areas. The AHSL directors and LIS educators had the most professional competency areas (10) in common, and the AHSL directors and LIS adjunct faculty/health sciences librarianship practitioners had the most personal competency areas (14) in common. Interestingly, the LIS educators and LIS adjunct

faculty/health sciences librarianship practitioners had the least number of professional and personal competency areas in common, three and five respectively. The findings of the study can be used for recruitment and selection, career pathing, staff training needs, continuing education courses, job descriptions and interview questions, and the evaluation of employee performance. The study may also influence the Medical Library Association's educational policy statement.

**Lisa Quirke (25 – Classification 52)**

University of Toronto

### **Title**

Settling in, reaching out and keeping secrets: Information practices of Afghan newcomer youth in Toronto

### **Abstract**

This qualitative, exploratory study examines the information practices of Afghan newcomer youth during settlement. Settlement, broadly defined, refers to the process of adjustment experienced during the first few years following migration. This process may include challenges such as learning English, finding housing, navigating an unfamiliar educational system and learning about a new culture. Though the Canadian government spends millions of dollars annually on settlement programs [1], little is known about how youth seek, share and use information following migration. This project explores the settlement-related information practices of Afghan newcomer youth in Toronto. Afghan youth experience some of the highest rates of poverty, unemployment and early-school leaving in the city [2,3].

Information studies research has only begun to explore how information practices change with migration [4, 5]. Studies of marginalized groups, such as those living in poverty [6], ethnic minorities [7], or migrant farm workers [8] offer some indication of the difficulties and circumstances people face when seeking, sharing and using information, however none fully addresses the issues of permanent settlement among immigrants and refugees. Due to the dearth of research on information practices during settlement, in particular among youth, an exploratory research design that focuses on phenomena in context was selected. As such, this project generated a framework that is grounded in the data collected; this study, in exploring and describing phenomena, is a first step toward later studies that will be able to confirm hypotheses and generalize findings to other groups.

Data collection included semi-structured interviews and participant observation over a period of two years in order to gain insight into the context of Afghan youth settlement and information practices in Toronto. I conducted in-depth interviews with seven Afghan newcomer youth to understand their settlement experiences and information practices, including preferred information sources and ICT use. Additional interviews were conducted with information and referral specialists serving Afghan youth, to gain their perspective on youth's information practices during settlement.

Interview transcripts and fieldnotes, which consisted of extensive hand-written notes taken during and immediately following participant observation, were analyzed using a grounded-theory approach [9]. Some concepts emerged from the coded data that matched those found in existing literature, while others were inductive and emerged solely from the interview and fieldnote data.

The preliminary findings of my study indicate that context matters: for example, youth arriving alone as refugee claimants experienced different settlement information needs than youth who arrived with family. Leisure settings also emerged as important places in which youth sought settlement information. In addition, youth noted that they withhold information relating to settlement from family members back home in order to avoid worrying them.

It is vital to document the information practices of newcomers in order to learn more about effective strategies to support their access to relevant settlement information. In addition to its relevance to public policy debates, this study also has implications for research in information studies as it adds empirical findings on Afghan youth to the growing body of research on immigrant information practices [4].

