2013 Annual Conference Abstracts:

Juried Paper Proposals

In the Company of Questions: An Introduction to the Invisible Intermediaries of Search

Presenter: Betsy Martens, University of Oklahoma

In a regrettably titled series of articles, Schneider (2006a, 2006b, 2006c) and Peters & Bell (2006) lamented the weaknesses of open public access catalogs in comparison with the strengths of contemporary commercial search engines such as Google. Ease of use, personalization, and relevance rankings were only a few of the ways in which commercial search engines outperformed the OPACs. However, one thing not mentioned in what Schneider (2006b) dubbed this "checklist of shame" is even more glaringly apparent today, as Google has become the search platform of choice for all but the most limited of in-library queries, while librarians themselves (e.g., Cahill & Chalut, 2009) are now exhorted to learn the basics of search engine marketing (SEM) and search engine optimization (SEO).

This unmentioned fact is that, considered as a search "platform" (Gillespie, 2010), the traditional library OPAC has displayed a professionally circumspect and deliberately circumscribed approach to directing users toward any specific search results on a list of all possible matches to their queries, while, on the other hand, commercial search engines have seemingly had substantial incentives to disintermediate and facilitate the search process through both privatizing and publicizing the search platform on which it takes place (Hargittai, 2007). As users may utilize commercial search engines such as Google for informational, navigational, and transactional queries, or various combinations of each, search engines cannot distinguish the underlying motives behind these queries (Broder, 2002), so tend to operate as a general platform providing both "organic" (non-paid) and "sponsored" (paid) results to all such queries. Importantly, there is some evidence to suggest that the boundaries between organic and sponsored search results may be becoming even harder to determine (Yang & Ghose, 2010). Crane (2011, p. 113) comments that "The technological affordances of search engine interfaces and the attending user experiences materially anchor the discursively constructed myth of disintermediation in design and practice. . . . Results give the impression of neutrality because they are organized according to ranking systems rationalized by the scientistic logic of computation."

Not surprisingly, then, there is tension between what users want (accessible, affordable, and reasonably accurate answers to their questions), what companies want (direct, cost-effective, and presumably profitable linkage to their proprietary content), and what commercial search engines want (comprehensive control over this "matching" process, regardless of the specifics of the individual queries or content). Hargittai (2000, p. 232) correctly identified the generic source of this tension as being the result of the relative abundance of available information and the relative scarcity of attention for that information in general, but neglected its converse in the particular: the relative scarcity of certain specific information and the relative abundance of attention for that information. These tensions mark some of the most disputed territories within the global search engine society (Halavais, 2009; Segev, 2010).

The existence of these tensions has generated numerous scholarly investigations, including the engineering of search engine marketing and optimization (e.g., Berman & Katona, 2011; Evans, 2007; Liu, Chen, & Whinston, 2010; Malaga, 2010; Ortiz-Cordova & Jansen, 2012), the economics and politics of search neutrality (e.g., Grimmelmann, 2010; Manne & Wright, 2011; Wilson, 2011), and the exploration of a wide variety of use, usability, and user issues (e.g., Espadas, Calero & Piattini, 2008; Goldman, 2010; Killoran, 2009; Zimmer, 2010).

One area that has received little scholarly examination, however, is the work of those so-called “search professionals” who create, develop, manage, and analyze the organic and sponsored search tactics, techniques, and tools, including audience research, keyword discovery, indexing and linking parameters, and on-page and off-page search engine optimization, that underlie the smooth surface workings of search engines such as Google. Despite the naïve user’s assumption that the results received in response to a search query are algorithmic and unmediated (Gross & Latham, 2011), there is an immense industry involved in which much of the activity is indeed automated, but some of which appears almost artisanal in attempts to reach and influence specific audiences (Mager, 2012). More than mere marketers but less than recognized gatekeepers, these search professionals perform what we might term “invisible intermediation” among the commercial and non-commercial content creators, Google and the other general, social, and vertical search engines, and the ultimate content consumer. Google in particular is known for encouraging “white hat” efforts (descriptive, credible data and metadata) that provide additional value beyond its own algorithms and discouraging “black hat” efforts (deceptive, fraudulent data and metadata) as well (Google, 2012).

Thus, the questions that these search professionals do or don’t ask during the course of doing intermediary work on behalf of their companies or clients can have important, though largely invisible, effects on the search engine’s results page in response to users’ queries. Since it is well-established that users rarely look beyond the first few pages of a search query (Connaway, Dickey, & Radford, 2011), this invisible intermediation of particular content may have both positive and negative impacts, as search engines routinely provide links to factual, financial, legal, medical, political, religious, retail, and scientific information of all types.

As these “invisible intermediaries” become increasingly sophisticated and their presence increasingly prevalent throughout the information industry, their practices are becoming as much a matter of interest to the LIS community as the somewhat similar skill sets of library catalogers (Hall-Ellis, 2008) or reference librarians (O’Connor, 2011). This paper, therefore, presents the results of a domain analysis (Hjørland, 2002) of emerging educational, employment, ethical, and evaluative practices as shown in the materials of the Search Engine Marketing Professional Organization (SEMPO), the nonprofit trade association whose membership represents a variety of individuals and companies engaged in search engine marketing activities, and compares these practices with those of other professional “relevance workers” (Martens & Van Fleet, 2012) in the information environment. More specifically, the study employs a refinement of Tennis’s “two axes” method of domain analysis (2003) as a methodological lens. This “questioning” of the professional domain of these “invisible intermediaries” may also lead to some more searching questions by critical information literacy researchers and LIS educators.

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THINKING BIGGER: IT'S REALLY ABOUT INFORMATION CULTURE LITERACY

Presenter: James Marcum, Queens College

What are the skills needed for a successful library career in the coming decades? When computers came on line in the 1970s and '80s the idea was "computer literacy." Then in the 1990s academic librarians led the charge to instill "information literacy" as a fundamental requirement for general literacy for college graduates in the information age. Accordingly, information literacy became a staple, an accepted agenda for American education as well as for other advanced societies. The accepted U.S. definition comes from the ACRL (2004): understanding when additional information is needed, the ability to access, evaluate, and manage the information, and to use the information properly to expand understanding and knowledge. Today, literally hundreds of books are available from Amazon.com alone on the skills, instruction, practice, and theory of information literacy (IL). And yet the debate goes on about what to call the subject: alternatives proposals include information fluency, information competence, multi-media literacy, and information and communication technology literacy, to name some of the more widely discussed approaches. Meanwhile, the need for IL competence is a fundamental requirement for effective inquiry today.

Part of the difficulty lies in the range of skills required to cope with the fast-moving information and communication technologies available. IL as practiced in the U.S. has been critiqued as inadequately focused on the practical skills needed for the world of work (Bruce 1999), overly focused on academic skills provided by college libraries and insufficiently addressing the emergence of media and the visual "ecology" (Marcum 2002a, 2002b, 2010), and for other perceived shortcomings. The assessment of IL is critiqued as overly dependent on information processing assumptions with its computational-style cognition (Budd 2008; MacMillian 2005), for weaknesses in the testing process (Scharf 2007) and for uncertainty about what can be tested (information gathering and management) and what cannot (understanding and knowledge building), (Gendina 2008). In short, a UNESCO (2008, 29) report puts the matter thus:

> The notion of standards and indicators for IL in the higher education context is not universally supported. The American and Australasian standards are perceived by some, especially in Scandinavian countries, to be associated with behaviourist traditions of teaching and assessment that are the antithesis of the enquiry driven model of teaching that underpins a constructivist approach.

From this perspective the goal must shift from information transfer to exploring the role of information as the foundations for our contemporary culture and to the work of inquiry learning in knowledge creation.

A global perspective offers a path through the difficulties. Much of the world outside the U.S. utilizes IL guidelines from UNESCO (2008), in collaboration with IFLA, which spell out a grander vision of promoting access to information and learning worldwide under a banner of Information for All Programme (IFAP). This vantage point provides additional studies making a case for addressing the challenges of a comprehensive information culture. Not an information society, which is too narrow, but information culture, encompassing reading, gathering and managing information, and inquiry learning and the expansion of knowledge that produces a better quality of life for all. This living process supports the improvement of knowledge and human intellect by nurturing inquiry and designing and utilizing diverse media for communication, improving understanding, and expanding the uses, socialization, and preservation of information throughout human activity (Ramirez 2002).

Individuals have personal information cultures, varying widely in their world outlook and system of knowledge, seeking information broadly or narrowly, competently or carelessly, thoughtfully and critically or mindlessly and without reflection. Their engagement in or neglect of inquiry in the process shapes their mindset—and their communities—determining whether they are open- or closed-minded, learning and growing or stagnant and dying (Fedorov, et al. 2007).

The UNESCO/IFLA agenda, seeing information and knowledge as a global public good and basic human right for improving health, advancing education, furthering creativity, and preserving diversity and the human heritage adds enormous weight to the importance of promoting information culture literacy. The critical importance of reading is stressed, in contrast to its increasing neglect in the U.S., which is no longer among the top two dozen nations in its level of student reading competence. UNESCO positions reading for pleasure and learning as a vital task for libraries, museums, and information institutions.

Clearly, the goal of IL cannot be the simple testing of information recall from a lecture or exercise as evidence of information literacy. Today's information culture requires reading, communication, using technology, and engaging with others in lifelong learning and inquiry for sustainability. Greater attention is required for better understanding of that culture, drawing on the work of Manuel Castells, Luciano Floridi, James Gleick, and others. Information culture literacy should become a priority goal for a profession committed to preparing professionals to prepare citizens to engage fully in global affairs.

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Constructing the passionate practitioner to inspire and to sustain the profession

Presenters: Anthony Bernier; Jeremy Kemp; Kristen Radsliff Rebmann, San Jose State University

In April 2012 the Australian Association for Certified Practicing Accountants (CPA) commissioned a report into the factors motivating young Australians between the ages of 18-30 in their choice of work (April 2012). The findings indicated that remuneration rated very low amongst the survey participants as a factor which motivated them in the workforce, with only 17.4 percent citing a good salary as the driving force in their careers. More importantly the report revealed that almost a third (32 percent) of those surveyed believed 'passion' for their work was the single most important factor in their careers, closely followed by a positive work life balance. According to CPA Chief executive, Alex Malley, 'the desire to choose a career based on what they were passionate about was a positive sign for the future' (2012).

Career choices based on a passion for what you do rather than what you may earn provide a positive challenge for educators in disciplines such as LIS, where remuneration is generally not high. The findings of the report offer hope for the LIS profession to be able to recruit high-quality, engaged, sustainable and committed graduates and offer an opportunity for educators to reassess teaching and learning to achieve this. It raises the question of how LIS educators might fully exploit the desire of future students to be engaged by a 'passion' for their industry in a climate of short-term outcomes measured by economic success. Educators need to ask questions about not just how they can begin to assist students to acquire relevant skills and knowledge, but also how to provide them with a sense of belonging to a professional group which is committed and passionate about the discipline and to an industry with a deep sense of tradition and of place. Exploration of these questions has led a cadre of Australian LIS educators to explore ways of engaging students in a way which develops their 'passion', with a view to producing graduates who are equipped with industry skills and attributes but also with a deep engagement and connectedness to their new profession even before they complete their study. Brown and Adler describe this type of learning as 'learning to be' rather than 'learning about' (2008, 19). In defining 'learning to be' they argue that mastery of a profession comes not from the acquisition of subject matter but in 'acquiring the practices and the norms of established practitioners in that field or acculturating into a community of practice'(2008, 19).

Educators are too frequently in competitive education markets where demands to conform to standardised modes of practice and to meet increasingly stringent industry standards and employability outcomes have meant that teaching practice can become centred solely on limited, measurable standards imposed by industry, government and by educators themselves--the 'learning about'. Limited time and resources remain for a commitment to 'learning to be'. To engage students fully and to tap into the desire to have 'passion' in their professional life educators may need to facilitate students' 'legitimate peripheral participation' (Lave and Wagner 1991) in the broader community of practice so they are presented with opportunities to engage with the industry while still studying. Through this participation it is believed students will begin to develop an understanding of the norms, practices and issues of their new profession, much as traditional apprentices have acquired not only the skills of their trade but the culture and traditions of their field under the 'watchful eye of master' (2008, 19)

This paper will discuss attempts to adapt the practice of passion-based learning to the Australian LIS student experience. Through collaboration with outstanding professional practitioners and other scholars students in some LIS programmes are being exposed to a range of issues and experiences which are intended to inspire and engage them. Drawing on the work of proponents of passion-based learning, such as John Seeley-Brown, the situated-learning theories of Jean Lave and Etienne Wenger and on John Dewey's concepts of productive enquiry, the aim is to construct a pedagogical approach 'based on the premise that our understanding of content is socially constructed, through conversations about that content and through interactions around problems or actions' (Brown 2008 1). This approach is underpinned by the belief that students will fully engage if they have a sense of wider social and historical forces, understand and value the role of information agencies and information workers and are immersed in the discourse surrounding seminal works, critical issues and core values which have shaped the industry and the profession. The learning strategies and assessment models employed in achieving this are designed to encourage participation in an internal community of practice and provide opportunities through both virtual and physical learning environments for students to self- reflect, to question, to pursue ideas and issues which inspire and engage them and to engage with an external professional community of practice. Through these strategies it is hoped not only to develop capable practitioners but passionate ones.

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An outcome-based assessment of a new eScience librarianship curriculum: the scientific, technical, and social aspects

Presenters: John D'Ignazio and Jian Qin, Syracuse University

Introduction

This paper will report on an analysis of results from an exit survey taken by a cohort of eight fellows as culmination of a three-year, IMLS-funded project at Syracuse University's School of Information Studies (iSchool). In partnership with Cornell University Library, the eScience Librarianship (eSLib) project established a specialization of the iSchool's ALA-accredited Master of Science in Library and Information Science (MSLIS). The specialization was achieved through a curriculum of courses added to the core required set, plus exposure to the practice of eScience and aspects of academic and research librarianship through projects, professional mentorship, topical briefings, conference attendance, and a summer internship. The curriculum featured this variety of components in order to give students skills and education enabling their application of librarianship in the evolving eScience environment. This environment calls for a mix of technical facility, science familiarity, and social finesse to support the work of science researchers who operate with data and technology in synthetic combination to generate new findings—eScience enabled by cyberinfrastructure. The assessment vehicle given at the end of the students' two-year educational program evaluates whether they had mastered course and program outcomes related to the scientific, technical, and social aspects they will need to intelligently manage digital resources for scientists' access and use over an appropriate lifecycle. The survey structure also enables analysis to explore which curricular component had a greater impact given each student's unique science exposure and trajectory through registered courses and skill development and awareness-raising education experienced throughout the program.

Program Evolution

Since the 1990s, the development of information technology (IT) and its application has affected programs of education in librarianship and information studies (LIS). From their high strategic perches, deans of LIS schools responsible for planning and administering such programs gave reports about the impact of IT on traditional areas of library and information service and the corresponding need for a differently educated individual prepared by such schools. Continuous IT development caused a movement away from service provided in a physical library location, and instead created a need for new professionals educated to have an "access orientation" where they assist in providing recorded information and knowledge in whatever form and wherever located, perhaps internationally and relatively instantaneously [Stueart, 1998]. This IT-enabled information environment had two effects on the career environment of professionals: 1) duplicate cataloging effort was reduced as one record about a resource available on a network is sufficient; and 2) demand increased for information systems, or combinations of vendor-supplied systems, that were capable of storing and retrieving different forms, types, and levels of content to meet the particular needs of institutions and working groups [Koenig, 1993]. Individuals prepared with a combination of problem analysis, entrepreneurship, and communication skills, as well as "technical comfortability," would provide the appropriate designs, applications, and standards to enable access to information by individuals working in institutions and businesses [von Dran, 1990].

The impact of IT led not only to the creation of new business-oriented and database technology-driven masters programs offered by LIS schools, but to some extent also affected the ALA-accredited LIS masters programs [Markey, 2004]. These latter programs are bound by the core courses they must offer, the percentage of which has increased across the decade from 38 to 46 percent of the total courses a student needs to obtain the degree—in 2008 programs with a “semi-core,” featuring slates of courses for student selection, increased the core requirement to nearly 60 percent. Across the last decade, there was increased IT emphasis in LIS core courses, such as requiring IT as a specific course, or adding an information retrieval core requirement [Hall, 2009]. Students also could supplement the traditional library emphasis by taking IT-oriented electives, about file structures, text or data-mining, and system or software management, if available at their respective schools [Markey, 2004]. Technical topics also were incorporated into core course topics: for example, the most required topical course, knowledge organization, incorporated metadata, Internet resource description, and ontology, along with traditional cataloging and classification topics [Morgan & Bawden, 2006].

