

2012 Annual Conference Abstracts:

Juried Paper Proposals

A Framework for Exploring Sustainability in LIS Education

Leanne Bowler*
lbowler@sis.pitt.edu

Eleanor Mattern
emm100@pitt.edu

Heather Soyka
has76@pitt.edu

Jessica Benner
jgb14@pitt.edu

*Author to whom all correspondence should be directed.

School of Information Sciences,
Library and Information Science Program
University of Pittsburgh
135 North Bellefield Avenue
Pittsburgh, PA 15260

Sustainability is a “new social ethos emphasizing the web of relationships that link the challenges we face” (Edwards, 2005, 9). Sustainability is a surprisingly amorphous term that crosses a wide array of issues. However, at its most basic level, sustainability is about finding a balance between ecological, economic, and equity issues. Edwards adds a fourth dimension to the relationship – education (2005, 23). Libraries, with their concern for the well being of the communities they serve, their focus on equity of access to information and culture, all of which is framed within an environment of limited economic resources, implicitly make decisions about sustainability. There is support for sustainability in IMLS’s *Museums, Libraries, and 21st Century Skills Report* (2009). Museums and libraries are encouraged to take a holistic approach to building 21st century skills in their communities, including such 21st century themes as environmental literacy, civic engagement, and global awareness – all essential elements to sustainability. Sustainability, therefore, is not just about recycling and using less resources; it is also about careful management, long-term planning and access. Ensuring that libraries and their services, collections, and ideas are kept alive for future users is both a design and management issue that can be addressed through LIS education. Librarians need to learn about sustainability and sustainable design practices so that they can create libraries that, to paraphrase the Brundtland report (*World Commission on Environment and Development*, 1987, 43), will meet the needs of present library users without compromising the ability of future generations to meet their own needs.

The purpose of this paper is to build on conversations about sustainability, sustainable design, and its relationship to LIS. We do so through the lens of design thinking, a management technique for solving complex problems in innovative ways. “Design thinking” is both a process

and a mindset and has surfaced as a topic of discussion in the design, management, and business fields (Brown, 2008). In order to create designs that benefit the environment, the economy, and people for the long-term, LIS designers must be able to adapt to changing projections and accept that there are many unknowns in sustainable design. An LIS curriculum should explicitly integrate design thinking through coursework and projects that reflect design thinking's continuing circular process of inspiration, ideation, and implementation that is done as part of a collaborative team.

We begin the paper by investigating the implications of sustainability (and its expression in sustainable design) for LIS from the perspectives of teaching, research, and practice. We then present a conceptual model that helps to bridge sustainability and LIS. Using the metaphor of an ecosystem – an information ecology – as a backdrop, the conceptual model maps the functions embedded in the information life cycle to the “4E’s” set out by Edwards - ecology, economics, equity, and education. We demonstrate some tools for evaluating sustainability that are used in other fields and discuss how these tools might be implemented in the LIS environment. To conclude, we present a set of questions to help steer exploration and the discovery of innovative design solutions related to sustainability and LIS, guided by themes such as *rationale* (the “why”), *significance* (the “so what”), *trust*, *values and ethics*, *empowerment*, *evaluation*, *challenges and barriers*, and *advocacy and outreach*. We map these questions to an exercise in design thinking as a way to inspire innovative solutions to a complex problem.

By defining sustainability through the lens of LIS, building a conceptual model, identifying questions to prompt further exploration, and framing the problem through the lens of design thinking, our paper helps to lay the foundation for the development of a learning module on the design and evaluation of sustainable libraries. As a result of this project, a new framework that brings together and helps guide exploration in sustainability, sustainable design, and LIS teaching, research, and practice was created. The framework is an original contribution to LIS and will help to steer future conversations on the topic. This paper relates to the conference theme of “*Extending Our Reach: Expanding Horizons, Creating Opportunities. Relevance to Current and Emerging Issues in LIS Education*” because it explores an issue that is relevant to society and does so from a unique LIS perspective, thus expanding the horizons for research and teaching in LIS.

Acknowledgements: The authors acknowledge the contributions of the students in the course *Design Theory and Practices in LIS*, University of Pittsburgh.

References:

1. Brown, Tim. (2008). Design Thinking. *Harvard Business Review* 86, no. 6 (June), pp. 88-89.
2. Edwards, Andres R. (2005). *The Sustainability Revolution: Portrait of a Paradigm Shift*. Gabriola Island, British Columbia: New Society Publishers.
3. Edwards, Andres R. (2010). *Thriving Beyond Sustainability: Pathways to a Resilient Society*. Gabriola Island, British Columbia: New Society Publishers.

4. Institute of Museums and Library Services. (2009). *Museums, Libraries, and 21st Century Skills Report*. Washington, D.C.: IMLS Office of Strategic Partnerships.

5. The World Commission on Environment and Development.(1987). *Our Common Future*. Oxford: Oxford University Press, p. 43.