#### References:

- [1] Citizenship and Immigration Canada. 2010. *Backgrounder: Government of Canada 2011-12 settlement funding allocations*. Retrieved September 24, 2011 from <http://www.cic.gc.ca/english/department/media/backgrounders/2010/2010-12-07.asp> .[2]
- Ornstein, M. 2006. *Ethno-racial Groups in Toronto, 1971-2001: a demographic and socio-economic profile*. Institute for Social Research, Toronto.
- [3] Amir, N. M. 2009. *Crossing the finish line: An analysis of the status quo of Afghan youth in the Ontarian school system*. Afghan Association of Ontario, Toronto.
- [4] Caidi, N., Allard, D. and Quirke, L. 2010. Immigrants and their Information Practices. *Annual Review of Information Science and Technology*, 44: 493-531.
- [5] Silvio, D.H. 2006. The information needs and information seeking behaviour of immigrant southern Sudanese youth in the city of London, Ontario: an exploratory study. *Library Review*, 55, 4 (2006), 259-266.
- [6] Chatman, E. A. 1996. The impoverished life world of outsiders. *Journal of the American Society for Information Science*, 47, 3 (1996), 193-206.
- [7] Metoyer-Duran, C. 1993. *Gatekeepers in ethnolinguistic communities*. Ablex Publishing Corporation, Norwood, NJ.
- [8] Fisher, K., Marcoux, E., Miller, L.S., Sanchez, A., and Ramirez, E. 2004. Information behaviour of migrant farm workers and their families in the Pacific Northwest. *Information Research*, 10, 1 (2004). Retrieved January 15, 2010 from <http://InformationR.net/ir/10-1/paper199.html>
- [9] Emerson, R., Fretz, R., and Shaw, L. 1995. *Writing ethnographic fieldnotes*. The University of Chicago Press, Chicago.

## **Lily Rozaklis (26 – Classification 52)**

Drexel University

### **Title**

The academic library in the life of the undergraduate: An investigation of undergraduates' academic information behaviors in the digital age

### **Abstract**

The information landscape in which undergraduate students function and study has changed dramatically within the last decade. The growth of the Internet and the ubiquity of digital technologies have led to the proliferation of information sources and channels in a variety of types and formats, of which the academic library (including library information sources and librarians) is a part. The explosive growth of information and easy access to it is unprecedented in human history, and is accompanied by lifestyle changes and expectations. This dissertation research examines undergraduates' academic information behaviors during this era of ever-changing information environments, and identifies the position of the academic library in this increasingly crowded information landscape.

While undergraduates' academic information behaviors have been studied previously, prior studies generally investigate only a portion of undergraduates' academic information behaviors or employ a library-centric perspective by focusing only on undergraduates who have used the library and the library's information services. Drawing from Zweizig's (1976) construct, "the library in the life of the user," and three relevant information behavior models (Taylor, 1968; Krikelas, 1983; Abels, 2004), this research investigates multiple information seeking components from the undergraduates' perspective: the information sources and channels they use, including academic libraries and library information sources; the people they consult, including librarians; selection criteria for information sources and channels of all types; and, the information seeking obstacles they identify. Additionally, this research explores whether any of the aforementioned components of undergraduates' academic information behaviors differ by discipline or class standing.

To achieve the broadest possible perspective this research was designed to make the undergraduates' perspective central, regardless of whether they are users or nonusers of academic libraries. Data will be gathered using a mixed method approach consisting of two methods: survey research and group interviews. Survey research was utilized to reach a larger number of undergraduates than possible using other methods. An electronic questionnaire was distributed to all undergraduates in a college of business and a college of arts and sciences, approximately 4,200 undergraduates combined, in one large urban research university located in the northeastern United States. Group interviews will be used to acquire richer details about the undergraduates' academic information behaviors. Results will be presented from the undergraduates' perspective and interpreted in relation to Zweizig's construct to understand "the academic library in the life of the undergraduate."

The future of the academic library is a topic of continuing concern for the profession. Results from this research will contribute to LIS practice, research and education. Academic librarians may use the findings to develop information seeker-centered services that incorporate the academic librarian either directly or indirectly, assign priorities to their work, and determine what investments to make to be relevant in undergraduates' academic lives. Researchers may use the findings to develop a theoretical model of undergraduates' academic information behaviors, taking undergraduates' discipline and class standing into account. Educators may use the

findings when preparing LIS students to meet the needs of undergraduates in their future academic library careers.

#### References

Abels, E.G. (2004). Information seekers' perspectives of libraries and librarians. In D. Nitecki (Ed.), *Advances in Librarianship* (p. 151-169). Amsterdam: Elsevier Ltd.

Krikelas, J. (1983). Information seeking behavior: Patterns and concepts. *Drexel Library Quarterly*, 19(2), 5-20.