In the past three decades, the practice of science has also changed due to IT research, development, and application. “Big Science” in disciplines such as physics, environmental science, and biomedicine put in place major cyberinfrastructure projects; whereas, “Little Science” in laboratories, field sites, and offices adopted ubiquitous computing and networks to reap collaborative and productivity gains [NSF, 2007]. In reaction, the Association of Research Libraries (ARL) sponsored a number of initiatives to extend the historic partnership between academic and research libraries and the scientists they support and manage the proliferation of digital data objects accumulating in the course of eScience effort [Soehner, et al., 2010]. A few curricular development projects have appeared to train specialists able to work in this area, such as UIUC’s data curation specialization curriculum development [Heidorn et al, 2007] and the data preservation and curation project at UNC [Lee et al., 2007]. As predicted by and advocated for by the deans of LIS schools starting back in the 1990s, this support is not solely about data curation but requires a strong technical and information system use component [Dillon & Norris, 2005]. Therefore, the eSLib program enhanced the existing adaptations to IT in the LIS curriculum with technical aspects found in iSchool information and telecommunications management masters program courses. The technical aspects, however, needed to be tailored to the practice of eScience according to the socially aware resource management strategies of traditional academic and research librarianship.

eSLib Pedagogic and Assessment Approach

The challenge in evaluating eSLib fellows’ mastery of the scientific, technical, and social aspects comes not just in assessing their experience of a mix of newly developed, adapted, or existing courses, but also in the degree other curricular components, such as the core, contributed to their education. The full paper will present analysis regarding the students’ survey responses compared to the eSLib program’s pedagogical approach that will assess their preparation to enter the workforce as eScience librarians in the different settings scientists are now working.

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Curriculum Mapping in LIS: Assuring Professional Standards Compliance

Presenters: Mirah Dow and Andrew Smith, Emporia State University

Students, library and information agency employers and accreditation agencies call for Master of Library Science (MLS) programs to ensure, document, and demonstrate how the school's curriculum incorporates coherent courses of study that systematically integrate statements of intended learning outcomes. According to Cuevas, Matveev, and Feit (2009), the curriculum mapping method provides a visual tool to capture and study the integration of program curriculum. It is an analytic approach that results in visual formatting of key components of program curricula and an overarching framework for analyzing the teaching and learning process.

Literature Review

Cuevas, Matveev, and Feit (2009) indicate that curriculum mapping has been used in the United States (U. S.), British, Australian, and Canadian colleges and universities (Bath, Smith, Stein, & Swann, 2004; Harden, 2001; Jones et al., (2007); Robley, Whittle & Murdoch-Eaton, 2005; Sumsion & Goodfellow, 2004; Tariq, Scott, Cochrane, Lee & Ryles, 2004; Willett, 2008). Cuevas et al. (2009) further state that in U. S. higher education, program curriculum and course mapping exercises have been primarily discussed in the context of focusing institutional assessment efforts (Allen, 2004, 2006; Driscoll & Wood, 2007; Maki, 2004; Palomba & Banta, 1999); as an approach to address requirements of specialized accreditation agencies in business, engineering, and pharmaceutical education (Stivers & Phillips, 2009; Kelley, McAuley, Wallace, & Frank, 2008; Plaza, Draugalis, Slack, Skrepnek & Sauer, 2007; Wigal, 2005); as an effective curriculum improvement process (Kopera-Frye, Mahaffy & Svare, 2008; Bloomberg, 2009); and, as a faculty development tool (Uchiyama & Radin, 2009).

Our literature review indicates that in U. S. library and information studies (LIS) education, while program curriculum mapping exercises may have been utilized, accounts of curriculum mapping by faculty are rarely published. During the past decade, some accounts of LIS curriculum mapping in the context of effective curriculum improvement processes were reported in studies of university-wide efforts to improve university librarians' involvement in information literacy instruction (Salisbury & Sheridan, 2011); library collection development (Hiebert, 2009); project-based curriculum and achievement of project goals (Whitaker & Albertson, 2011); and, in studies of specific foundational courses (Wilson, 2001).

Research Questions

To explore pedagogical strategies and strengthen our continuous Master of Library Science curriculum development process, using fall 2011 and spring 2012 semester course syllabi we answered these questions:

1. Are program outcomes explicitly or implicitly mentioned among the course outcomes on the syllabus?
2. What is the scope and complexity of the knowledge and skills that are taught and learned in a course?
3. Do students in a given course have opportunities to demonstrate what has been learned in each program outcome and to receive feedback in a formal way?

Method

Curriculum mapping is a research methodology that utilizes a quantitative indicators scheme to facilitate comparative analysis and to capture curriculum development over time. The comprehensive, structured curriculum mapping model developed by Veltri, Webb, Matveev, and Zapatero (2011) to examine an Information Science baccalaureate program was used to study the Master of Library Science curriculum at the School of Library and Information Management (SLIM), Emporia State University. This model is

designed to capture the degree of curriculum coherence by systematically exploring relationships between and among five major curriculum components: 1) intended program learning outcomes; 2) course sequence; 3) course syllabi; 4) instructional activities; and, 5) the assessment of learning.
This study is built on the assumption by Cuevas et al. (2009) that, from an instructor's perspective, there might be at least 5 different conceptions of curriculum:

1. Intended curriculum is reflected in program catalog descriptions, and statements of program-level outcomes.
2. Designed curriculum is reflected through degree plans and course sequences.
3. Communicated curriculum consists of course-level outcomes and specific teaching and learning activities listed in course syllabi.
4. Enacted curriculum refers to classroom pedagogies and the content, scope and depth of the material delivered by an instructor in the classroom.
5. Assessed curriculum is the type and content of specific assessment tasks assigned to students in a given course.

Our presentation will emphasize use of these concepts and include the procedural steps, quantitative indicators, and computation procedures used in this study.

Brief Summary of Findings
We focused on the extent to which MLS Program Outcomes are addressed in the master's degree program courses, and sought to determine whether or not 1) students are explicitly informed or reminded about program outcomes in the course syllabi, 2) program outcomes follow developmental progression (introduction, emphasis, reinforcement or application) in the course sequence; and, 3) assessment provides formative and/or summative evidence. Some key findings include that one or more MLS Program Outcomes are explicitly addressed in all core required courses (outcome scope scores); all required courses explicitly express the given program outcome on the syllabus (outcome communication score); the number of program outcomes in each course varies (course breadth score); Capstone course has the greatest sum of I (introduced), E (emphasized), R (reinforced) , A (advanced) scores for a given course (course depth score); two required core courses have the lowest sum of I (introduced), E (emphasized), R (reinforced) , A (advanced) scores for a given outcomes (outcome saturation score); and, all core courses integrate assessment of the given program outcome (assessment points score).

Brief Summary of Conclusions
These quantitative indicators will be invaluable in our continuous curriculum evaluation and planning to capture and document the evolution of program curricula over time, and to provide evidence of continuous quality enhancement in curriculum development. In addition, our curriculum maps are shared with students, and other stakeholders, to point out program structure and faculty expectations. The maps enable students to see coherence in the structure of the curriculum and to understand how individual courses relate to overall program outcomes. The maps potentially serve to develop students as intentional learners by facilitating their decision-making, enhancing student-program fit, supporting efficient student progression throughout the curriculum, and helping to ensure timely graduation.

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Innovation, Competition, and Cooperation: Library and Information Science Education in East Asia in 2013

Presenter: Andrew Wertheimer, University of Hawaii

Library and Information (LIS) education in East Asia (Japan, Korea, China, and Taiwan) is undergoing dramatic changes in response to the continent's rapid advances in the international information environment, as well as significant changes to the nature of higher education. This is resulting in an interesting array of opportunities for cooperation, such as the A-LIEP (Asia-Pacific Conference on Library & Information Education and Practice) and CiSAP (Consortium of iSchools - Asia Pacific) initatives, which have called for internationalizing of LIS education and research.

This study will be based primarily on interviews with faculty at leading national as well as regional Library and Information schools or iSchools and participant observer work as a foreign researcher at the University of Tsukuba, Japan's largest graduate school of library science, which recently introduced an international English-language Master's degree Program in LIS. It also will give an overview of the current efforts of the LIPER 3 (Library and Information Professions and Education Renewal) Project.

Going beyond Japan, the paper will report on innovations China, Taiwan, and Korea, such as the spread of online learning and adaptation of iSchool concepts such as information entrepreneurship and information security.

In addition, the paper will explore how schools in the region are developing cooperative relations through international conferences, exchange of students, faculty, as well as pursuing more regional exchanges and partnerships in the wider Asia-Pacific region and beyond. The study explores employment trends, curricular innovation, research, and relations between researchers and those in professional practice.

The paper will also cover how LIS education is responding to changes in higher education throughout the region, which is increasingly impacted by the same patterns we see elsewhere -- namely, greater autonomy tied with decreasing national funds. In East Asia we see the added complexity of dramatically a dramatically declining birth rates. This has increased competition for students on campus and across disciplines, and even resulted in the mergers of some universities, including the former National University of Library and Information Science. In Japan, this also has led LIS schools to work with practitioners to lobby for changes governing the legislation determining the classification of minimum requirements to become a librarian. At present they are at the undergraduate level, as they are many parts of Asia. This parallels America's situation before the Williamson Report, when the standard professional degree for librarians was the Bachelor's of Library Science. The obvious problem with the current situation is that librarians are seen as clerical staff, who rarely can become administrators. Library directors for the most part come from outside LIS and often do not have an understanding of issues like intellectual freedom or other ethical codes. This may also be related to the increasing evidence of outsourcing in many libraries.

I cannot report yet on the situation in Korea, China, or Taiwan, as I have not arrived in Asia to begin my sabbatical-fieldwork, however, I plan to review relevant literature, visit appropriate archives, and conduct interviews at several campuses.

Awareness of international developments in LIS education should be a natural altruistic interest of LIS faculty for many reasons. We are all colleagues after all, researching many of the same practices, but in different contexts. However, there are strategic reasons us to examine and reflect on the situation of librarianship and LIS education in Asia. For example, because the undergraduate degree remains the staple, LIS education in Asia may offer interesting insight on the repeated calls from unhappy graduates wanting to downgrade the professional degree back to the BLS. It also should be important since most LIS schools have students from East Asia. It is imperative for us as educators to be able to understand the environment "back home" and what opportunities or limitations they may face with a North American degree. Another SWOT reason for interest is the current Trans-Pacific Partnership accord discussions between several nations in Asia with the U.S. and Canada. This agreement, which is being negotiated in secret, may impact professional qualifications for employment similar to how the North American Free Trade Agreement (NAFTA) changed national requirements for librarians to join the profession or become residents in the U.S. and Canada.

A question of survival? Strategies for the small LIS school

Presenters: Brenda Chawner and Gillian Oliver, Victoria University of Wellington

Over the last half-century, there has been considerable discussion about the best ways for library and information studies programmes to survive in changing times. Some commentators, such as Warner (2001), suggested that the field is in crisis, while others, such as Nolin and Åström (2010), consider this to be a time of opportunity. As with most continuums, the 'truth' is likely to lie somewhere in the middle. The goal of this paper is to address the question "What strategies best help a small library and information studies programme survive in changing times?", using the Information Studies programmes at Victoria University of Wellington as a case study.

Most early library schools were established as either stand-alone programmes, or were part of colleges or institutes, not universities (Richardson 2010). However, as the library profession became more established in the 1920s, its senior members argued that universities were more appropriate to educate future professionals, leading to the establishment of the first graduate library school at the University of Chicago (Richardson 2010). These spread to other universities in North America for the next fifty years, so that by the mid-1970s a Master's degree from an ALA-accredited institution had became a prerequisite for most professional positions in North American libraries. However, many library and information studies programmes struggled to find acceptance as legitimate academic programmes in their parent institutions. Nolin and and Åström (2010) identify ten characteristics of the field that contributed to this, including its origins as a field of practice, the relative youth of the field (in comparison to more traditional academic disciplines), the reliance on other disciplines for theory and insights, lack of a consistent identity (with names including library science, information science, library studies, and information studies), and the small size of many programmes.

Between the late 1970s and the early 1990s, fourteen library and information studies programmes were disestablished (Paris 1991). The most notable was the School of Library Service at Columbia University, which traced its origins to the Columbia College School of Library Economy founded by Melvil Dewey in 1887. The primary reasons given for the closings were either economic, on the grounds that the schools failed to pay their way, or that they were failing to meet institutional expectations for research and scholarship (Paris 1991).

In the twenty years since these closings, the remaining library and information schools have responded to the various threats in a number of ways. The first of these involved forming strategic alliances with other groups within their institution to establish a larger school or faculty, which it was hoped would be less vulnerable to threats of closure. Some programmes chose to extend the scope of their programmes to cover related topics, such as archives and records management, which increased the potential number of students, and broadened the stakeholder base. By the mid-2000s, a small group of schools with a strong technology focus joined similar library and information schools to start the iSchool movement (http://www.ischools.org/). In mid-2012 the iCaucus had over 30 members, with a strong focus on developing a shared research culture. A similar group, CISAP (Consortium of iSchools Asia Pacific) was formed in 2008, focusing on programmes in the Asia and the south Pacific. By mid-2012 CISAP had members from 12 countries, and organised an annual conference to bring staff from the various programmes together. Though these actions strengthened programmes by building academic alliances, they did not address the issue of their relatively small size. This threat was able to be addressed because of the development of Web-based course delivery modes. Their adoption allowed programmes to extend traditionally face-to-face programmes to distance delivery, in order to maintain, or grow, their student numbers. Once this was done, there was a new opportunity to form alliances with similar distance programmes, extending the course offerings available to students in a programme. The largest of these consortia is the WISE Consortium (http://wiseeducation.org/).

The remainder of this paper will use the Information Studies programme at Victoria University of Wellington in New Zealand as a case study. The programme is small by North American standards, with 8.5 FTE academic staff, and approximately 70 FTE students at any one time. Its history and development is discussed in detail in Chawner and Oliver (2012). It was chosen for the case study because it has adopted all of the responses identified above in the last twenty years, despite its small size. In addition, programme staff took steps to increase its relevance to New Zealand organisations by including course material on indigenous topics where appropriate. The analysis examines which of Nolin and Åström's threats each action has addressed, and shows how each response the programme chose has been applied to create a thriving information studies programme. Flexibility and agility were key attributes that allowed the programme to respond to the threats it encountered.

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Social Marketing: An Impact Strategy for Libraries and Information Centers in Times of Change and Crisis

Presenters: Barbara Immroth and Bill Lukenbill, University of Texas at Austin

Introduction:

By the 1930s librarianship accepted and promoted libraries of all types as important institutions serving broad-based social, cultural, educational, intellectual and scholarly needs in American society. Nerveless, the 1930s was a decade of economic instability and social dislocations similar to what libraries face today. Important research, theories and strategies targeting library sustainability grew from this general unrest. The important research from the faculty of the Graduate Library School during the 1930 decade and beyond helped solidify the social expectations of libraries and provided means to solve problems. Louis Round Wilson, an early Dean of the Graduate Library School, University of Chicago, held deep concerns for the lack of libraries and their support and the scarcity of readers in the general American population of his day. His concern lead to a number of important survey research projects including The Geography of Reading as well as those by his colleagues including Douglas Waples' People and Print: Social Aspects of Reading in the Depression and his Investigating Library Problems. From these studies we can conclude that these researchers believed that libraries and reading could not prosper and develop without the influence of community decision-makers, committed library users and the general public. We now face similar problems today including economic uncertainties, perceived community indifference to libraries, changing readerships between libraries and funding sources, and technological changes in ways that information is distributed and consumed. To meet these challenges we continually devise operations for survival such as political and social advocacy, reaching out to community leaders and public relation campaigns. Does social marketing as a survival strategy present an avenue worth expanding on in library and information center research?

Social Marketing and Social Change

Social marketing developed in the 1970s to help improve society and to change in positive ways the concepts that people hold about important issues. This paper will address the role of social marketing and its adaptation to library and information centers. It will emphasize the research aspects of this adaptation. The concepts of social marketing clearly address similar needs identified by the early research of Wilson, Waples and others.

The concept of social marketing was first presented by Zaltman, Kotler, and Kaufman, in their 1972 book, Creating Social Change. Social marketing is based on general marketing principles and strategies aimed at selling products and services to consumers but with the purpose of improving society by providing socially relevant information, changing existing actions; changing individual or group behaviors, attitudes or beliefs; and reinforcing desired behaviors. Since the 1970s, social marketing has been used widely to promote a variety of prosocial behaviors including: reducing smoking, reducing drug abuse, preventing heart disease, promoting contraceptive use, and promoting organ donation. These marketing approaches are theoretically encased in well-conceived educational and public information programs and management.

Current authorities writing on social marketing now stress the differences between social marketing and non-profit marketing, and cause marketing. They are careful to clarify issues appropriate to social marketing and ethical considerations inherent in such research. They also outline how marketing research can well-serve social marking campaigns (Kotler and Lee, 2008).

Identifying a target audience is essential in social marketing. Dennis Meissner argues that information agencies such as archives may have focused too broadly on promoting their services as elements of social institutions with cultural identities rather than directing their services to well selected-target audiences as advocated in social marketing. (Meissner, 2009).