Taylor, R.S. (1968). Question-negotiation and information seeking in libraries. *College & Research Libraries*, 29, 178-194.

Zweizig, D.L. (1976). With our eye on the user: Needed research for information and referral in the public library. *Drexel Library Quarterly*, 12(1/2), 48-58.

### **Karen Louie Smith (3 – Classification 10)**

University of Toronto

#### **Title**

*Making* policy participation: The co-construction of the social web and citizen designers

#### **Abstract**

My research is premised upon the idea that the creation of public policies and the social web are both *making* activities, which can include citizens. For information scholars, the idea that end-users or citizen-designers and the social web may be mutually shaped may seem obvious. How to go about designing more genuine and effective opportunities for citizens to be involved in policy-making remains an immensely challenging endeavor for governments and civil society organizations. In Ontario, Canada, the social web, including web 2.0 services (such as Facebook, Twitter and YouTube) and 'open' platforms (such as wikis and the Drupal content management system) are becoming part of policy-making processes. Although the provincial government banned Facebook from staff computers in 2007, a Facebook group with 100,000 members was credited in the legislature for changing the political tide in relation to regulations for young drivers in the province. Understanding such situations motivates my research. *How do citizen-designers leverage the social web to attempt to build robust opportunities for citizen participation in Ontario policy?* My research question implicitly suggests that assemblages for participation can include both social and technical practices. I seek to understand the assemblages on the fuzzy spectrum of success and failure in engaging citizens in policy-making.

#### **Theory, methods and data collection**

*Using science and technologies studies (STS) and actor-network theory as methodological scaffolding*, I am exploring assemblages which include artefacts on the social web, a citizen-designer, and an Ontario bill to better understand policy participation. My data collection began with the creation of a list of 20 bills discussed in the province of Ontario which pertain to the themes of identification, transparency, and participation. Subsequently, I conducted systematic searches of the internet and the social web (including social networks, blogs, and video sharing sites) to locate instances of citizens participating online. Finally, I contacted the social web citizen-designers to carry out semi-structured interviews (target n=20). My analysis of the social web artefacts and interview transcripts are revealing a number of emerging themes.

## **Emerging themes and research significance**

Thus far, the citizen-designers recruited for this project range from young adults who created Facebook groups from their bedrooms, to established professionals who may be considered policy elites. The participants have been predominantly male and white, but have varied ages. Their motivations and experiences of participation have differed. Some participants became engaged because a policy issue would affect them personally, others spoke of ongoing civic involvement. Varied stories of participation have emerged such as 'going viral' with coverage by the mass media, or remaining small and unnoticed. Various stories of strategies for use of government information have also emerged. For example some participants spoke of absent information, needed from government, as significant to their participation. As governments are increasingly intertwining citizen participation with open government agendas, experiences of citizen designers must be brought to bear. The barriers to participation reveal possible points for intervention.

## **Cheryl Stenström (42 – Classification 75)**

San Jose State University

### **Title**

Factors influencing funding decisions by elected politicians at the state/provincial level: A case study of public libraries in Canada

### **Abstract**

The decisions leading to annual funding allotments for libraries can be complex, with many factors influencing the final outcome. Staff in public libraries have been challenged to adapt services to meet patrons needs, yet one constant has been the financial uncertainty underpinning the planning and work carried out on an annual basis. The purpose of this study was to determine factors (internal and external) which influence Canadian provincial politicians when making funding decisions about public libraries.

Using the case study methodology, three provincial governments in Canada were explored. Specifically, the study collected data from interviews with elected officials and senior bureaucrats, and primary and secondary documents focused on budget recommendations for public libraries from the 2009/10 budget year. The data was analysed to determine whether any of the six tactics of influence as identified Cialdini (2001) (i.e, commitment and consistency, authority, liking, social proof, scarcity and reciprocity) were instrumental in these budget processes. Preliminary findings are presented, and show the principle of 'liking' may be especially relevant to these decisions.

This study makes both professional and scholarly contributions to library and information science. It fills a gap between the perceptions of library leaders on effective influence tactics and those which can be verified with their elected targets and begins to address the question of evaluating advocacy campaigns empirically. It also adds to the research on decision making and budget processes in the political context in Canada. By examining key actors at an individual level, the construct of influence may be added to the study of public finance and budget theory generally. While the case study has been used in previous library research, a framework for analysis as it applies to the provincial decision-making context has been developed; this may provide useful for further research in additional settings. Professionally, senior library leaders, board members and those active in library associations may gain insight into effective communication processes between stakeholders and provincially elected politicians, and indeed,

the study may be of use for leaders in other non-profit agencies working within the framework of provincial funding.

**J. Brenton Stewart (5 – Classification 13)**

University of Wisconsin – Madison

**Title**

Informing the city: On the culture of print in antebellum Augusta, Georgia 1825-1860

**Abstract**

Much is written about the nineteenth-century American South's delayed development in almost every aspect of human life and technological advancement. The trouble with these characterizations is they tend to obscure Southern progress and most importantly create a false reality of not only Southern but American lifeway's during this period. My dissertation, "Informing the City: On the Print Culture of Antebellum Augusta, Georgia" examines the information industry of this, often overlooked, city in middle Georgia. For much of the antebellum period Augusta was Georgia's cultural, economic and information hub, boasting two daily newspapers, the Medical College of Georgia, which published the Southern Medical and Surgical Journal; two agricultural papers; several literary and children's magazines; and a library founded by the Young Men's' Library Association of Augusta.

My dissertation is an oppositional investigation that rebuffs both historical and contemporary notions that the antebellum South was wholly illiterate and disinterested in technological advancement. As such, I am less interested in the reading habits of individuals and focus instead on the published/printed documents of businesses and organizations in Augusta. Specifically I am interested in the social, economic, and political motivations that surround the production and consumption of Augustan print information. Situated within the framework of social construction of technology theory, this dissertation treats printed text as a form technology. This dissertation makes two arguments: 1) the proliferation of print information in antebellum Augusta correlates to what Ben Kafka, calls practical literacy or "literacy toward practical rather than literary ends." Because much of the research on geographically situated reading histories privileges novels as sources of data, other literacies are hidden from view. 2) Augusta's elite adopted print as a form of technology to help imbue a spirit of Southern self-agency, as well as a performance tool, designed to showcase Southern ingenuity and technological proficiency. I illustrate these patterns by analyzing an assortment of print genres in antebellum Augusta, Georgia encompassing agriculture, literary, medical, and business (jobbing) literatures as well as investigate the history and role of the city's public and medical libraries.

**Sayaka Sugimoto (27 – Classification 52)**

University of Toronto

**Title**

A content analysis of an online support group for people living with depression

**Abstract**

The rapid increase in the number of people suffering from clinical depression is a global concern. By 2020, depression is going to be the second leading cause of disability for all ages and both genders in the world [1]. Today, depression affects 121 million people worldwide and 2.5

million people in Canada. However, less than 25 percent of patients access appropriate treatment due to a combination of lack of knowledge and stigma associated with mental illness [2]. As a result, the majority of patients remain untreated and continue to suffer. An increasing number of patients turn to the Internet to seek information and support. Online support groups, in particular, have shown a strong potential to foster supportive and resourceful environments for patients without restrictions of time, space, and stigma [3][4]. However, in spite of the strong potential of those support groups, little is known about the benefits of participating in those groups due to the scarcity of research and methodological problems of existing studies [5]. For instance, little is known about who participate in those support groups and whether or not/how different users use those communities differently.