Social Marketing for Libraries and Information Centers

This paper will highlight social marketing research conducted by the authors and provide some of insights learned through these social marketing projects. The three studies are: "Teacher-School Library Media Specialists Collaboration through Social Marketing Strategies: An Information Behavior Study." “Social Marketing for Archives: The Austin History Center Experience.” "Acceptance of Social Marketing Concepts by Selected Romanian Librarians: Culture and Context." The analysis will include for each study purpose; problems encountered; access to participants and materials; and reporting avenues and examples of resulting citations.

Recommendations and Conclusion

Based on the authors’ research as well as other studies, the paper will conclude with recommendations that emphasize research projects and methodologies that can best serve libraries and other information agencies as they face challenges and crises.

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Similar Challenges, Similar Approaches? A Comparison of Canadian LIS and Journalism Education Programs

Presenters: Heather Hill and Meredith Levine, Western University

Introduction

LIS and journalism share many similarities. Both professions contribute to the public good by working to provide broad information dissemination throughout the local and global community. Both professions have a master's as a terminal degree. At the same time, there are individuals with the title librarian or journalist who do not have the degree. Both professions are also facing similar challenges. There have been significant disruptions to the institutions in which these professionals function in addition to threats to their labour. Challenges include increased outsourcing, consolidation or closing of information outlets, and deprofessionalization.

Within the last two years there have been significant labour upheavals for journalists. In 2008 and 2009, *The Star*, *The Globe*, as well as news organizations run by Postmedia and Sun Media all reduced their workforces. In 2009 *The Star* considered outsourcing some positions. Union concessions avoided the change at the time, but outsourcing has come up again as the publisher of the *Toronto Star* recently offered buyouts to over 1,000 employees (CBC news, 2011; Armstrong, 2011). During the same period Quebecor announced it was cutting 400 Sunmedia jobs (CTV News, 2011).

Libraries are in similar interesting times. Just a brief overview of the last year shows significant turmoil for libraries of all types. Economic downturn and changes in public funding have created threats of branch closures and outsourcing of libraries. In April, the head of the McMaster University Library gave a speech detailing his vision of the future of academic libraries that would include more PhDs and technology positions and significantly fewer librarians. In 2011, there were talks of closing branches of the Toronto Public Library and the possibility of outsourcing the libraries to a private company (Taylor, 2011). In December, Human Resources Skills Development Canada announced it was closing its human resources library (Thompson, 2011). Most recently, Harvard University has announced that there will be a significant restructuring of their ademic libraries and many library staff are worried about their jobs (Kelley, 2012).

Even with these challenges, graduate programs in LIS and journalism continue to educate future professionals. So the question becomes, how are these structural challenges being addressed in the graduate education for these two professions? Is graduate education in both fields addressing these challenges in similar ways? If they are exploring different ways to address or at least acknowledge these challenges, is there potential for a cross-pollination of ideas where both professions could learn from each other?

Literature

Both the LIS and the journalism literature have examined graduate education programs from various perspectives. LIS education has been examined from multiple angles including how it prepares students for particular types of libraries (Bailey, 2010), how it addresses particular issues like law (Gathegi & Burke, 2008), and assessments of accreditation (Burnett & Bonnici, 2006) among other angles. Similarly, journalism education has been the focus of much discussion. More recent discussions have centered on the potential of a shifting emphasis from a corporate model to a community model, an increased acknowledgement of how neoliberal policies affect journalism, and an emphasis on citizenship (MacDonald, 2006; Manoff, 2002; Mensing, 2010). These are numerous, but have not really addressed if or how these significant upheavals are permeating the discourse in graduate education programs. In addition, there has been no comparison of education in both fields.

Project

Semi-structured interviews were held with 20 faculty members; 10 from journalism and 10 from LIS to provide an understanding of how these challenges to both professions are manifesting themselves in graduate education programs. Of particular interest for this project was the perspective of Canadian educational institutions.

Findings indicate that the challenges noted above are being incorporated across courses in both programs, but perhaps unevenly. There is a perception by some instructors that the incorporation of material related to these challenges is uneven. Interview participants in both programs noted the importance of a strong relationship between graduate education and practicing professionals and both also mentioned the difficulty in balancing an introduction to some of the current labour challenges in the professions with their desire to keep students from losing their drive and motivation.

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I am a… How do future LIS professionals identify themselves?

Presenters: Lisa Hussey, Simmons College; and Jennifer Campbell-Meier, University of Alabama

How we identify ourselves influences how others view us. This applies to individuals and to groups such as professions and trades. In fact, identification within a profession is an essential rite of passage, which often follows the completion of an educational degree or an intensive training program. Selecting an identity within a profession influences our perceptions of and attitudes towards the profession, as well defining a context for how professionals presents themselves as a member of the profession. All of these processes provide a framework from which to shape the individual's professional identity, as well as that individual's perception of the profession.

In LIS there are a variety of identifications and titles. Depending on the professional's focus, he or she may be called an information professional, a reference librarian, a researcher, a technology specialist, a library administrator, or a teacher-librarian. However, many students do not enter their LIS education with a well-defined professional identity. By graduation, most students have decided on a particular path and have developed the foundation of their professional identity. Somewhere in the education process, students begin to accept or reject different possibilities and begin to assess the professional positions and identities. At what point in the process do individual select a particular title associated with their professional identity?

In order to try to answer this question, a survey of LIS students at the Simmons College and the University of Alabama will examine how future LIS professionals identify themselves and how this identification influences their career aspirations and their views of LIS. Given the diversity of ALA accredited and non-accredited programs, students have the option of pursuing a general library science program or specialties in information science, administration, school, library or academic libraries, knowledge management, and archives, to name just a few. This begs the question, how do LIS students identify themselves while in a master's program? How is this influenced by their LIS program? Does either affect their views on the information professions?

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Pop Culture and the Socialization of LIS Students

Presenters: Lisa Hussey and Mary Jordan, Simmons College

In this study, we are trying to uncover methods of socializing students into the LIS profession and develop an understanding of the ways in which we incorporate individuals and groups into the LIS culture, as well as the strategies used by these individuals and groups to envisage themselves as professionals. During LIS graduate programs, students are introduced to the profession through a variety of methods including course materials, student group activities, and practical hands-on experience. Yet, socialization necessarily involves a wider breadth of examination then merely looking at their course work. While the traditional concepts are important, other tools such as movies, televisions shows, comics, cartoons, and other pop culture images are also used to help students identify with the LIS professions and understand their roles in society. By identifying the ideas that shape the student's view of herself as a librarian allows us to gain insight into potential trends in career aspirations and expectations of public perception and acceptance.

Popular culture provides an array of images of librarians and concepts related to information professionals. These range from Giles the school librarian in Buffy the Vampire Slayer, Marion the librarian in the Music Man, the title character from the Librarian action movies, Evy in the Mummy series, and George Lucas' double-bun wearing archivist in Return of the Clones. Each of these images present an interpretation of a LIS professional and how it is perceived by the wider public. These popular culture images, and many others, are often used by professor, fellow students, and organizations to illustrate ideas, to mock public perception, or to simply explain the roles and expectations of professionals.

The purpose of the research is to explore the introduction of the various popular culture concepts and images introduced through courses, student organizations, informal discussions and other socialization practices in LIS programs and how these ideas are absorbed and incorporated into students' understandings of what it means to be a librarian. Looking at one way students are shaping their own understanding of themselves as professionals by using popular culture images will help LIS educators to deliberately use imagery that assists our students in their development. In this paper we will report on the results of our national survey of LIS students, hoping to understand the popular culture imagery that is shaping their personal points of view. Additionally, we plan to identify the sources of these images – from fellow students, from professors in class or outside of class, from student organizations, or from their own study of the images that surround them - in order to provide further understand of how these images influence the development of their understanding of librarianship and identification with the wider LIS professions.

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“I felt like a real librarian”: Field experiences as an opportunity for professional identity development

Presenters: Selinda Berg and Kristin Hoffmann, Western University

Overview of Research

Professional identity is the set of attributes, beliefs, values, motives, and experiences that contribute to people's definition of themselves in professional roles (Schein, 1978). Professional identity has received scholarly focus in other professional disciplines, where research studies have demonstrated that educational field experiences, such as co-op placements, can provide key insights into the development of professional identity (Grealish & Trevitt, 2005; Lurie, 1981; Niemi, 1997; Pratt, Rockmann & Kaufmann, 2006). The development of professional identity is a result of the socialization processes that occur in both education and work environments, and field experiences are uniquely positioned at the intersection of education and work environments. The purpose of this study is to gain a greater understanding of the factors that influence the formation of academic librarians' professional identity, and to understand the important roles of co-op placements in the formation of professional identity among LIS students.

Methods

Grounded theory methods were used to analyse semi-structured interviews and progress reports of LIS students who had recently completed a co-op placement in a Canadian academic library. Canadian LIS co-op placements are typically four- or eight-month paid field experiences, which provide students with an immersion into the work environment while maintaining a connection to the students’ program of study. Participants were asked questions related to three broad themes: Experiences and daily activities during co-op placement; Perceptions of professional identity; Professional goals and aspirations. The co-op reports provided additional description of the students’ work environment and responsibilities during the placement. Our method of analysis for this study follows the iterative analysis model described by Pratt, Rockmann and Kaufmann (2006) in their work on professional identity construction in medical residents.

Sixteen participants were recruited from The University of Western Ontario and the University of British Columbia, the only two Canadian universities that currently offer co-op options as part of their MLIS programs.

Results

Several themes about the relationship of field experiences to LIS education emerged from the data, and provide insight into the role of field experiences in the development of librarians’ professional identity. The themes explored in this presentation are: Connections and disconnections with classroom education; Authenticity of the professional experience; Lack of formal training programs; Importance of working as an equal with librarians.

Connections and disconnections with classroom education: Students provided examples where classroom education was both congruent and incongruent with what they observed as the reality of librarianship. While students ascribed their theoretical understanding of libraries to their classroom learning, their understanding of the realities of the profession were attributed to their co-op experience. Overall, students explain that the co-op experience did not just *contribute* to their understanding of the realities of librarianship, but rather, *entirely formed* their views of the work and responsibilities.

Authenticity of the professional experience: Students described opportunities to participate in a wide range of activities during their co-op placements in academic libraries, and classified many of these activities as similar or equivalent to the responsibilities of professional librarians. Many of their duties, however, appeared to better align with the responsibilities paraprofessional staff, rather than with the work of professional librarians. In many professional settings (e.g., business, publishing, journalism, government/politics) it is not uncommon for interns and co-op students to be assigned more menial tasks; however, if the purpose of the co-op placement is to provide students with an accurate picture of the professional role of librarians, then the use of co-op students to fulfill paraprofessional tasks is potentially problematic.

Lack of formal training programs: Students described their training as “on the job” and “on the fly”, but did not feel that more formal training was required in order to carry out their co-op placement activities. When juxtaposed against their perception that their work was equivalent to that of librarians as well as the important role that the field experience provides in their understanding of librarians’ work, important questions emerge about both the nature of librarians’ professional work and the perceived contributions of education for librarians.

Importance of working as an equal with librarians: Students’ positive experiences of the co-op placement were often attributed to a sense of belonging and a sense of being treated as an equal. This acceptance into the library community led them to feel like they were – as students labeled themselves – ‘a real librarian’. Students not only shared their experience of being treated as equals, but also spoke of doing equivalent work. This perception of equivalency is positive, but is also complicated when considering the many instances where the experiences and role of co-op students were better aligned with paraprofessionals rather than professional librarians. When considering the role of co-ops in the formation of professional identity, the lack of recognition by students that the work they completed on co-op placements may not be reflective of the work of professional librarians may be problematic. However, on a more positive note, the high value that students placed on acceptance, community, and belonging is a value that is likely to translate into the professional identity of these future academic librarians.

Significance of Research

This study examines field experiences as an important intersection between the education and practice of librarians, and offers insight into the education of future academic librarians. Field experiences appear to be a critical period of students’ development in their understanding librarians’ responsibilities; however, students are provided with little or no formal training to successfully engage in this work. Further, students engage in work during their co-op placements that appears to better align with the responsibilities of paraprofessionals, but perceive the work to be professional in nature. Students described positively their experiences of belonging to a community of librarians, which points to a significant theme in the development of librarians’ professional identity, apart from the engagement in activities associated with professional work. For classroom instructors in library schools who influence the LIS curriculum, and for those academic librarians who host and supervise field experiences, this understanding of the connections between education and practice will help to ensure that meaningful and relevant experiences are provided for LIS students.

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Online Student Experiences: Inquiry Supporting LIS Education

Presenters: Fatih Oguz, Anthony Chow, Clara Chu, and Mimi Smith-Decoster; University of North Carolina at Greensboro

Online education is growing at a much greater pace than overall college enrollments in the US. Over 600,000 graduate students took at least one online course in fall 2008 which represents about 14% of all students who took at least one online course in postsecondary degree-granting institutions in the US (Allen & Seaman, 2009). In library and information science (LIS) programs online course offerings have also been steadily increasing as about 76% of all LIS courses (n=2,039) during the 2009-2010 academic year were delivered online from 35% (n=994) in the 2000-2001 academic year (Daniel & Saye, 2002; Wallace & Naidoo, 2010).

The primary rationale for program delivery of online courses in LIS include increasing access to professional qualifications, removing geographical barriers, and offering independent and more diverse life-style oriented courses and learning opportunities. For students, primary factors include affordability, tailor-made courses and learning opportunities, and asynchronous instruction (Islam, Kunifuji, Hayama, & Miura, 2011). Students also have noted that not having to relocate and not having to find a new job trumped the perceived quality of distance education, implying the opening up of opportunity for an LIS education especially for underrepresented populations (Wilde & Epperson, 2006). These same students reported that when selecting a program ALA accreditation was the most important factor followed by the reputations of the MLS/MLIS program and the university. A majority of LIS programs have incorporated some facet of distance education in their course offerings including blended, TV, Telenet, video conferencing, and online. An online course can be defined as a Web-based instructional method in which at least 80% of the instruction occurs via the Internet (Allen & Seaman, 2007).

A majority of the literature on online education focuses on three functional areas: instructional methodology, technological infrastructure, and content delivery. More specifically, earlier studies investigated issues associated with sense of isolation (Croft, Dalton, & Grant, 2010), building communities in online classes to enhance student participation, satisfaction, and success (Kazmer, 2007; Sadera et al., 2009; Vesely, Bloom, & Sherlock, 2007), student achievement (Jahng, Krug, & Zhang, 2007), and technology changing education (Bonk, 2009).

Despite the growing body of research addressing distance education in LIS programs, national studies are needed to understand the experiences of online MLIS students. The current research responds to this need by addressing the following questions:

1. Which students are doing an online MLIS education?
2. What influences student selection of an online MLIS education?
3. What experiences do online MLIS students have?
4. Which delivery formats do students prefer when taking core content areas?

This study is part of a larger project examining different aspects of online MLIS education. These include funding models and management structures employed in online MLIS programs, and faculty experiences and participation in online MLIS education.

Method

Students from ALA-accredited LIS schools which offered online education (courses or entire degree) were surveyed about their experiences with online education. Thirty-seven programs are represented by the 1,038 students who filled out the online questionnaire. The questionnaire was administered in Spring of 2012 with the assistance of the administration of the LIS programs and their student associations. Findings from respondents who had taken and completed at least one online course constituted the sample (n=930) that was used for analysis and the reporting of the results. The study included students in both partially and fully online programs. When both are being addressed the term "online education" is used; otherwise, students will be described in terms of those taking online classes versus those in entirely online degree programs. Google Maps API was used to calculate driving distance and travel time based on student-supplied zip code information (Google Maps, 2012). Student residential zip codes were mapped to Rural Urban Commuting Area Codes (RUCA, n.d.) to determine their rural/urban resident status while attending school. Descriptive and inferential statistics were conducted to analyze the data.

Preliminary Results

The profile of online education students point to access and flexibility as indicators of online education participation. Most of the participants were female (84.7%), White (87.7%) and live in urban areas (91.2%). Half of the students (49.4%) taking online education are Generation X (29-47 years of age) with the mean age being 34.3. Approximately half of the students were working full-time (42.9%), resided less than 30 minutes driving distance from the main campus (42.5%), and were attending an entirely online program (44.7%). On average the driving distance of students taking online education was 298.6 miles, however, the average driving distance of those in an entirely online program was 537 miles and those in partially online program was 118 miles. Generation Y students (less than 29 years of age) tended to reside closer to campus ($\bar{x}$=161 miles). The average cumulative GPA was 3.82, with no significant difference amongst different age groups nor those in partially versus entirely online programs.

Findings for the remaining research questions will be reported at the conference.

Implications

This study aligns perfectly with the conference theme by focusing on Inquiry Supporting LIS Education. By learning about who the online MLIS student is and what influences their selection of an online education, LIS programs can work on continuing to target those they are already serving, reaching out to those who are not studying online and/or differentiating their online vs. face-to-face student populations. Student experiences and preference of instructional delivery of the core curriculum will inform the services and support needed by online students and their teaching needs. This research can serve as the baseline for future studies to identify any shifts in online MLIS student population, experiences and needs, while the findings can point to additional research needed to understand the reasons for certain results. The study supports programs and faculty offering online education as well as those who are considering it.