In order to contribute to filling the knowledge gaps, my research aims to examine the nature of interaction in a depression online support group by analyzing the types of information exchanged in the community, characteristics of users, and relationships between the user characteristics and their patterns of use. To do so, my study employs mixed methods in three stages. First, a stratified cluster random sampling will be conducted to select approximately 1500 posts made in a depression online community. Demographic and clinical information of the users who made those posts will be recorded. Second, qualitative and quantitative content analyses will be conducted to examine the types of support exchanged through those posts. The coding scheme developed by Bambina [6] will be used with modifications to classify support types. Third, a set of statistical analyses will be conducted to examine the correlations between user characteristics and types of support they exchange in the community. In this process, I examine how user characteristics, such as gender, ethnicity, age, illness severity, and treatment history, affect the types of support users request to or receive from other users.

This research will contribute to the fields of Health Informatics and Library Science by providing empirical evidence about who uses depression online support groups and what kinds of information and support users exchange in those communities. This study is important for healthcare professionals and information professionals who wish to understand the information needs and information seeking practices of those who suffer from depression. Also, the findings from this study will help depression patients and their friends, families and caregivers understand what kinds of benefits users can expect from participating in those groups and make an informed decision about whether or not they wish to participate. The poster of this research will present the preliminary findings from the second stage (qualitative and quantitative content analysis of the posts).

## REFERENCES

- [1] World Health Organization. (2007). Depression. Retrieved Nov 20., 2007, from [http://www.who.int/mental\\_health/maganement/depression/definition/en/](http://www.who.int/mental_health/maganement/depression/definition/en/)
- [2] Public Health Agency of Canada. (2002). A report on mental illness in Canada. Retrieved on Nov 20, 2007, from [http://www.phac-aspc.gc.ca/publicat/miic-mmacc/chap\\_2\\_e.html](http://www.phac-aspc.gc.ca/publicat/miic-mmacc/chap_2_e.html)
- [3] Shaw, B., McTavish, F., Hawkins, R., et al. (2000). Experiences of women with breast cancer: Exchanging social support over the CHES computer network. *Journal of Health Communication*, 5, 135-159.
- [4] Wright, K. (2000). Perception of online support providers: An examination of perceived homophily. *Communication Quarterly*, 48 (1), 44-59.

[5] Griffiths, K. M., Calcar, A. L., & Banfield, M. (2009). Systematic review on Internet support groups (ISGs) and depression (2): What is known about depression ISGs? *Journal of Medical Internet Research*, 11 (3).

[6] Bambina, A. (2007). *Online social support: The interplay of social networks and computer-mediated communication*. New York: Cambria Press.

**Virginia Tucker (36 – Classification 63)**

Queensland University of Technology and San Jose State University

**Title**

Threshold concepts in search expertise

**Abstract**

This research explores the existence of threshold concepts in the development of search expertise. Threshold concepts have been used to explore and identify the most essential concepts—representing transformative learning portals—in subjects ranging from economics to mathematics. This study seeks to improve our understanding of search expertise in the context of today’s information environment using the theoretical lens of threshold concepts and to consider implications more broadly within LIS education.

The research question is: What can be learned from the learning experiences of novice and professional searchers about becoming an expert searcher? To address this question, the study used interviews, think-aloud and talk-after protocols, and transcripts of search interactions in data collection and grounded theory methodology. Two groups of participants were studied: (1) highly experienced, professional searchers, including LIS faculty, information brokers, and search engine designers; (2) MLIS students who had completed coursework in information retrieval and online searching and demonstrated exceptional ability in search. Using two groups of subjects—experts and able novices—provided insights from both sides of the threshold concept portal and from those who may be actively journeying through it. Concepts were identified that may represent threshold concepts for the intellectual work of searching and provide a deeper understanding of transformative learning experiences involved during the development of search expertise.

**Diana K. Wakimoto (12 – Classification 26)**

Queensland University of Technology and San Jose State University

**Title**

The history of queer community archives in California since 1950

**Abstract**

**Purpose**

This study examines the history of queer community archives in California. Its goal is to construct histories of three community archives (GLBT Historical Society; Lavender Library, Archives, and Cultural Exchange of Sacramento, Inc.; and ONE National Gay and Lesbian Archives) and through these histories discover why these independent, community-based archives were created, the issues that influenced their evolution, and the relationships among the

archives. Additionally, it compares the community archives to institutional archives which collect queer materials.

### **Significance**

The study contributes to the literature in several significant ways: it is the first in-depth comparative history of the queer community archives movement; it adds to the cross-disciplinary research in queer and archival histories; it contributes to the current debates on the nature of the archives and the role of the professional archivist; and it has implications for changing archival theory and practice.

### **Methodology**

This study is a comparative history of the community archives. It used social constructionism for epistemological positioning and new social history theory for theoretical framework. This research used information from seven oral history interviews with community archivists and volunteers and the archives' collections to construct the community archives' histories.

The institutional archives used in the comparisons are the: Bancroft Library, UCSC's Special Collections and University Archives, and James C. Hormel Gay and Lesbian Center. For the comparisons, finding aids and collection policies were analyzed along with archival collections.

**Findings** The findings revealed striking similarities in the histories of the community archives and important implications for the archives' survival and the relevancy of the archives profession. Each archives was started by an individual, or small group, collecting materials to preserve history that would otherwise have been lost as institutional archives were not collecting queer materials. Each collection grew and became the basis for the community archives. The archives were created to rectify the silences in the institutional archives. While in the past, the community archives had little connection to institutional archives, today they have varying degrees of partnerships. However, the historical lack of collecting queer materials makes some members of the communities reluctant to donate materials to or collaborate with institutional archives. The community archives have grown to incorporate more public programming functions than most institutional archives. All three are currently managed by professionally trained and educated archivists. All three face financial issues impacting their continued survival.

### **Implications**

This study supports previous research on community archives showing that communities take the preservation of history into their own hands when ignored by mainstream archives. It also expands the understanding of queer history to include in-depth research into the archives which are the sources of material for constructing history. Currently, community archives struggle to sustain their operations and partnerships with better-funded institutional archives would be one way to build more collaborative, respectful relationships with the communities in this post-custodial age of archives. Institutional archivists need to understand the histories of their communities and the communities' archives in order to better serve and represent a diversity of voices in the archives.

## **Jing Wang (6 – Classification 13)**

Pennsylvania State University

### **Title**

Behind Linus's Law: Investigating creative peer review processes in Open Source

### **Abstract**

Peer review is an important collaborative activity of knowledge work. It involves peers evaluating one's work products to detect flaws and discover potential improvement. Besides assuring quality, peer review can evoke creativity: one recognizes an opportunity to elaborate or refine an idea, improves current approaches, develops a new method or creates a new product. Such creative peer review is critical to accomplish professional work.

I am especially interested in open source software (OSS) creative peer review. Extensive peer review is considered the power of OSS communities, where geographically dispersed individuals, mostly voluntarily, collaborating on developing software products. Despite its importance, OSS peer review has not been studied with respect to creativity. Even the understanding of how OSS peer review is performed is limited at depth (e.g., quantitative) and scope (e.g., patch review).

My research is to investigate how OSS communities achieve creative peer review and how such creative collaboration can be supported. It seeks to answer (1) how is peer review conducted in OSS communities? (2) In what conditions does creative peer review occur? (3) How specifically can they be improved to support creative peer review?

Theoretical support I lean on to address the questions includes activity theory, as well as theories and empirical findings in creativity and social psychology.

I use comparative case studies in OSS communities that are established and well-recognized as creative. Mozilla and Python are selected because of this criterion; furthermore, they differ at community sizes, structure, product types, code review policies and supporting tools. Both qualitative and quantitative analyses will be applied using content analysis and interviews. Data sources include bug reports, source code, design documents, emails, wikis, and web pages.