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Who Do You Know? A Study of Connectedness in Online Education and Employment

Presenters: Fatih Oguz and Nancy Poole; University of North Carolina at Greensboro

Library and information science (LIS) programs in the United States (US) offer an array of graduate degree programs and specializations designed to prepare students for careers in librarianship, knowledge management, and information science. While they have offered online courses since the late 1990s, many programs are now completely online (Kazmer, 2007). A majority (70%) of online courses currently offered by American Library Association (ALA)-accredited LIS programs have little or no face-to-face instruction (Bird, Chu & Oguz, 2011).

While studies suggest there are no significant differences in student achievement between online and face-to-face course delivery methods (Dutton, Dutton & Perry, 2002; Rovai, 2003), students taking online courses often complain about disconnectedness, isolation, and lack of bonding interaction (Park, 2008; Tryon & Bishop, 2009). This lack of interaction impedes students' ability to establish relationships with their peers resulting in the establishment of fewer weak-ties (e.g., social contacts) as opposed to strong ties (e.g., family). This puts them at a disadvantage in the job market (Granovetter, 1983, 1995) where half the individuals in search of jobs find them through social contacts. When LIS programs lack residency requirements, students establish fewer social ties with peers also reducing the ability to leverage social networks instrumental to their professional careers (Emler & McNamara,1996; Kazmer, 2006). On the other hand, students taking face-to-face classes have more opportunities to develop the kind of social networks that alleviate the challenges of loneliness and foster the development of supportive social networks (Haythornthwaite, Kazmer, Robins, & Shoemaker, 2000; Kazmer, 2007).

As the LIS field relies increasingly on online education to educate future library and information professionals, it is important to understand how students establish social ties during school, how they maintain and foster these ties before and after graduating, and how they leverage these ties to attain their career objectives.

Problem Statement

Finding employment is a function not only of strong academic preparation; it is also a function of the methods, including social contacts (Granovetter, 1995; Huang & Western, 2011) used to obtain information about job openings. Social networks developed through student-to-student, student-to-faculty, and professional interactions in face-to-face settings may influence students' career and employment prospects. Despite increasing online offerings little research has been done to examine the types of social contacts formed by online students or the role these contacts play in securing employment after graduation.

This exploratory research aims to develop a better understanding of the effect of social connections on employment prospects. The research focuses on connections established when students are enrolled in online LIS classes and addressed the following research questions:

1. How do students sustain and foster weak-ties established in online courses during the MLIS program?
2. How are these ties maintained, if at all, after graduating from the MLIS program and with whom?
3. How do students utilize such ties to improve and attain their career goals and secure employment?

Methods

The study comprises two parts: a questionnaire designed to identify characteristics of the alumni and methods of forming and maintaining social contacts; and a set of two asynchronous focus groups (Stewart & Williams, 2005) designed to further explore these variables and the degree to which interaction between respondents and contacts facilitated job seeking and employment.

Alumni who graduated between spring 2006 and summer 2011 from three ALA-accredited LIS programs in the Southeastern US were invited to participate in the study. These programs were purposely selected to include a range of online/face-to-face class ratios. One program offered less than 50% of its program online, one offered both face-to-face and online options, and one offered its program entirely online. Four hundred and fourteen graduates responded to the online questionnaire.

Preliminary Findings

Following analysis of descriptive statistics for all variables and chi-square tests for selected variables by percentage of online courses, we found students use different methods of communication for establishing and maintaining contacts based upon the percentage of classes taken online. Students with a higher ratio of online courses (75 – 100%) noted an absence of opportunities for building relationships through planned activities outside of class. They were less likely to join any professional associations than students with lower ratios of online courses (less than 25%). As well, ongoing post-graduation communication, particularly face-to face and through social media, was higher than expected for students with fewer online classes. Group assignments and discussion board activities were identified by students with high ratios of online classes as important venues for building and maintaining weak-ties with peers.

Ninety percent of the respondents held a full or part-time job while completing their MLIS degree, with 57% of them leaving these positions for new ones after graduating. Sixty-seven percent of these job-changers remained in the new positions, reflecting high job satisfaction rates overall. Thirty percent of the respondents used social networks (personal contacts) to find their current positions (predominantly students having fewer online classes): sixty percent used market methods (predominantly students having more online classes). No significant difference was observed in salaries or job satisfaction between jobs found through strong or weak ties.

Those who found a new job after graduation through personal contacts often relied on strong ties (54%). This was more frequent among students taking more online classes; students with fewer online classes relied on weak ties. No statistically significant relationship was found between gender and the use of weak or strong ties.

Additional findings and results from the focus groups will be presented at the meeting.

Implications and Relation to the Conference Theme

The study addresses the research needs around the social impacts of distance education LIS programs. It <u>supports teaching</u> by providing evidence on the importance of promoting interaction in online education, including pedagogy, asynchronous and/or synchronous course activities, and deliverables, with an emphasis on small group and/or large group communication, problem solving and relationship building. The study also <u>supports research</u> by serving as a reference, pointing to the need for further investigation into the socialization process in professional education, especially in an online environment, and its impact on professional development, and suggesting new areas of exploration.

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A Cross-institutional Examination of Modality Delivery Preference for Online Course Delivery

Presenters: Laurie Bonnici, University of Alabama; Stephanie Maatta, Wayne State University; M. Katherine Klose, University of Alabama; Heidi Julien, University of Alabama; and Stephen Bajjaly, Wayne State University

Introduction

The most beautiful question, once informed by data, continues a process of metamorphosis. The topic of inquiry is evolutionary and perpetuates driving, constant, and duplicitous inquiry. Modality of distance-based education delivery is one topic that has fueled the formation of a series of beautiful questions by library and information science (LIS) researchers. Since the advent of the first online, web-based, distance education (DE) programs in the late 1990's, LIS researchers have queried various aspects of online learning.

Review of the Literature

The nascent years of distance-based delivery of courses drove the question of whether online education was of equal quality to, or as effective as the traditional, on-campus alternative (Buchanan et al, 2001). Once in situ, the beautiful question about DE delivery shifted to 'which mode is best; synchronous or asynchronous?' (Mellon, 2004). Research has investigated factors such as gender preference for delivery mode (Marley, 2007) and embedded practical learning (Most, 2011). Instructional style as related to interaction has been investigated for online learning (Burnett, Bonnici, Miksa, and Kim, 2007). Ubiquitous change in information technologies and evolving multimedia continue to push the inquiry with each new mode of delivery (audio vs. video, slide presentation vs. movie, threaded discussion vs. blog). The variety of technologies combined with differing modes have piqued questions regarding adaptive delivery based on learner preference (Bojilov et al, 2010).

The challenge to rigorous comparative testing of delivery mode has been pre-empted by the fact that each LIS school has invested in one predominant mode of delivery of their degree programs. Thus, the opportunity for comparison of delivery mode within group is elusive at best. And between-group testing is prohibitive due to the fact that students are not enrolled across institutions. A partnership of cross-enrollment between two LIS schools, each engaged in distinct delivery modes in their distance programs, provides a unique opportunity to investigate modality preference among students and faculty between and among groups and modalities. This study examines within and between group comparisons across two institutions for delivery mode preference. So, the beautiful question is resurrected: Which mode is more advantageous for LIS education? In turn, additional beautiful sub-questions are posed: Which mode supports optimized learning? Which mode accommodates student availability? Which mode do students prefer? Which mode do faculty prefer?

Method

An IMLS funded partnership between the University of Alabama, School of Library and Information Studies (UA SLIS) and Wayne State University, School of Library and Information Science (Wayne SLIS) involves a cohort of 15 students (8 at UA SLIS and 7 at Wayne SLIS). UA SLIS engages a synchronous, voice-over-IP (VoIP) mode of course delivery. Wayne SLIS employs a largely asynchronous delivery mode for its DE courses. All members of the IMLS-funded cohort enrolled in a required course at Wayne SLIS in Fall 2011 (LS XX1). In turn, all cohort members enrolled in a required UA SLIS course in Spring 2012 (LS XX2). Each course was delivered by the home institution's preferred mode of DE course delivery. Each professor has approximately 15 years of experience in web-based instruction in both synchronous and asynchronous modes. The two courses covered similar topics with LS XX1 serving as a prerequisite to LS XX2. Both courses required group work in addition to any formal scheduled class sessions. All cohort members successfully completed and passed the two courses.

In June 2012, the directors of the two schools held a web-based focus group with thirteen students from the cohort. The focus group session was held in VoIP mode. The session was archived for purposes of data analysis. Students were assured anonymity and confidentiality whereby the two professors would not have access to the archived focus group session. Guiding questions were posed via slide presentation within the online virtual room to provide a semi-structured process. Questions were grouped into five categories; delivery mode, teaching style, course complement, auxiliary learning, and general questions.

Data Analysis

An external evaluator with expertise in instructional design provided first-level evaluation. The evaluator analyzed data for overall modality preference, within group by student institutional affiliation, and between-group preference for both institutions. The evaluator prepared a transcript of the archived session stripping student identity for purposes of second-level analysis by the two professors that designed and led the courses. Second level analysis involved pattern seeking of modality preference as related to teaching style (lecture, discussion, in-class activity, student presentation) and topicality (course structure, technology, session topic, readings/activities). In addition to the two--level analysis, the evaluator provided a summary and analysis of the data from an instructional design perspective.

Findings

Initial analysis indicates a distinct preference across institutions for delivery mode. The data reveal that preference for mode is impacted by teaching style, instructional design, as well as topicality. Analysis reveals additional factors that impact modality preference including student learning style, post-class session content review, as well as economic issues. Findings serve to inform LIS education at both the macro-level (DE delivery mode) and micro-level (teaching and learning style).

As excellent research tends in turn to raise more questions than it answers, always the beautiful question is far more valuable than the beautiful answer. Beautiful questions regarding DE education serve to fuel the most informed answers so that LIS education delivers the most beautiful programs.

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"Pass on what you have learned, Luke": Exploring experiences of research assistantship

Presenters: Caroline Whippey, Western University; Nadine Desrochers, University of Montreal; and Diane Rasmussen Neal, Western University

Introduction

Research assistants (RAs) are commonly found in academia, assisting faculty or scholars in their research. They may provide support in a number of ways, for multiple research-based tasks. For researchers, assistants are a key form of support which allows them to conduct research in a timely, thorough manner. RA positions provide students with training on the research process, publication, conferences, and in building relationships in the academic community. For supervisors, they provide experience in mentorship and leadership, as well as project management. Interestingly, however, there is very little academic literature on the role of RAs in the research process, or the relationships between RAs and their supervisors. In this paper, the authors will explore the processes of research, teaching, and mentorship through the examination of the RA and supervisor experience and relationship. Utilizing autoethnography, this research will pay particular attention to notions of inquiry, support, and information exchange. It asks a number of questions, including:

- What is the nature of the information exchanges within RAship?
- How does inquiry in the RA experience support effective communication, learning, and teaching?
- What are the expectations of RAship (including those that are not announced)?
- How does RA turnover affect the RA role and relationships?

Literature Review

Training new researchers is a key part of a faculty or supervisory role, particularly in graduate programs. Students are expected to learn from their supervisors, committee members, and other professors through conversations and research experiences. The importance of this mandate has been recognized by national funding agencies, such as the Social Sciences and Humanities Research Council (SSHRC) in Canada, which states that applicants for the Insight and Insight Development Grants must provide students with a "high-quality research training experience" (SSHRC, 2012).

Within library and information science, there are only a handful of articles on the role of RAs - it is therefore difficult to discern what tasks RAs are given and what skills they learn from these tasks. Nonetheless, several researchers have touched upon the subject through other studies. In her study on mature undergraduates' information seeking behaviors, Given (2002) notes that one student learned to use the library through her job as a RA, which introduced her to information resources and contacts within the library. This provided the student with information about how to conduct research, valuable resources, and social contacts (Given, 2002). In contrast, Barry (1997) briefly discusses the supervisory side of the RA relationship, stating that a lack of training on the part of the supervisor can affect their role in supervising RAs. She points out that part of training doctoral students is building broadening transferable skills, in addition to those that are specific to the academic community (Barry, 1997).

Hobson, Jones, and Deane (2005) conducted a study in Australia which explored the experience of the research assistant within a hierarchical university structure and their role in knowledge generation. They state that on the surface the role of the RA is practical; however, there are a number of social and cultural aspects of research at play which complicate the RA role and relationships (Hobson et al., 2005). In addition, some studies from the health sciences community explore the role of RAs, as do "how to" books on law school or graduate school, which all advise students to seek out RA opportunities throughout their education. Indeed, Roberts (2010) 60th tip in getting a better college education is to become an RA. That being said, these works seldom explore the role of the RA, the relationships between RAs and their supervisors, information exchange, and the skills that are learned from both the perspective of the student and the supervisor.

Methodology

Through autoethnography, the researchers will explore the roles of the RA, the supervisor, and the relationships between them. Autoethnography connects personal experience - autobiography - to the cultural, political and social world, involving both the process as well as the end product (Ellis, 2004). Chang (2008, p. 48) states that autoethnography should be ethnographic in methodological orientation, cultural in interpretive orientation, and autobiographical in content orientation. In conducting autoethnography, researchers systematically collect data via fieldnotes or journals, analyze and interpret them, and produce scholarly documents (Chang, 2008). The use of autoethnographic methods has grown within the LIS discipline, such as in Michels (2010) and Polkinghorne (2012), allowing researchers to connect experience with issues of interest to the LIS community.

Each researcher is currently involved in RAship as an RA or a supervisor in addition to her previous experiences, thus bringing multiple perspectives to the research. The researchers will document their own experiences in their current and past RAship roles through a series of fieldnotes which include reflections of behavior, thoughts, and emotions, as well as analytic examination. Each researcher will reflect on the weekly tasks completed, meetings, research processes, and interpersonal relationships in their RAship experiences. The fieldnotes will be analyzed along with supporting documentation such as e-mails. The data will then be coded in order to ascertain arising themes using a phenomenographic approach, which seeks to understand a collective experience by examining the experiences of individuals (Limberg, 2005).

Conclusion

Through this research, the authors will explore the role of the RA and supervisor, the skills that are taught through the RA experience, the nature of information exchange, and the challenges that may emerge. It is essential that we explore how research assistantships are conceptualized, leveraged, and harnessed by the LIS community to ensure that we are meeting the needs of both researchers and students. This exploratory research is a first step in exploring how LIS schools, scholars, and infrastructures support RAship. The context could then be broadened in order to gain a better understanding of how RAship differs across the LIS discipline and in various parts of North America, in the hopes of fostering positive and enriching teaching and research relationships.

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Through the Eyes of Students: an Inquiry into Undergraduates' Research Skills and Practices

Presenters: Kathleen DeLong, University of Alabama; Lisa Given, Charles Sturt University; Heidi Julien, University of Alabama; Susan Barker, University of Calgary; Anne Carr-Wiggin, University of Alberta; Darel Bennedbaek, University of Alberta; and Anna Opryshko, University of Alberta

Improvements in pedagogy in LIS education, as well as improved professional practice supporting learning and research, are ideally based on inquiry that provides systematic empirical evidence for pedagogical and professional decisions. The study described here provides data illustrating the information literacy (IL) experiences and use of information technology (Given 2007) of undergraduates as they make the transition from high school to the post-secondary environment. The results of the study will be used to improve design of information literacy instruction in the university library, and to inform revision of an elective MLIS course in IL instruction.

Pursuing the research question and developing appropriate research methods brought the research team into the world of the undergraduates as they took early steps in research. Photovoice methodology (Wang & Burris 1997) was used to shed light on the students' research experiences and ways of knowing. Changes in pedagogy and practice that are grounded in students' experiences have the potential to increase the relevancy of students' learning for the digital context in which they live and work. It is with this goal in mind that this collaborative, longitudinal study of undergraduates in writing-intensive disciplines (i.e. humanities and social sciences) is being conducted at a major Canadian university.

Theoretical frameworks for IL connect instructional practices to competencies that enable learners at all levels and in all disciplines to locate, critically evaluate, manage and use information in a range of contexts and learning environments. Development of these competencies is generally recognized as a necessity for undergraduate learning and research in post-secondary environments. To navigate the escalating complexity of the information environment, students must be able to access and use information effectively and efficiently. To evaluate students' abilities to do this, the research team administered the James Madison Information Literacy Test to 103 grade 12 high school students and audited the existing IL programs and practices at the university (both in libraries and in academic departments/faculties) (Citations removed for blinding purposes).

In the second phase of research, the team specifically looked at the degree to which first year university students are ready for academic work at a post-secondary level and how university students perceive their information literacy skills in the context of academic expectations. This research provides insight to how information literate students are and what challenges they face as they negotiate academic expectations. By assessing the skills in terms of appropriate preparation for academic work in the digital age and examining the transition from high school into university, the research will contribute to the documentation of students' skills and their readiness for appropriate engagement in academic work.

Research in education notes a dramatic shift as students move from high school (where tasks are highly structured and students are provided a great deal of guidance) to university (where students must manage their own learning); evidence from this study supports this research and reveals a number of ways in which students' planning is unsuccessful. This difficulty in planning is often accompanied by an inadequate determination of the costs and benefits of acquiring needed information, where students are not choosing to invest time to acquire important IL skills which will be of great assistance to their future in later years of higher education. The same approach is observed in their adherence to particular sources of information. While students may be very proficient in search systems that they are comfortable with, and they may be comfortable with a variety of search systems and formats, they do not easily branch into new systems or formats. Some students demonstrated outright mistrust of unfamiliar sources.

The research does illustrate that students are in the process of improvement, though. Based in the context of the audit of existing IL instruction at the university, the few research participants that attended a librarian's information literacy session became more open to using the various resources of the library.

A fascinating aspect of this study is the snapshot of students in transition. A student may excel at a particular task in one area, or in one search system, and then perform very poorly at the same task in a slightly different setting. This conflicting evidence serves to illustrate both the difficulty students have with the transition and the strategies that they bring to try to confront the new environment.

Study Design:
This project examines students' skills as they complete their last year of high school, to assess the preparation they have received for further study in post-secondary environments. The project then interviews a group of students as they pursue the initial year of their first undergraduate degrees. The project is designed to document students' skills and their perceptions of readiness for appropriate engagement in their academic work. The study team, comprised of library and information studies and education scholars, and academic librarians, follows students on their journey from secondary school through first-year University.

The design of this project is multifaceted. Eighteen new university students in the humanities/social sciences classes were administered the James Madison University "Information Literacy Test," with ten of these participants being interviewed face-to-face. These interviews were then coded and analyzed according to the ACRL Standards for Information Literacy. Building upon the previous information collected by this study (in particular the 100 grade 12 students in three high schools who were administered the same James Madison University "Information Literacy Test"), these data set a baseline for understanding students' familiarity and comfort with core skills and expectations. In addition, the Photovoice research methodology that this study has employed provided the researchers with important contextual data to illustrate and understand students' experiences. Results from the interviews, analysis, and skills tests will be presented at ALISE 2012.

This paper contributes to the conference theme of "Inquiry Supporting Teaching, Research, and Professional Practice" through an innovative approach to pedagogy in the field, as the collection of fresh empirical data will inform MLIS course design, library practices in higher education, and will be used to support new practice in LIS pedagogy and IL instruction.

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Asking the Beautiful Questions about School Library Supervisors: An Initial Inquiry into the Roles, Responsibilities, and Challenges Faced by Individuals Responsible for Library Programs at the District Level

Presenters: Ann Carlson Weeks; Jeffrey DiScala; Alexandra Moses; Sheri Massey; Diane Barlow; Rebecca Follman, University of Maryland

Introduction

It has been more than forty years since questions were asked or data collected on a national level about school library district supervisors. Although there is evidence to suggest that the supervisor has a profound effect on the quality of building-level elementary and secondary school library programs, much of this evidence is anecdotal. Data about these individuals were last collected in the 1960s as part of a national "manpower" study of administrators in academic, public, and special libraries, and library supervisors in large school districts sponsored by the Bureau of Research in the U.S. Office of Education (Bundy et.al, 1970). As a result of this lack of attention, little is known about the education and training needed to effectively carry out the role of supervisor; the most typical responsibilities; the strategies used by supervisors to provide effective training and professional development for library staff members; the most common challenges facing supervisors; if there is a correlation between the supervisor and building-level staffing or budgets; and even the most commonly held title (supervisor, coordinator, manager, etc.). Until baseline data are available, little research is possible to investigate these complex issues.

In July 2011, the Institute for Museum and Library Services (IMLS) awarded funding to researchers at the University of Maryland to launch The Lilead Project, a national workforce study of individuals responsible for library programs and services in large and medium-size school districts, which will begin to provide these baseline data. This paper will present information gained from the pilot study for the project conducted in April 2012, and preliminary findings from the full-scale study to be conducted in October 2012.

Background

School library standards have long communicated the importance and value of the library supervisor at the district level. The 1960 *Standards* noted, "a district library services supervisor works with administrators, teaching staff, and other supervisors to provide better educational experiences for children and young people," (American Association of School Librarians (AASL), 1960, p. 42). Documents supporting the standards describe the supervisor as one who "interpret[s] the role of the library to everyone…so that people are made aware of the importance of the library in all places in the school program," (Saunders, 1968, p. 149). A 2011 position statement on the role of the school library supervisor by AASL states, "The leadership of a qualified school library supervisor is an essential component in the delivery of a quality school library program," (AASL, 2011).

Despite the stated importance of this position, in reviewing research published since 1960, few studies could be identified that investigated the roles, responsibilities, and/or expectations of the district level supervisor and only the Bundy study was national in scope. Five studies (Held, 1986; Macon, 1977; Nelson, 1988; Newcomb, 1968; Sullivan, 1977) surveyed district library supervisors as well as various other stakeholder groups and compared their reported perceptions, while a sixth study (McCulley, 1989) compared the differences in demographic groups among district library supervisors. Interestingly, in the studies identified, there was little consensus about the value, roles, perceptions, and primary responsibilities of supervisors.

Five studies were identified that examined the effect of the district supervisor on library services. Three of these studies (Coleman, 1982; Eberhard, 1974; Zsiray, 1986) showed the position of supervisor had a positive effect on library services in the district. Two other studies did not find such a direct effect (Dandridge, 1988; Jackson, 1988).

The Need for a National Study

As is obvious from the brief review of identifiable research, little empirical data are available about the district level supervisor. Although anecdotal evidence suggests that districts that have library supervisors provide a higher level of service for students and teachers in building-level libraries, offer more professional development for building-level library staff, and have stronger building-level library programs, little empirical research can be undertaken to address these assumptions until base line data are gathered, analyzed, and disseminated.

Research Goals

The Lilead Survey, which will be distributed in October 2012, will collect information in the following areas:

- Position profiles (e.g., position title, primary responsibilities, percentage of time spent on library media supervision and other responsibilities, size of staff, placement in district structure, reporting relationships, etc.)
- Knowledge and skills required for the position (e.g., career path, formal education, certification requirements, professional development needs of supervisors and staff, etc.)
- Greatest challenges and needs (e.g., personnel shortages, recent changes in certification requirements, recent changes in the support provided to building level programs, etc.)
- Demographic data (e.g., age, gender, ethnicity, education, training, other professional experience, length of time in the position, etc.)

Anticipated Contributions of the National Study

The paper to be presented at the 2013 ALISE Conference will outline the preliminary findings from the full distribution of The Lilead Survey and suggest how LIS educators and researchers can use these data to: (1) better prepare and support individuals who hold these key positions in school districts; (2) begin to explore the relationship between district level support and building-level budgets, staffing, and programs; (3) document changes in district and building level staffing, budgets, and programs over time; and (4) explore the important questions that may result in the beautiful answers that will support the improvement of school library programs and services for young people everywhere.

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Becoming a professional: a case for community service learning in LIS education

Presenters: Luanne Freund; Leanna Jantzi; Heather O'Brien; and Samantha Sinanan, University of British Columbia

Proposal

Library and Information Science (LIS) programs are constantly challenged to balance theoretical and practical knowledge and skills in order to prepare graduates for their roles as information professionals in diverse settings. However, the transition from student to professional is more than epistemological: it is a process of socialization and becoming, a "transformation of the self" whereby learners come to exemplify the values, behaviors, and thinking of the professional community (Dall'Alba, 2009; Weidman, Twale & Stein, 2001). This occurs when learners have opportunities to interact with established members of the community (Mehra & Robinson, 2009), as well as those whom the profession serves. LIS education programs facilitate this process of becoming by engaging professionals to participate in teaching, inform curricula and supervise experiential learning opportunities, such as internships or practicum. However, as Dall'Alba notes, "the most challenging task of learning professional ways of being…is left to the students themselves" (2009, p. 43). This is problematic given that "a clearly defined professional identity…[determines]…work-readiness, recruitment, retention, job satisfaction and work-related motivation" (Tsang, 2009). As LIS educators, how do we support and monitor students' journeys into the profession?

We sought to facilitate and study this process through "Research Rescue," a volunteer peer-to-peer program that brought LIS graduate students together with undergraduate and graduate students from other programs, to provide research support. It was offered jointly by the School of Library, Archival and Information Studies (SLAIS) and the Chapman Learning Commons, University of British Columbia (UBC). Research Rescue was based on a desire to supplement classroom experiences with community-based practice, and to provide a framework for students to reflect upon and learn from their experiences. This endeavor was informed by experiential learning, which emphasizes problem solving in real-life situations by intrinsically motivated, self-directed learners (Knud, 2007), and community service learning, which encourages students to "contextualize course work" and to acknowledge patrons as equals and experts, with the goal of benefitting the learner and the community where the learning occurs (Mehra & Robinson, 2009, p. 31). The program operated as a peer instruction model, based on the idea that graduate students could act as a bridge between students and librarians, displaying attributes of both (Colvin, 2007). In doing so, emerging librarians would come to understand their position in the learning process, act as role models, and enhance their knowledge and professional identity through reflection and interaction with others (Bandura, Millard, Johnson, Stewart, & Bartolomei, 2003).

Thus Research Rescue was designed to afford Master of Library and Information Science (MLIS) student volunteers the opportunity to gain experience and confidence in providing face-to-face academic assistance, while at the same time providing the student patrons with individual assistance in a relaxed and comfortable environment. From 2008-2010, Research Rescue offered term paper counseling and research assistance to approximately 200 UBC students. The service was managed and staffed by volunteers (30 in 2008-2009, 46 in 2009-2010) who had completed the 3-credit foundations course in information services and sources and participated in a training and orientation session led by an academic librarian and faculty members. Students volunteered two hours per week over a six to eight week period during the academic terms and worked in teams of two. This study will report on data gathered during 2009-2010.

Throughout the 2009-2010 academic year, we studied the effects of serving as Research Rescue volunteers on student learning and professional socialization. Data was collected through detailed "shift notes" written up by volunteers at the end of each shift and shared via the Research Rescue wiki. These diary-like entries were available to all student volunteers and were monitored by a professional learning services librarian, who provided feedback. In the shift notes, volunteers described each interaction in terms of subject area, research stage, resources used, and approximate duration, and summarized the challenges they faced and what they felt they had learned. A brief, open-ended paper questionnaire was also employed at the end of each term to collect more general feedback from volunteers. Questions addressed students' motivations for volunteering, their perceptions of challenges, areas for improvement, and perceived benefits (both for themselves and the undergraduates they interacted with).

Over two terms of activity, we collected 84 usable shift note entries and 6 questionnaires. Through inductive coding, we identified a number of themes related to our research questions. We grouped the themes into three broad categories: activities and behaviors, learning outcomes, and challenges. The student volunteers described using their burgeoning professional knowledge as well as social, collaborative and communicative skills to work with patrons and each other. Comments related to learning focused on learning about themselves, including personal strengths and limitations, learning how to be professionals, and developing interpersonal skills. Through the reflective process of writing the shift notes as teams of two and garnering feedback from the professional services librarian who monitored the wiki, volunteers deepened their understanding of ethical and behavioral issues, professional standards and boundaries, and negotiated their roles and service mandates as peer research advisors.

In sum, our data provide evidence that Research Rescue volunteers explored and learned practical skills required of information professionals, including search strategy development, resource identification, and appropriate referral. More importantly, they began to mold their professional identities, as reflected in their self-evaluations, the ways in which they described interacting with students in a helping yet collaborative capacity, and their growing awareness of professional boundaries and conduct. In our presentation, we will expand upon these themes and discuss implications for LIS education, emphasizing the benefits of employing experiential learning, community service learning and peer instruction to supplement classroom learning.

Acknowledgments

We would like to acknowledge important the contributions Heidi Henkenhaf, and Larissa Halishoff (MLIS graduates) and Simon Neame and Julie Mitchell (UBC Library). Our thanks to the many student volunteers who made Research Rescue and this research possible.

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Questioning the LIS Internship: Who is the Learner?

Presenters: Nora Bird and Michael Crumpton, University of North Carolina at Greensboro

Introduction and Prior Literature

The effort to connect practical experience with theory and academic instruction is a long-standing issue in library and information science (LIS) education (Grogran, 2007). There are a variety of avenues that have been used or proposed to benefit the LIS student, including experiential learning exercises, service learning projects, and longer term opportunities such as internships or practica (though these terms can be defined differently in different institutions, we will use them to stand for what Coleman (1989) described as "a relatively short-term, professionally supervised work experience offered as part of the school's curriculum and taken during the academic sequence [of course work] (p. 22).") (Ball, 2008; Coleman, 1989; Grogan, 2007; Peterson, 2009; Sen and Ford, 2009). Little or no work has been done on the benefits to the academic faculty member and to the practicing supervisor librarian who are the other two members of the trio of participants in the typical internship. A model called the Teaching Library by Suzanne Stauffer (2006) clearly points to the roles that the three participants can adopt to benefit each other.

Other fields, however, have given the questions more attention. Notably, Donald Schön (1987) writes in *Educating the Reflective Practitioner* that, "In some fields, the question of professional artistry has come up in the context of continuing education. Educators ask how mature professionals can be helped to renew themselves so as to avoid 'burnout,' how they can be helped to build their repertoires of skills and understandings on a continuing basis." (p.15). Schön goes on to suggest that the architectural intern can be the locus of such renewal for the design practitioner (1987). The value to the faculty member may be more philosophical, but is indicated by the work of Paulo Freire who writes that the stance taken by the teacher to the learner must not be based on the refusal of the teacher to learn from the student; otherwise there will be a culture where the expert dominates and overpowers both the student and the practitioner. The faculty member will be the expert and will not be exhibiting willingness to learn.

Problem Statement

LIS educators often enter into an internship relationship with an attitude that the student is the sole locus of learning. The student will interact with the practitioner supervisor, do the tasks that have been contracted to be accomplished, and then will evaluate the student at the end. In many cases, the student is left to connect classroom theory with the realities of the workplace. In the traditional internship, the faculty member does not necessarily work with the student or the practitioner to process the contradictions that are raised by a clash between theory and practice. At the same time, practitioner supervisors are eager to have extra help but are focused on the tasks in front of them and do not wish to explain how their real-life practice may differ from what is learned in the classroom.

The situations described above lead to the following research questions:

R1: Is there a better, more connected model to describe the internship relationship in LIS?

R2: What are the benefits to all participants in the internship?

R3: How can the model be extended to other learning opportunities?

Real Learning Connections

Based on a model developed for the Teach Library Project, an IMLS funded initiative in New York by Suzanne Stauffer (2006) the Real Learning Connections project is a collaboration between the University of North Carolina at Greensboro Library and Information Studies (DLIS) department and the University Libraries (UL). The project combines graduate assistant tuition waivers from the department and a stipend from the University Libraries for twenty hours of work. The program has operated for two years and a third year will be started in Fall, 2012.

The internships are based on special projects that were solicited from the various departments of the UL with two forming an initial pilot project, and three being accomplished in the second year. The projects required learning objectives from the faculty supervisor, the librarian supervisor, and the student. Progress was documented by reflective journaling, regular meetings, and knowledge products created. Two years of data has been analyzed to date. The presentation will describe the workings of the Real Learning Connections model, the benefits to the participants, and the extension of the work to several other initiatives including incorporation of mentorship into the classroom and extension to virtual internships.

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The international question: Experiential learning overseas as an integral component of library science education.

Presenters: Andrew Smith and Gwen Alexander, Emporia State University

The School of Library and Information Management (SLIM) at Emporia State University (ESU) teaches its blended master of library science degree program at two centers in Kansas, as well as at centers in Colorado, Oregon, and Utah. Each center begins a cohort of students every year, and the students take core classes together in a blended face-to-face and online format, developing a strong cohort identity and forging relationships that will last throughout their professional careers. Later in their program, students may elect to take electives with students from other cohorts, expanding their networks in the library community.

The State of Kansas has a strong outward focus, and encourages its universities to engage in international programs both by bringing students into Kansas, and by sending our students out into the world. ESU maintains a strong international program and in addition to aggressive recruitment of students to attend the Kansas campus, offers support to departments and faculty to plan and implement travel outside the United States for students at all levels across the university. In addition, ESU offers travel scholarships which cover part of the trip cost and reduce the cost for students. As a result of this, SLIM has for several years offered students the opportunity to participate in a class that examines library and information science applications in a particular country and features a field trip of 10 to 14 days in the country in question. Over the past few years, trips have visited a wide variety of countries, including Mexico, Bulgaria, the Ukraine, Serbia, Paraguay, Croatia, and Scotland.

In the early years, trips were planned that focused more on service learning, and on students engaging in a particular task or project. Although this is a useful and well-documented instructional strategy, there are several problems with implementing it in an international trip. One of the greatest limitations is time, and the nature of most of the projects we were invited to do meant that the students were unable to complete a whole project, or even make significant progress within the confines of the trip. (As the majority of SLIM students remain in full-time employment while they pursue their master's degree, there are strict limitations on the amount of vacation available and therefore the length of time a trip can last.)