I have generated preliminary results for my first two research questions, drawing primarily on the data from bug tracking systems in Mozilla and Python. I identified four common activities of OSS peer review, submission, identification, resolution and evaluation. I also quantitatively characterized each activity, and qualitatively analyzed how participants interact with each other and with bug tracking systems. These analyses show that despite the similarities to four of the core steps in conventional software inspections (i.e., individual reviews, review meetings, rework and follow-up), OSS peer review differ at product stability, review group composition, reviewers' motivations, division of labor, and decision rules. I further articulated the obstacles and enablers of creative collaboration during each activity, recommending design implications to enhance creative collaborative bug fixing processes - support for establishment of common ground, externalization of social networks, creation of activity-based personal profiles, awareness of resolving progress, and articulation of design rationale.

My research will contribute to the areas of Human Computer Interaction and Computer Supported Cooperative Work with mid-level abstraction of OSS creative peer review practices and implications for designing tools that support distributed peer review. Despite the peculiarity of its context, this research can also inform design of volunteer organizations (e.g., pattern analysis) and improvement of peer review in other remote collaboration (e.g., academia).

## **Melinda R. Whetsone (28 – Classification 52)**

Florida State University

### **Title**

The situational relevance of kept personal artifacts: An exploratory study of kept artifacts as expressions of need of adults living with Type 2 Diabetes

### **Abstract**

Diabetes, a chronic disease characterized by high glucose levels in the body, is currently estimated to affect 23.6 million people, ages 20+ years, in the United States. The potential effects of diabetes may include death, a shorter lifespan, blindness, kidney failure, and amputations. The majority of individuals (90-95%) diagnosed with diabetes are diagnosed with Type 2, which is more commonly known as adult onset diabetes. Management of Type 2 diabetes entails using a combination of medication, diet changes, and exercise. Successful management often involves education and the use of various health information tools to monitor diet (nutrition), exercise, and glucose readings.

The information needed to support successful management of Type 2 diabetes may come from various sources, e.g. healthcare provider, pharmacist, or diabetic magazine. Personal health information technologies that offer tailored guidance are in development and increasingly promoted as a means for individuals to track and share various health related information. However, successful digital tool development depends on knowledge of health information behaviors. Therefore, this study takes a personal information behavior approach and aims to determine what information items people currently keep and find useful. Specifically, this study investigates the information items that adults with Type 2 diabetes keep in their homes to help manage their life with diabetes. For the purpose of this study, kept health information items (or artifacts) are considered physical information items, e.g., books, news clippings, or journal articles, which are on the individual's premises at the time of the interview. Electronic items, maintained on the individual's computer, or glucose meters are also considered kept artifacts; this is inclusive of spreadsheets, bookmarked URLs, etc.

This study expands upon current knowledge of personal health information management with regard to the types of health information items kept in homes, to include information needs and uses of kept personal health artifacts. This extension is important in order to understand the purpose an item serves in an individual's life. This study is further unique in that it focuses on established personal health information collections, as opposed to identifying material consulted during a search process, and recognizes that individuals also keep electronic items, such as spread sheets and data on glucose meters.

Subjects (n=21) were recruited from a diabetes center associated with a teaching hospital in the Southeast. Data were collected during using semi-structured interviews conducted in the participants' homes in accordance with a naturalistic framework. Data analysis is on-going. It is anticipated that the results of this study will inform several stakeholders, including health professionals, library professionals, and health information technology developers. Specifically, the results may:

- Provide health professionals, such as diabetes educators, with knowledge regarding information items kept to inform diabetes self-management in order to make informed educational course decisions.
- Inform informational professionals as to material that is useful for the population so they may make collection decisions accordingly.

□ Inform future development of health information systems, e.g., WebMD, so they may offer useful and relevant reference material that is not already maintained in a home

## **Hong Xu (29 – Classification 52)**

University of North Texas

### **Title**

Factors affecting faculty use of learning object repositories: An exploratory study of Orange Grove and Wisc-Online

### **Abstract**

A learning object (LO) may serve as the basic building block of instructional materials. A learning object repository (LOR) may facilitate reusing and sharing LOs. One problem though, is that there are not very many users of LORs. Consequently LOs positive impact on education is limited. In the literature of LOR research, there is lack of research into the factors affecting faculty use of LORs, more specifically factors affecting the faculty who have used or are using LORs.