Lack of expertise and language difficulties were other limiting factors. Often, the students were asked to provide services that were beyond their competence, or where the local staff had the competence but had difficulty explaining the process to the students. Again, students may be capable of cataloging to a high standard in English, but do not have the language skills to catalog adequately in Spanish, or, for example in languages using the Cyrillic script. Students often reported frustration at the limitations of the service opportunities, while expressing enthusiasm for the professional exchange and the cultural experience.

Over the past two years, trips are now focused on interaction with local librarians in the destination country, on a professional exchange of ideas, and of the students seeking to understand the opportunities and problems of the information world in the country they visit. While there are opportunities for the students to present workshops and participate in library activities (on the last Serbian trip, for example, the students conducting a workshop on programming ideas for young adults to librarians in Belgrade, or conducting storytimes for young children in Novi Sad,) the emphasis is on cultural immersion and observation of libraries and information services. The emphasis is on the students as learners, rather than outside experts, and the students gain a much more rounded understanding of the country and its culture.

All students keep a journal of their class experience, which includes the preparation time before the field trip, the actual experience in-country, and after their return to the United States. These journals reveal the extent of their learning and the major impact of this one class on their whole outlook of the library and information profession. It is noticeable that the great majority of students who take advantage of these travel opportunities feature this class in their cumulative portfolios and cite it as their most significant learning experience within the MLS program.

This paper will discuss more fully the great opportunities for international learning, including detailed descriptions of the problems and limitations of previous service learning projects, the advantages and drawbacks of the experiential/cultural exchange model currently being used, as well as lessons learned from years of conducting overseas trips with a student population varying widely in age, physical ability, academic concentration, and expectations. It will also draw on student journal writing to illustrate the extent and depth of the learning that occurs, as well as the way in which it gives meaningful context to the MLS degree in particular, and to the world of library and information science in general.

Too Taboo? Examining Sex in LIS Education Texts

Presenters: Heather Hill and Marni Harrington, Western University

Introduction

Censorship and controversial materials are often issues addressed in the LIS literature and in texts created as LIS educational tools. Collection development texts and other professional materials advocate for preventing censorship and for providing multiple viewpoints on controversial issues. As the controversy over the book *50 Shades of* Grey shows (Flood, 2011), even with these espoused ideals it can be difficult to remain neutral on certain issues, particularly those dealing with sex.

Learning about collection development for any library requires an understanding of controversial topics. LIS students should be pushed to critically analyze their own perspectives and biases, those of the potential communities in which they will practice, and those of the profession as laid out in professional associations' documentation and texts used in LIS education. Collection development courses could offer a safe space in which to consider controversial materials, particularly in regard to sexually-focused materials. This research uncovers the type of discourse encouraged through LIS texts by critically examining how controversial materials, particularly those of a sexual nature, are presented in LIS educational texts.

Literature

The library literature examining pornography, erotica, and other sexually themed materials in LIS centers on examining collections, cataloguing and classification, and the social and cultural pressures on librarians. Significant with this topic is the issue of self censorship (Crook, 2001; Moody, 2005). Other literature focuses on developing an understanding of the legal challenges librarians face in addressing sexual materials (Morgan, 2001; McLean, 2003).

The shifting nature of definitions, terminology, and social acceptability has been explored through examining the tools of use by the LIS profession and the changing nature of the pornography industry itself. Burek Pierce (2005) examined the changing nature of language used for sexual and reproductive health in *The Reader's Guide to Periodical Literature*.

Dilevko and Gottlieb (2002) provide a broad analysis of pornography including an overview of the business of pornography, the categorization of materials used by stores and catalogs that sell pornography, and how these categories might be adjusted for the library environment. They also discuss the shift of community standards over time and their dependence on class and other social structures, concluding that definitions for sexual materials are impermanent and subjective. They also argue that as the pornography industry grows it is becoming more mainstream. Because of this growth, pornography will become increasingly of interest to researchers in many disciplines including popular culture studies and anthropology. Hence, collecting, accessing and supporting materials of a pornographic nature need to be addressed in academic library collections.

There has been no examination of LIS teaching literature to obtain a perspective on how materials of a sexual nature are framed. The usage and definitions utilized in the teaching literature provide a new and unique perspective on which to examine the treatment of controversial materials in LIS. This paper describes a content analysis on how these materials are portrayed in LIS.

Project

This project is informed by Michel Foucault's perspective on discourse and power as outlined in his lecture "Discourse on Language" particularly his understanding of education. Education *"follows the well-trodden battle lines of social conflict. Every educational system is a political means of maintaining or* *of modifying the appropriation of discourse*" (Foucault, Discourse on Language, 1972, p. 227). It is our contention that cultural discomfort with sexual topics stymies discourse in the classroom.

Research questions

This research attempts to answer three research questions regarding LIS educational materials that support collection development curriculum.

1. How are items of a sexual nature represented in LIS educational materials?
2. Are sexual materials given balanced coverage in collection development and other LIS texts?
3. In texts with multiple editions, has the representation of sexual materials in LIS text changed over time?

Method

Texts examined for this study include both current and previous editions (where available) of English-language texts of use to LIS students and practitioners. Texts fitting the following themes were included for analysis: textbooks on collection development and reference, LIS encyclopaedias, glossaries, and dictionaries, and professional association publications (for example, *Intellectual Freedom Manuals)*. Relevant materials for analysis were located using keywords and subject headings in the extensive collection of a long-standing, ALA-accredited LIS program library.

In all, 116 texts were analysed using content analysis (Krippendorff, 2004). The table of contents, indices, glossaries, encyclopaedic entries, section and chapter headings of the texts were examined for the following thematic elements: *sex, pornography, erotica, obscenity, censorship, curiosa, facetiae,* and *controversial materials*. All definitions and usages were categorized as negative (pejorative; not the legal definition), middling (a mix of neutral and negative information, with some redeeming qualities) or positive/neutral (based on exemplar definitions i.e. obscenity as defined by the Miller Test, 413 U.S.15[1973] and erotica as defined by Kent, 1968).

Findings

Findings from our investigation indicate that LIS reference resources are predominately pejorative when discussing sexual topics. The legal definitions of obscenity are not followed and there is a negative link between obscenity and pornography. Few texts provide distinctions between different types or genres of sexual materials, the few that do fall far short of truly tackling the topic.

An underlying theme is that pornography seems to be used as a catch-all term to encompass all material of a sexual nature and seems to be automatically lumped into the 'obscene' category. In preliminary research, one text consulted provided a definition for 'pornography' and distinguished it from the milder term 'erotica,' but its sole example of the erotica genre is *Fanny Hill: Memoirs of a woman of pleasure*, written in 1748.

Additionally, reference materials are not given balanced coverage compared to intellectual freedom and policy texts. Finally, coverage in reference materials becomes increasingly unbalanced over time as more recent editions do not cover controversial materials or the treatment of the topic becomes pejorative.

Results of this study will be significant to researchers, practitioners, and LIS students who are interested in more critically examining their own biases and developing a stronger understanding of the cultural constructs that fashion our approaches to controversial topics.

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The Most Important Question of All: How Do We Prepare the Next Generation of Faculty in LIS and iSchools?

Presenter: Richard Cox, University of Pittsburgh

The professional schools, in all their various forms, are situated in universities that are constantly evolving. As Jonathan Cole states, If an ideal type exists for the great American university, most universities do not, in fact, usually attempt to orient and educate new faculty members, students, and academic leaders about what it is, or to inform them about the history of the particular institution that they have chosen to make part of their lives. Universities do not often talk about the core values of the university – the values at the heart of university culture, which they are nevertheless expected to understand. There are no discussions with newcomers about what is meant by free inquiry and academic freedom; about the acceptance and encouragement of debate, dissent, and controversial opinions; about tolerance of ideas that may seem hurtful or repugnant; or about how and why great universities are organized as vehicles for discovery and criticism. Somehow, we assume that people have considered these issues, have come to understand them, and don't need to discuss the idea of a university or how to reinforce or challenge appropriately its core norms and values. Universities need to make a better effort at developing a culture that recognizes and rewards the contests that take place in the marketplace of ideas" (*The Great American University: Its Rise to Preeminence; Its Indispensable National Role; Why It Must Be Protected* [New York: Public Affairs, 2009], p. 502).

How well prepared are new faculty in our schools for functioning within the modern university? Some years ago, based on my own continuing reading about the nature, issues, and challenges in higher education (and my own experiences as a doctoral student), I prepared a course on academic culture and practice. This course has been offered as both an elective LIS doctoral seminar and the required LIS introductory doctoral seminar. It has been positively received by students taking it, has resulted in some published essays, and has established itself in the LIS curriculum.

In this paper I will do several things. First, I will discuss the nature of the course's purpose, content and assignments. It has three purposes: it introduces doctoral students to the nature, history, and purpose of higher education, with a focus on the American university system; students learn about critical issues confronting Schools of Library and Information Science and iSchools; and, the course will provide a framework for enabling doctoral students to consider their own interests in and aspirations for academic teaching and research careers. The course provides an intensive reading experience in the growing literature on higher education and the role of faculty, including the changing nature of the university; the idea of the university; the history of higher education; the role of faculty; the place of professional schools in higher education; the corporate university; the faculty and scholarship; the faculty and reading; the faculty and teaching; the faculty and writing; the faculty and publishing; the faculty and intellectual property; and the faculty and free speech.

Second, I will discuss the impact the course has had on doctoral students in terms of publishing, preparing for their dissertation research, and preparing for their academic posts. I will survey past students, both graduated and currently in the program, who have taken the course. One of the aims of the seminar is to assist doctoral students in developing a foundation for their future academic careers (as well as to consider the choices between academic and other careers in the information professions).

Third, I will evaluate the doctoral curriculum of other LIS and I-schools to identify the extent to which such preparation for academic and scholarly careers is being addressed in a direct manner. I know of a few other courses similar to what I teach. In addition to this context, I will draw on a recently completed survey directed at archival education programs (my own area of specialization), about attributes desired by schools for new faculty hires with freshly-minted PhDs.

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Employable Skills and Ethical Concerns in LIS Education: the Case of FRBR and Shakespeare

Presenter: D. Grant Campbell, Western University

The current job market for LIS graduates is placing significant demands upon LIS educators to both clarify and justify their understanding of the balance between the acquisition of hard skills and the encouragement of critical analysis. While LIS students advocate for courses that give them concrete skills in current systems, educators argue that they must go beyond individual systems to teach broader concepts that apply across systems. Furthermore, they argue that students must be able to assess those skills within broader intellectual contexts: particularly those of ethics and political economy (Vaagan 2003).

This controversy leads us to assume that acquiring professional skills and acquiring a graduate education are mutually-exclusive activities. This paper will argue that we need to focus on the overlap between them, and that this overlap lies in showing students the ways in which broader intellectual questions in the information field manifest themselves at the level of specific procedures, specific systems, and specific techniques and skills.

This paper will address this need by showing how the concepts of information organization systems can shed a useful light on the ongoing problem of censorship. In particular, it will argue that the conceptual model underlying our latest library cataloguing standard—the FRBR paradigm—seeks to render fundamental ontological distinctions machine readable: distinctions that lie at the heart of our conceptions of what constitutes censorship and, indeed, what constitutes hate in text.

IFLA's FRBR paradigm—The Functional Requirements of Bibliographic Records—rests on a distinction between the work as an aesthetic or ideational construct and the expression as the representation of that construct in some specific set of notation or symbols. While the distinction will hopefully make catalogues of the future more effective at collocating related materials in rich and useful ways, three recent controversies involving questions of racism, homophobia and censorship have shown that the distinction between work and expression lies along important ethical fissures, and will therefore cause us to embed those fissures in machine-readable form.

The Canadian Radio and Telecommunications Commissions ruling in 2010 on a Dire Straits song, “Money for Nothing,” required that Canadian radio stations air only versions of the song that do not contain the word “faggot.” Earlier, an Ohio school cancelled a production of Agatha Christie's play, *And Then There Were None*, because the plays original title—*Ten Little Niggers*—suggested to parents and community leaders that the play was racist, even though all overtly racist language had long since been removed.

In one case, the homophobia lay in the expression; “Money for Nothing” is fine, as long as there are no offending words. In the other case, racism lay in the work: removing the words from the expression does not alter the fundamental characteristics of the work. Encoding bibliographic records in terms of works and expressions, therefore, creates a potentially explosive situation for cataloguers: by encoding in this way, are we, whether we like it or not, encoding into machine-readable form our ethical assumptions about the location of racism and homophobia, and thereby defining the technical affordances by which users could identify and label such phenomena?

If these two examples show us the potential and confusing power of the FRBR paradigm, Ron Rosenbaum's critique of Michael Radford's film of Shakespeare's *The Merchant of Venice* suggests that in certain important ethical contexts the distinction collapses. Rosenbaum argues that Shakespeare's play is intrinsically and fundamentally anti-Semitic; furthermore, he argues that the anti-Semitism is manifested in *both* the work and the expression: that in fact it is impossible to separate the intellectual content from the words chosen to express it. Radford's efforts to sanitize *The Merchant of Venice*, Rosenbaum argues, are ineffectual: not because there's something “beneath” the words, as argued by the opponents to *And Then There Were None*, but precisely because we have nothing but the words. Rosenbaum's critique, while it does not specifically engage the work/expression distinction, effectively renders that distinction meaningless.

These three examples, then, offer different possible ways to interpret the effects of our efforts to encode bibliographic records according to the FRBR paradigm. If objectionable content lies in the expression, it should be possible to filter catalogues to limit access to records of controversial materials. If such content lies in the work, then such efforts will be problematic. And if, as Rosenbaum's argument implies, the distinction between work and expression is ultimately a fallacious one, we may be encoding according to a distinction that has no substantial benefits for catalogue users. Furthermore, this is not an isolated case. Important ethical considerations in information organization manifest themselves frequently at the level of rules within manuals, and the techniques of reading and interpreting classification schedules and controlled vocabulary conventions.

This paper, then, argues that LIS educators need to integrate dimensions of the information studies field that are often kept separate. Information organization and retrieval, while it rests on a quantitative and empirical research tradition, cannot be seen simply as a collection of search skills; the skills students learn are deeply embedded in moral, ethical and ontological questions about freedom and censorship. At the same time, the ethical issues of information studies often manifest themselves at the particulate level of procedure and technology: the rules we follow, and the rules that machines follow on our behalf. Broader conceptual questions of information at the ontological, philosophical and moral level should not be sequestered into isolated courses, as if they are issues that students can address apart from their mastery of professional skills. They should be integrated into courses that teach professional skills.

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Communication and Dialogue: Understanding success in the collaboration between the classroom and the Centro para Puerto Rico (CPP)

Presenters: Sergio Chaparro; Eliut Flores-Caraballo; and Carlos Suarez, University of Puerto Rico

This article discusses, analyzes, and explores the lessons of a multi-level collaboration effort at the Graduate School of Information Sciences and Technologies (GSIS&T) of the University of Puerto Rico (Río Piedras Campus) in the context of the core class Foundations of Information and Knowledge Organization. In this context, three sections of the class worked together to implement a Content Management Platform using Open Source software (Knowledge Tree) that would benefit an outside organization such as the *Centro Para Puerto Rico* (CPP). This project starts with a simple inquiry: How can we develop a solid and creative learning environment to teach the design and implementation of a content management? This article explores the importance of creative communicative practices and dialogue among the participants of this project: students, employees of the CPP, and faculty members. Unlike a typical class setting, in this particular instance, students taught other students and CPP personnel about the design, implementation and assessment of the Knowledge Tree platform; they even designed an instruction manual for the CPP employees. In addition, the students used face to face and virtual communication methods to dialogue during the process. This article discusses the importance of using communication methods that fit to the student needs in the process of learning and collaborating and discusses how relevant and insightful is for students to become teachers and instructors to others as a way of learning. This article suggests that experiences of this kind represent the future of LIS education. Several factors make also this experience worthy of being discussed and analyzed for current and future LIS education:

1. It is the first time a collaboration of this kind has happened at the GSIST in the context of a class of this size (around 65 Masters' students and three faculty members in total).

2. The *Centro Para Puerto Rico (CPPR), Fundación Sila M. Calderón*, a non-profit organization located at Río Piedras and founded by former Puerto Rico Governor Sila María Calderón, had until this project, no experience with Content Management Systems or the use of any document management software whatsoever. This is the first time that an organization of this size was able to work directly with library school students and faculty on a project of this scope.

3. The collaboration process required a great deal of client-education and persuasion on the part of the professors and student teams. CPPR management learned about the long term benefits of embracing document management software. An important finding of this experience is the added-value that these systems can bring to information organizations with small or limited experience with electronic records management and electronic preservation.

4. Much of the design and implementation work for the CMS involved working on a bilingual environment (English/Spanish) which increased the educational value of the experience and could be a positive lesson for numerous projects of this kind around the world, especially in Spanish speaking regions.

In essence, this article stresses the importance of being creative when posing the initial inquiry for a class project: What is the best possible project for an LIS classroom and how can we design it creatively using and making the best of the student's input and abilities?

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Broadening the Field of Inquiry: How and Why LIS Faculty Collaborate

Presenters: Lisl Zach and Prudence Dalrymple, Drexel University

Background

While collaboration is seen as an essential part of faculty life in many academic disciplines, relatively little is known about the nature of collaborations pursued by library and information science (LIS) faculty or about the factors that motivate or inhibit them in regard to establishing collaborative relationships, either within their own domain or across academic disciplines. The results of this study provide a snapshot of collaborative behavior by LIS faculty and may shed light on how LIS faculty can contribute to other fields of knowledge through successful interdisciplinary collaborations, whether by supplying missing expertise for specific research projects or by providing intellectual stimulation while thinking about ways in which to design innovative curricula. Through such collaborations, LIS faculty can pursue the goal of broadening the field of inquiry in ways that benefit not only themselves but also educators and researchers in other disciplines.

Traditionally, LIS educators and researchers study information, and pose questions about its uses and its users, in a wide range of organizational settings and environments. This involves LIS faculty in a variety of collaborative activities, including those within their own academic units and those involving faculty from other academic units or institutions. Global interactions made possible by virtual environments may affect LIS faculty collaborations (Sonnenwald et al, 2009). Visualizations of co-citation clusters (Chen, Ibekwe-SanJuan, & Hou, 2010) demonstrate the range of collaborative activities among LIS faculty. Citation analysis also shows that collaborations between LIS faculty and practitioners do occur, although these collaborations result in relatively few co-authored publications (Hildreth & Aytac, 2007; Winston & Williams, 2003).

Approach

Two research questions guided this investigation:

1) In what types of collaborative relationships do LIS faculty engage?
2) What factors motivate or inhibit collaborative relationships for LIS faculty?

Much of the research that has been done on collaboration in academic settings has focused on collaborations among scientists (Birnholtz, 2007; Hara et al, 2003; Qin et al, 1997; Sonnenwald, 2007). These studies supplied the authors with models that were useful in framing questions about collaboration by LIS faculty but provided no single approach to investigating the phenomenon; the disciplinary backgrounds and research interests of LIS faculty tend to be more disparate than those of scientists within a single discipline.

Building on this earlier research, the authors developed a twelve-question survey to collect data about LIS faculty's experiences with collaboration as well as their perceptions about the factors that affect their collaborations. The survey consisted of two parts; the first part (questions 1 through 7) addressed the nature of collaborative relationships experienced by LIS faculty, and the second part (questions 8 through 12) addressed perceptions of factors affecting collaboration. The list of factors affecting collaboration was drawn from the literature on collaboration and team building and was confirmed by the interdisciplinary group of researchers using a modified Delphi technique.

With support of the conference organizers, data were collected from registered attendees during and after the 2010 conference of the Association for Library and Information Science Education (ALISE) using the pre-tested survey instrument, which was administered in both a paper-and-pencil version and an online version; 141 responses were collected. While the limited sample used for this study does not represent a comprehensive picture of the LIS field, the data offer insights into the nature of collaboration by LIS faculty and suggest areas for future research on this topic.

Selected Findings and Discussion

LIS research often focuses on information use and users in a variety of organizational settings and environments, which should make interdisciplinary collaborations attractive as a way of accessing research subjects in disciplines outside of the LIS field. It is thus surprising to note that less than half of the LIS faculty responding to the survey question about types of collaborators had collaborated with a colleague from another department or academic unit within her or his own university. Furthermore, LIS faculty are more likely to form collaborations with practitioners than with an interdisciplinary partner at her or his own university.

One change in the research climate that may affect the frequency of collaborations in the future is that many major funders now include appropriate collaboration as one of the key evaluation criteria for receiving external support. This often means that faculty seek out partners for collaborative activities from within their own universities as well as from other universities and from outside of the academy. The goal of demonstrating a wide impact of research results can motivate LIS researchers to form collaborations with community organizations as well as with schools and libraries.

The most important motivator for collaboration identified by the survey respondents was the need for specific expertise for a project (68 percent), followed closely by shared goals (65 percent). Lack of time is the most serious barrier to collaboration (identified by 62 percent of respondents); personal issues including lack of progress toward the goal, lack of contribution from others, and conflicting personalities were listed as inhibitors for collaboration. Trust, while seen as an important enabler for collaboration (by 59 percent of respondents) was only identified as a barrier by 38 percent of respondents. This is consistent with previous research indicating that trust is seen in an intervening role rather than as a direct mechanism (Sargent & Waters, 2004). Trust was seen as the greatest enabler and lack of time was the greatest barrier to collaboration. Based on the results of this survey, LIS faculty collaborations follow patterns found in other work domains, but in order to encourage greater collaboration, especially across disciplinary boundaries, faculty may wish to consider ways to improve conflict resolution and engender greater trust. Issues of time are likely to be addressed only at the institutional level.

Limitations

The results of this study may be limited in that respondents to this survey were recruited from registered attendees at a single conference. Future research is planned to expand the study to other LIS faculty and to faculty in other disciplines. These data will provide a point of comparison with what has been learned from this preliminary study.

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Community Informatics Studio: Designing Experiential Learning to Support Teaching, Research, and Practice

Presenters: Martin Wolske and Colin Rhinesmith, University of Illinois at Urbana-Champaign

1. INTRODUCTION

This paper introduces a model of experiential learning to support teaching, research, and practice in library and information science (LIS). The concept we call "Community Informatics Studio" uses studio-based learning (SBL) to support enculturation into the field of *community informatics* (Keeble & Loader, 2001; Gurstein, 2003; Williams & Durrance, 2009). The SBL approach is rooted in the apprenticeship model of learning in which students study with master designers or artists to learn their craft and is closely related to John Dewey's inquiry-based learning (Lackney, 1999). Our paper begins with a review of literature to provide a foundation for our research. We then introduce our case study of the Community Informatics Studio course. For each of the three semesters it has been offered, we discuss the guiding theoretical frameworks, research questions, methodological approaches, findings, and recommendations. The goal of our paper is to respond to this year's conference theme by presenting three sets of questions that emerged from our overarching research question:
"How can the Community Informatics Studio be understood as a model of experiential learning to support teaching, research, and practice in library and information science?"

2. THEORETICAL FRAMEWORK

The relevant literature can be traced to the teachings of John Dewey, Paulo Freire, and other educational philosophers who argued that learning should be rooted in people's everyday experiences (Becker, 2000; Mehra; 2004; Ball, 2008). "Service-learning" seeks to connect "practical experience to reflection" as a strategy to enhance student learning and "personal growth through civic engagement" (Ball, 2008). However, scholars have noted the long-standing tension that exists between theory and practice in library education (Morehead, 1980). Others have sought to problematize the concept of service learning by addressing the unequal power relationships in university/community partnerships (Reardon, 1998; Mehra,2004). Our paper attempts to fill a gap in the literature by fusing theory and practice through SBL (Lackney, 1999; Brown, 2006; Brocato, 2009) in LIS teaching, research, and practice.

3. CASE STUDY: COMMUNITY INFORMATICS STUDIO

Using SBL methods, Community Informatics Studio has brought students, instructors, and professionals together with community members in a collaborative environment to apply community informatics practices to a real-world problem or "case." Project work has been student-led, with student's work-in-progress as well as the critique of that work by the instructor, outside practitioners, and peers occurring in the public space of the studio, a facility designed to closely reflect the professional work environment. The learning objective is to shift focus from learning-about to learning-to-be by providing a more nuanced understanding of the thinking behind design choices (Brown, 2006). Formal lectures are used sparingly to provide students with background knowledge and information needed to successfully address the case and produce an effective proposal/plan.

Studio-Based Learning: Three Examples

In this section, we introduce three semesters of the course. We emphasize the diversity of theoretical and methodological approaches used to address the unique themes and questions:

Summer 2010. Students used SBL to design “Public Computing Centers (PCCs) of the Future.” They reviewed environmental psychology, evidence-based design, and diffusion of innovation research and theory, interviewed administrators of existing PCCs, and performed field research. They used this combined knowledge to develop design principles for PCCs in community-based organizations.

Summer 2011. The course built upon the knowledge gained from the Summer 2010 semester. In this case, students used SBL to equip “Community Media Newsrooms” with community partner organizations. Students worked with partners and mentors to address the disparity in effective use of technologies for information gathering, reporting, and information, and news presentation in north Champaign and East St. Louis, Illinois.

Fall 2012. Students will continue to build upon lessons learned from the past two semesters to design “Popular Technology” (Eubanks, 2011) workshops with community partners. The course will integrate popular education, participatory research, and participatory design methods with SBL to help partner organizations design more effective and relevant digital and media literacy training programs.

4. CONCLUSION

In this paper, we hope to provide an innovative and adaptable model of experiential learning in LIS education by presenting our case study of the Community Informatics Studio course. Our intention is to inspire further lines of inquiry to help support the development of teaching, research, and practice in library and information science.

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Communities of Practice: An Effective Environment for Authentic Inquiry

Presenter: Joyce Yukawa, St. Catherine University

Problem Statement: Challenges to Authentic Inquiry

Asking authentically beautiful questions is the driver of knowledge formation and is in large measure rooted in new ways of seeing problems that arise in research and professional practice (Bowden & Marton, 1998). Ways of seeing are built on existing theory and practice, informed by new trends, and shaped by individual experience and frames of reference. The challenge to authentic inquiry is in fostering new ways of seeing in the rapidly changing, technologically driven environment of LIS. This paper identifies important factors in the learning environment that foster the development of new ways of seeing and argues that a communities of practice (CoP) framework can provide an effective environment for pursuing authentic inquiry.

The Pursuit of Authentic Inquiry: Theory, Practice, Individual, and Community

Theory, practice, the individual, and the community are the four main dimensions of the learning environment that shape authentic inquiry. *Theory* is broadly defined to include abstract concepts related to theories, principles, practices, and emerging trends in information behavior, access, and organization. *Practice* is defined as applications of theory in actual or simulated professional contexts. *Individual* refers to factors that affect learning as individuals. *Community* is broadly defined to encompass social learning and the relationships built among individuals. These four dimensions are strongly interrelated.

Although theory constitutes the core of LIS curricula, it will not be discussed extensively here. Ample discussion and debate exist elsewhere on the content of LIS curricula (e.g., Bruyn, 2007; Hall, 2009; Lester & Van Fleet, 2008). This section focuses on important gaps in typical learning environments that affect knowledge formation and the pursuit of authentic inquiry – (1) the needs of adult learners as individuals, (2) a practice-based curriculum, and (3) social learning in a community.

Individual. Adult learners value individual agency, social learning, and authentic problem solving (Boud et al., 1985; Brookfield, 1995, 2005; Freire, 1970, 1998; Knowles, 1980; Mezirow, 1978, 2000; Schon, 1983; Webster-Wright, 2009). For the most part, adult learning is characterized as intrinsically motivated, self-directed, and purposeful. It is rooted in contextual understanding formed through experience and practice, is developed through critical reflection on assumptions, and proceeds through problem solving and negotiation of contested meanings with others, including reciprocity between teachers and students. Experience and empirical research have shown that professional education is most effective when it is learner centered, active, social, and practice based (Ball & Cohen, 1999; Darling-Hammond et al., 2009; Garet et al., 2001; Wei et al., 2010; Yukawa & Harada, 2009). Although these aspects are important supports for asking beautiful questions, they are frequently not primary considerations when developing curricula.

Practice. Learning is in part a process of enculturation into authentic practice (Brown, Collins, & Duguid, 1989). Problem/project-based learning (PBL) is based on authentic inquiry and has been shown to be more effective than other teaching methods (Ravitz, 2009; Strobel & van Barneveld, 2009; Walker & Leary, 2009). Knowledge formation through problem solving "is more meaningful, more integrated, better retained, and more transferable than from any other activity" (Jonassen, 2006, p. 194). PBL encourages deep learning over time (Ravitz, 2009) and emphasizes learner autonomy, authentic problems, evidence-based investigations and solutions, collaborative learning, and reflection (Savery, 2006), aspects that are valued by adult learners. Service learning provides similar advantages for LIS education (Becker, 2000; Roy, et al., 2009; Yontz & de la Pena Cook, 2003). While interest in these types of extended forms of practice-based learning appears to be increasing, their use is far from universal in LIS education.

Community. While the relative importance of individual and social learning has been debated, both are considered essential to the inquiry learning process (Hakkarainen, 2009; Salomon & Perkins, 1998; Sfard, 1998). Sfard (1998) argues that choosing one over the other results in "theoretical distortions and undesirable practices" (p. 4). Some important social and affective gains of learning in groups include growth of a sense of community (Liu et al., 2007), trust and empathy (Preece, 2004), sense of belonging (LaPointe & Reisetter, 2008), and identity formation (Jorgensen & Keller, 2008).

In addition to insufficient attention to the practice, individual, and community dimensions, what is lacking is an integrated framework for the learning process that attends to all four dimensions of the learning environment to support the pursuit of authentic inquiry.

Authentic Inquiry in a Community of Practice Environment

According to Wenger (1998), communities of practice are groups of people (a community) who share a concern or a passion for something they do (a domain) and learn how to do it better as they interact regularly (a practice). Through developing a shared practice, members of a CoP develop new ways of seeing and ways of addressing recurring problems.

The communities of practice (CoP) framework considers individual and group learning as interrelated and inseparable learning processes that evolve through shared problem solving and the use of a common repertoire of tools, methods, and skills. Since the concept was introduced by Lave and Wenger (1991), studies theorizing and applying CoP ideas have been prolific in educational, business, government, and professional spheres (e.g., Barab et al., 2004; Dube et al., 2006; Garrety et al., 2004; Hara, 2007; Lathlean & Le May, 2002; Ruuska & Teigland, 2009; Schlager et al., 2002; Snyder et al., 2004; Vavasseur & MacGregor, 2008; Wenger et al., 2002).

To support blended learning, I developed a CoP model based on Wenger (1998) to guide collaborative learning among adult learners in a graduate LIS program. This holistic framework helps ensure that theory, practice, individual, and community factors are given attention as part of the learning environment. CoP learning is based on three modes of participation: engagement, imagination, and alignment. *Engagement* is active involvement in meaning making and addresses the need of adult learners to connect to their prior experience and established frames of reference, as well as engage socially and emotionally with other learners. *Imagination* is seeing connections and encompasses the critical, creative, and reflective thinking processes that lead to questioning assumptions, imagining alternatives, and transforming one's knowledge through exposure to new information and ideas from others. *Alignment* focuses on solutions to shared problems, clear decision-making, and socially responsible action. A CoP organizes learning around the negotiation of four creative tensions: meaning, practice, expertise, and identity/leadership. These negotiations involve the interaction of theory and practice, improvisation, mutual teaching and learning, and developing an identity in relationship to the professional communities.

Through addressing typical gaps in learning environments, the CoP model provides an effective environment for the pursuit of authentic inquiry through asking beautiful questions.

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Teaching with Case-Based Instruction: Teaching to question rather than answer

Presenter: Jeonghyun Kim, University of North Texas

Introduction and Background

Asking students to actively participate in real or hypothetical problem situations, followed by reflection and discussion on the experiences encountered in the field, is a recognized instructional strategy. This strategy is often referred to as C*ase-Based Instruction (CBI)*.[1]

CBI is a problem-based learning approach that requires students to participate in the learning process in an active way by working through authentic situations (Hmelo-Silver, 2004). It is widely known that CBI can improve student learning in various ways. Mayo (2002) found that students viewed CBI not only as realistic and helpful in the learning process but also as challenging, creatively stimulating, interesting, and enjoyable. For this reason, CBI has been widely used for years in classroom settings for professional fields, such as law, medicine, business, and instructional design.

At the center of CBI is the case, which is a story that students read or explore interactively. Many researchers assert that cases should be realistic, engaging, and challenging, thus leading to better learning and decision-making. Davis (1993) noted that a case should tell a story about a thought-provoking issue, have elements of conflict, lack an obvious solution, and encourage students to think about how they would handle the situation in a similar circumstance. Often, cases can be used as the catalyst for class discussions and lectures; they are used in conjunction with traditional lecture methods to link practical applications and classroom didactic material. They are implemented in small group discussions to stimulate both collaborative learning and self-directed learning.

This paper describes the implementation of case-based instruction in an online discussion forum.

Data Collection and Analysis

The participants of this study were 25 students enrolled in a LIS profession foundation course involving multiple online discussions.

In one learning module, students were presented with a hypothetical case scenario in which a librarian is presented with an ethical dilemma. Here is an example: “You are asked by a patron in his late 40s or early 50s who struggles with using technology to help him print a few e-mail attachments. Those attachments consist mainly of photos of a young and attractive woman, many titled with messages such as “I Love You” and including requests for money. What would you do if you found yourself in the situation and suspected that maybe the patron was being scammed?”

Both quantitative and qualitative methods were employed to analyze students’ postings of the case discussion. For quantitative analysis, the total number of online postings and accesses to the discussion thread were calculated. For qualitative analysis, online postings were analyzed at the paragraph level. We developed a coding scheme for social and cognitive presence comments. Following the iterative process of categorizing, recategorizing, and creating codes using actual comments in the posting, two social cognitive presence codes and seven cognitive presence codes were developed: greetings; praise and appreciation; agree or disagree; connect to course materials; pose questions; provide resources; offer personal perspective; disclose personal experience; and clarify misconceptions. Then the frequencies of the coded phases per posting were calculated.