The purpose of this study was to identify factors that motivate or impede faculty use of LORs from actual faculty users' perspectives. The Unified Theory of Acceptance and Use of Technology (UTAUT) served as the theoretical framework for this study.

The study used a mixed research approach to seek answers to two research questions.

1. What are the factors that motivate faculty use of LORs?
2. What are the factors that are barriers for faculty use of LORs?

Research subjects were faculty users from two LORs: Orange Grove and Wisc-Online. Two phases of the study were conducted. Phase I of the study conducted 13 (4 face-to-face, 7 Skype, and 2 phone) interviews with faculty users of Orange Grove and data were analyzed by a content analysis method. Based on the results of Phase I, Phase II collected data by a survey instrument from 38 respondents to Orange Grove and Wisc-Online surveys, and data were analyzed by descriptive statistics and analysis of variance. The study identified 22 factors as motivators for faculty use of LORs, which reflect that LORs generally attract faculty from the aspects of (1) perceived usefulness, (2) extrinsic motivation, (3) job-fit, (4) relative advantages, (5) facilitating conditions, and (6) compatibility. The study identified 13 factors as barriers for faculty use of LORs, which reflect the critical issues that impede faculty use of LORs in aspects of (1) perceived usefulness, (2) extrinsic motivation, (3) job-fit, (4) relative advantages, (5) complexity, (6) compatibility, (7) behavior control, and (8) self-efficacy. The identified factors were classified into 11 constructs under 5 dimensions defined by UTAUT. UTAUT provides a theoretical guide from dimension and construct perspectives to understand the factors that motivate or serve as barriers for faculty use of LORs, and the results of the study also validate UTAUT in the context of faculty use of LORs.

This study is exploratory in nature and significant in three aspects. First, the study's findings contribute to understanding the reasons that faculty use or do not use LORs and provide foundations for designing strategies to increase faculty use of LORs. Second, this study is among the first known to explore these factors using UTAUT as the theoretical framework. Third, the

survey instrument developed in this study was tested as reliable. It may be useful for future studies.

**Yong Jeong Yi (17 – Classification 51)**

Florida State University

**Title**

Consumer health information behavior in public libraries: A mixed methods study

**Abstract**

Considering that users' inadequate health literacy is one of the biggest challenges for consumer health information services provided in public libraries, the study focused on health information behavior of public library users according to their health literacy abilities. The proficiency levels of health literacy were determined by the scores of the Short Test of Functional Health Literacy Ability (S-TOFHLA). The study applied self-perception theory for measuring health information behaviors, and sense-making theory for designing a neutral questionnaire for interviews. The study employed self-administered survey as a principal quantitative method and in-depth interviews as the follow-up qualitative method. The total number of people surveyed was 131. For the interviews, the study used a purposive sampling to select 20 participants among survey respondents. According to the findings, 98.5 percent of study participant were proficient users. The study found some significant associations between health literacy and user demographic characteristics including gender, ethnicity, and education levels. The findings indicated that even if a majority of users were aware of the importance of accessing health information in public libraries, they were not familiar with health information resources or services provided by public libraries. A large portion of participants did not have appropriate skills to assess the quality of health information. The findings from interviews provided further evidence of users' lack of knowledge of quality criteria. Most of study participants relied on library collections concerning the quality of health information. After using health information provided by public libraries, study participants were likely to experience knowledge extension and a decrease of anxiety. In addition, they tend to take actions (e.g., treatment decision, health behavior/lifestyle changes). Findings from interviews enriched the survey results. Most of study participants with proficient health literacy judged their health literacy as excellent or good. However, the findings indicated study participants had considerable barriers in seeking, evaluating, and using health information. The challenges included barriers with staff, limited collections, complicated healthcare terminology or medical jargon, and contradictory treatment or remedies. The study suggests that public libraries should pay more attention to raising public awareness and encouraging continuing education for librarians in promoting consumer health information services.