Preliminary Results

A total of 39 messages were posted. From these messages, we coded 111 textual units.

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[1] Case-based learning, case-based teaching, case method of instruction, case studies, scenario-based instruction, and scenario-based learning are used synonymously in the literature.

Students used a range of social and cognitive comments in discussions. Students' comments involved greeting students (1%) and offering praise and appreciation (5%) as a way of creating social interactions. A large proportion of students' comments (94%) were cognitive presence comments. Students offered multiple perspectives on a given situation. Twenty-five percent of students' comments contained their personal perspectives. Sample comments include: "My thought process and feelings on this issue would be to put myself in such a situation … I would bring what I felt was wrong to the attention of the patron. I then would allow them to do what they will with the information that I give them…" "I think I would print the material for the patron as requested. I don't think that I would directly express my concerns to the patron unless, since he is a regular patron, I had previously established a rapport with him..."
A similar number of students' comments (24%) connected to course materials provided to students. Many students referenced ALA's Code of Ethics and other given papers to support their perspective. Several students brought other resources on ethics without offering much interpretation or explanation as to why the resources were relevant to ongoing discussions.
Seven percent of students' comments included their own experience relevant to the situation. For instance, one student stated: "Occasionally I am asked to print material for our students when we have technical issues with our printer network. I am very happy to help, but I also am uncomfortable with my access to the content they ask me to print."

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Putting a Human Face on Library Services: A Framework for Persona-Centred Design

Presenter: Eric Meyers, University of British Columbia

User analysis is an important component of information service design. Without a solid understanding of who the user is – in terms of demographics, behaviors, needs and attitudes – information services may be ineffectual at best, detrimental at worst. This is particular true of library and information services for youth. A vexing challenge in teaching future information professionals, many of whom have limited prior experience working with young people, is how we as educators can help them envision the diverse needs and behaviors of today's youth, including those who may not yet use the library. This paper proposes the use of a specific design technique, Personas, to systematically approach the development of library and information services. Personas are constructed archetypes that represent the goals and behaviors of a hypothetical user population. They include physiological, sociological, and psychological details that make users come to life. Personas facilitate design for specific users, rather than a more generalized, one-°©-size-°©-fits-°©-all approach to systems development.

This paper will begin by describing the Persona design method, originally championed by Alan Cooper (1999), and further refined and investigated by Grudin and Pruitt (2002; Pruitt & Grudin, 2003), Bodker (2000), and others (e.g., Blomquist & Arvola, 2002; Johansson & Messeter, 2005) in the Human-°©-Computer Interaction (HCI) community. Personas have been employed in professional design settings, including software and interface design, for over a decade. The literature confirms its theoretical and practical application in design. However, we are yet to see this technique documented as a pedagogical strategy in LIS education. As the future designers of information services and systems in libraries, archives, and non-°©-institutional settings, Library and Information Studies (LIS) students can benefit from design activities that force them to question their assumptions, think creatively, and refocus their attention on the user and his or her service needs (Bell, 2008). Personas puts a human face on information services, and provides a unique focal point for other design activities, including scenario discussions and brainstorming exercises.

Scholars in the design community (e.g., IDEO, 2011) and Library and Information Studies (e.g., Kopak & Nathan, 2012) have suggested and documented design-°©-based methods as a pedagogical strategy. However, a closer look at "design thinking " in classroom practice reveals mostly one-°©-off approaches, rather than a systematic framework for the development of technological and human-°©-mediated services. By this, I mean that the design activities sit in isolation from the content of the course – a brainstorming activity here, a scenario or envisioning exercise there – rather than being an integral part of the course framework. The activities are rarely revisited or connected; they become an end in themselves instead of a means toward developing thoughtful and reflective service design competence. LIS educators can and should incorporate design thinking into their course development; however, the process should be systematic rather than ad hoc and opportunistic. The Persona-°©-Centred Design Framework offers a holistic and replicable approach to incorporating design methods in LIS service course offerings.

Over the last three years, the author has developed and revised a framework that situates Persona development and related design activities as central features of a course on Young Adult Services. The framework facilitates the students constructing a series of unique young adult personas in class to surface their assumptions, conceptions and misconceptions about young adult users. These personas are then revisited throughout the term in different exercises that ask students to revise and extend their initial ideas. Persona-°©-based activities become integral to the course structure, and provide students with a cognitive tool kit to engage in user analysis and program evaluation work in real-°©- world settings regardless of the extent of their prior contact with young people.

In sum, this paper will outline the theory, structure, techniques, and advantages of a Persona-°©-centred approach to the design of information services using the Young Adult Services course as an exemplar. The easily replicable nature of the activities and framework suggest that this pedagogical technique can be employed across courses of varying size and duration, customized for the teaching context, and transferred to other service design instruction environments outside LIS. Personas help educators and students explore the diverse answers to these beautiful, and vital, questions: Who are we serving in library and information service environments? How can we better engage with our users in these contexts?

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Research Agendas and Time: Persistence and Change in the Profession's Questions

Presenters: John M. Budd and Denice Adkins, University of Missouri

Where do research questions come from? Ideally individual inquirers develop the ideas into which they delve, but every researcher looks to others for conceptual assistance. This paper explores the nature and content of research questions that are recommended for library and information science over the years. At times entire fields of study develop (or have developed for them) research agendas. In 1986-1987 a series of four meetings were held under the auspice of the Office of Library Programs of the United States Department of Education. The project, "Issues in Library Research: Proposals for the 1990s," included investigation of contemporary issues related to library and information science. A sizable group of participants took part in the eighteen-month-long project; one outcome was a set of critical papers that examined the major issues that were identified as a result of the investigation (*Rethinking*, Volume II, 1988). A (brief) companion publication summarized the research agenda that emanated from the project. The issues identified included:

- Policy issues
- Access to information
- Organizing, indexing, and retrieving materials
- Role of the public services librarian
- Library funding and economics
- Information users and needs (*Rethinking*, Volume I, p. 3)

The issues present no surprises; in fact, they could apply to research into libraries and librarianship at just about any point in their histories. The project identified more specific questions to be addressed by research endeavors, though. The questions were informed by the set of papers that resulted from the participants' deliberations. For example, Louis Vagianos and Barry Lesser wrote, "The information marketplace is in the midst of a period of profound change, a transformation of a scope and scale unseen since the invention of the printing press" (*Rethinking*, Volume II, p. 9). The influence of the essay is not so much in the expression of change, but in the identification of an "information marketplace." Questions expressed at the time included: "What is the impact of fees upon access for public libraries and academic libraries?" "Are the structure, organization and delivery of information influenced or decided more by aggregates of users (e.g., professional firms, businesses, citizen organizations) than by individuals as users (e.g., parent, student, private citizens)?" "Can a cost benefit/effectiveness library model be constructed?" "How can we measure the cost to society and to the individual of illiteracy and of the inability to use information successfully?" "Should librarians try to 'add value' to the information they give?" Granted, these are only select examples illustrating the "marketplace" notion; the extent to which they continue to obtain is itself open to inquiry.

In more recent times there have been a number of calls for, and formulations of, research agendas. Several of these agendas concentrate rather narrowly on particularly aspects of the profession or its institutions. One example of such a focused agenda is that presented by David Lankes (2005) on digital reference research. He (2005) says that a research agenda should consist of:

1. A definition of digital reference
2. A central, driving question
3. A series of lenses, or approaches to the central problem (p. 321)

The usefulness of clear and concise definitions for the areas to be addressed cannot be overstated. Even with a much broader and more ambitious agenda the importance of defining problems environments, technologies, social interactions, etc. is undeniable. The addition of a central driving question is less common to the articulation of agendas; more are open to an array of questions or problem statements. An underlying assumption of the other agendas may be that there is no one, single, and unique question.

Another example that is narrowed to a topic (and even an environment) is that of Hernon and Schwartz (2008). They provide an agenda that deals with leadership in academic libraries. As does Lankes, they begin with a definition of leadership from which they can proceed. The agenda for which they (2008) argue embraces the components of planning, goal setting, evaluation, and reporting (p. 247). The elements include sub-units that concentrate on the library, engagement beyond the library (as they both affect organizational culture), and developing talent. It becomes readily apparent that, while the initial focus of the agenda seems narrow, it is quite sweeping insofar as it covers most managerial function as seen through leadership. Some of the specific agendas emanate from associations. For example, the Association of College and Research Libraries (ACRL) formulated a research agenda several years ago (2003). This set of issues was intended to update one developed in 1980. "The *Research Agenda for Library Instruction and Information Literacy* is organized into four main sections: Learners, Teaching, Organizational Context, and Assessment. Each section poses general questions with the goal of encouraging those interested—practitioners, researchers, and students alike—to conduct research around these important areas" (p. 480). Numerous specific questions related to each section are articulated.

Some more sweeping research agendas have been proposed in the last several years. Perhaps the most noteworthy have been suggested by Wayne Wiegand. In 1999 he published the article, "Tunnel Vision and Blind Spots," in which he critiqued the directions of library and information science (LIS) research. Later, he (2003) argued for specific attention to the library as place and to reading; he stated that LIS could draw upon the field American Studies as a source for approaches to inquiry. In a broader vein, Gerald Benoit (2002) recognized that the prevailing logical-empirical approach to research in LIS has been fruitful, but it could be augmented by inclusion of communicative action, as Jürgen Habermas conceives it.

The foregoing are only a few examples of more recently articulated research agendas; they demonstrate some key departures from the agenda of the 1980s (and may include disparities among themselves). Not only are technological possibilities fundamental different today, but ideas of what research is and what it can accomplish can be altered. There are some similarities, though, and the proposed paper will explore in detail what has remained unchanged over time and what has changed.

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Maximal (M3) Inquiry: Range of Theory Talk in Library Science Research

Presenters: Deborah Charbonneau, Kafi Kumasi, and Dian Walster, Wayne State University

This research project evolved from of a broad desire to enhance a required graduate research methods course that the authors respectively teach by exploring the latest research articles in the field. The focus of the investigation took a turn after the initial meetings among the authors, which helps to affirm the 2013 ALISE conference theme on inquiry and its malleable qualities. Although the authors began with an initial goal of information gathering, they later refined their inquiry to settle on a more-focused question of: *How is theory portrayed or "talked about" in the library science literature?*

The impetus behind this research question emerged from a common concern among the authors whose graduate students appeared to lack the ability to effectively locate, understand, and/or integrate theory in the research design process. Moreover, the three faculty members comprising the research team found it difficult themselves to systematically retrieve research articles that employed theory using traditional key word and subject heading search strategies.

A review of the related literature revealed that previous research has tended to be quantitative, where scholars have traced the number of incidents of theory observed in the library and information science (LIS) research (Pettigrew, K., & McKechnie, 2001; Kim & Jeong, 2006). Moreover, research in this area has tended to examine theory in journals that are more oriented towards IS rather than LIS (McKechnie & Pettigrew, 2002). Other researchers have examined theory related to a particular dimension, such as information behavior (Julien, Pecoskie, & Reed, 2011). To date, there has been little research that qualitatively analyzes the meaningful use of theory and how authors "talk about" theory in the library science-oriented literature.

To address this methodological gap, the current study employs a qualitative inductive approach to help explain *how* theory is "talked about" in contemporary LIS journal articles published between 2009-2011 (Spurgin & Wildemuth, 2009). The data collection and analysis process occurred iteratively over two phases. The first phase involved selecting the sample and refining the research questions. Based on the selection criteria, seven prominent library science-centered journals were examined between the years of 2009-2011.

During this initial phase, the authors identified articles in the sample that spoke to theory in the broadest definition of the term by reading a subset of the articles. In the second phase of the research, the authors refined and focused their inquiry to investigate the more substantive question regarding *how* theory was being addressed in library science-oriented research articles. This then became the guiding framework for subsequent rounds of data collection and analysis.

Findings from this study provide an explanatory structure for understanding the treatment of theory within the sample of library-focused journal articles. In comparing these data, it became apparent that the treatment of theory covered the full spectrum of intensity from minimal to moderate to major (see Figure 1). The findings that emerged from the study, along with guidance for teaching and implementing theory into the LIS curriculum, will be discussed in the full-length paper presentation.

Figure 1: Continuum of Theory Talk

M1 M2 M3

Minimal (M1) Moderate (M2) Major (M3)

Theory Dropping Theory Diversification Theory Application

Theory Positioning Theory Conversation Theory Generation

Theory Testing

Insight gained from this study may offer contributions to both the LIS literature and education by:

Examining a subset of library science-focused journals thereby making the sample of journals used in this study unique.
Updating the existing literature related to theory in LIS research by covering the years 2009-2011.
Providing a richer understanding and depth of complexity regarding *how* theory is presented and "talked about" in current library science scholarly literature.
Offering an explanatory structure that can help both novice and experienced scholars locate, understand, and integrate theory into their own research designs.

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Conducting Young Children Randomized Control Studies within Public Library Settings: Research Barriers and Possibilities

Presenter: Janet Capps, Ohio State University

Public library services, young children, and family interactions continue to generate beautiful questions within library and information science classrooms, grant proposals, and professional practice venues. Some of the questions perpetuated by theory and practice converge under a literacy framework. This paper introduces a pilot study that utilized a delayed-treatment design with random assignment of children to condition for a rigorous evaluation of the impacts of the Summer Reading Club on children's reading achievement, activities, and attitudes. Conducting young children randomized control studies within public library settings create research barriers and possibilities that deviate from school-based studies.

The 3 sections of this paper, couched in terms of a randomized assignment pilot study conducted June-September 2012, address: (1) a brief overview of children-focused literacy studies conducted in conjunction with public libraries, (2) research-related barriers and possibilities, and (3) recommendations for preparing library and information studies (LIS) students to conduct experimental and quasi-experimental research involving children within public library settings. Section 1 highlights contemporary public library literacy-based research investigations conducted in English-speaking countries and summarizes the type of research designs used to address an array of inquiries. Examples of public library research involving children as participants covered in the full paper literature review include (a) a study undertaken in the United Kingdom that investigated the relationship between children's reading and public libraries through case studies and a questionnaire (Denham et al., 1997), (b) a public library investigation of summer reading programs conducted across the United States that employed a quantitative and qualitative approach with pretest / posttest reading assessment scores and surveys (Roman, Carran, & Fiore, 2010), and (c) a two treatment condition Carroll County Public Library early literacy assessment project (Czarnecki, 2006). Current public library and children services research being conducted in the Pacific Northwest and in the Midwest are also referenced.

The second section introduces research study design considerations related to working with children population samples in informal learning environments. Some examples for how public librarians may interact with academic institutional review boards (IRB) are introduced. While higher education researchers are familiar with IRB or ethical review board processes, public librarians with no ties to an institution may be new to these procedures. In addition to sensitizing community-based participatory research partners to IRB procedures, some IRB granting institutions may require public library personnel actively involved in the recruitment and/or primary data collection to complete a basic human research course prior to IRB approval, e.g., Collaborative Institutional Training Initiative (CITI). With approximately 16 required modules each taking between 10 to 30 minutes to complete, CITI training during peak public library summer reading program planning months may be overly taxing on library personnel resources. In the delayed-treatment design pilot study, this potential barrier was overcome as recruitment, obtaining consent, and data collection was restricted to only institutional researchers. Child learning outcomes and impacts of summer reading programs may also be difficult to systematically measure because of inherent population characteristics. For example, when obtaining consent a potential child participant may not be accompanied to the library by a parent or even a court appointed caregiver. Children meeting the study selection criteria may also visit the library as part of a community club, childcare, or group. These situations are not barriers to randomized assignment research; however, additional discussions to examine alternative possibilities for obtaining consent may help with the recruitment process and even potentially reduce attrition. Random assignment studies in public library environments should also account for friends or siblings potentially being assigned to different conditions. An extended discussion on these and other factors related to consent and / or assent, randomized assignment, and data collections considered during the pilot are presented in the full paper.

The concluding section acknowledges the important role LIS faculty has in preparing public librarians to be progressive leaders in providing literacy services for children. A role that includes the support of children developing emergent literacy skills, obtaining school readiness goals, and developing as lifelong learners (Celano & Neuman, 2001). Walter (2003) posited the unexamined research in this area may be related to a lack of interest from LIS academics to work with children. Perhaps, preparing future librarians to collaborate with institutional researchers willing to tackle challenging literacy-related research questions will involve providing extended research learning opportunities in our accredited library programs for students to gain quantitative and qualitative experiences involving children participants. To develop these important skills, LIS courses will need to include opportunities to learn how to select, administer, and analyze child literacy assessments and documented program observations. Public librarians with research skills that include how to reliably measure impacts of library

services and programming on young children may enhance public library funding opportunities, inform policy, and expand community services that target literacy opportunities for children. As LIS faculty continue to evolve curriculum to prepare librarians and future researchers, this paper introduces additional considerations impact research in children informal learning environments brings to the conversation.

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