Educator-Level Contributions to Youth Learning Outcomes in a Discovery-Based Game Design Program in Rural Schools

INTRODUCTION

This study centers on a technology education and digital literacy development program of game design administered by a non-profit organization with middle and high schools throughout the state of West Virginia. The program utilizes an online social learning network made available to educators and students, with each class receiving its own wiki site and Flash game design curriculum, embodying a discovery-based co-learning model in which students and educators learn together.

This model requires a certain extent of autonomy and self-driven inquiry and self-directed learning among students, while educators are still novices. Questions pursued in our research agenda include: Is the discovery-based context motivating for students? What kind of students? Does the program's autonomy-supportiveness elicit positive outcomes? What role do educators play as co-learners and guides, and what educator factors influence outcomes? How much structure/scaffolding is optimal in the Constructionist learning (from educators, and/or the socio-technical environment itself)?

A previous study by Reynolds (2011) investigated students' game design learning outcomes in the 2009/2010 school year. She evaluated 216 student games produced at 22 participating schools using a reliable content evaluation coding scheme, and found that when evaluated outcome values were grouped as a mean by pilot location school, results varied substantially by location. This finding led us to question what factors are contributing to this variation. We expect some is explained by educator-level phenomena and we set out to explore the extent to which our qualitative educator data offer insights in this regard.

In this study, we explore educator reflections during the 2009/2010 pilot year as evidenced in quarterly progress report reflections, and investigate in what ways educator-level phenomena may contribute to the measured students' outcomes. Evidence supporting an influence of certain educator qualities, experiences, and/or extent of expertise, on student outcomes will establish an initial rationale for continuing to pursue this link with greater rigor. It may be that while the discovery-based context supports student autonomy, educator scaffolding is still substantially impacting the learning. This finding would offer insights into the role of structure in optimizing

discovery-based learning. Results on educator scaffolding may impact program practicalities such as hiring and training, and enrich current theoretical debates in the learning sciences, around discovery-, problem- and inquiry-based learning and cognitive load (e.g., Kirschner, Sweller & Clark, 2006; Hmelo-Silver, Duncan & Chinn, 2007).

OVERVIEW

We employed a mixed method approach to explore educator reflections and their linkages to student outcomes. First, game evaluation outcomes were used to rank schools. 216 student games from Pilot Year 3 were analyzed in four categories using the content analysis approach described in Reynolds (2011). The coding scheme had established inter-coder reliability. The schools were ranked by means and batched into two groups: higher and lower performing schools.

Then, quarterly educator progress reports were analyzed using inductive textual analysis in two “waves.” The reports are rich data sources including quarterly educator reflections on professional development, and experiences working directly with students. In Wave 1, we qualitatively reviewed and summarized the educator reflections to identify categories of findings. When three or more schools evidenced a particular theme, we coded this as a findings category. Established categories that demonstrated this agreement were placed in a grid for each school reflecting them, by quarter and mean student outcome ranking. In Wave 2, we dichotomized the dataset into higher and lower performing schools, and positive experience and challenge categories.

RESULTS

Educators from higher performing schools reported a greater frequency of positive experiences categories than lower performing schools, and reported several positive experience categories that were not discussed at all by the lower performing schools, including:

Positive experience becoming familiarized and acclimated to the complex game design curriculum and platform over time, and understanding the array of activities in which participants engage

Enjoying co-learning and knowledge sharing with students (letting their guard down as authority figures and working in more egalitarian power dynamic)

Increasing their confidence in their own expertise and ability to guide students

Successful completion of the program through meeting of deadlines and student achievement of milestones and expectations

Positive expectations for upcoming class in the subsequent school year

Educators from lower performing schools reported a greater frequency of challenges than higher. They generally gave an impression of concern and in some cases burden towards their duty to support students in the program, and reported several challenging experience categories that were not discussed at all by the lower performing schools, including:

Concern about students' attendance issues

Feelings of difficulty in motivating the lower-achieving students

Concern about their poor performance and meeting the expectations of the non-profit

Concern with some students' incompleteness of final projects

Feelings of fatigue from ongoing effort required to stay on track

Concern about limited time and looming deadlines in completing the required work; feeling over-burdened by program expectations

Fourth quarter progress reports provide some of the clearest differences and contrasts among educator attitudes and reflections at the higher and lower performing schools; specific quotations will be shared in our conference presentation. Overall, it appears individual differences such as attitude / motivation might explain educators' response to the common challenges posed across all teacher participants, in learning a very new array of expertise domains.

DISCUSSION

Kirschner, Sweller & Clark (2006) criticize "discovery-based learning" for creating excessive cognitive load and de-motivation as a result of a lack of structure and distraction when students must engage in a search process for learning resources which detracts from the primary learning aim (e.g., Actionscript programming). However, Reynolds & Harel Caperton (2011) find that some students in this program report feeling frustrated during discovery-based learning, whereas others report enjoying the program, and, the autonomy afforded.

Self-determination theory (SDT, Deci & Ryan, 2008) argues that three constructs underlie intrinsically motivated human behavior as innate needs: the need for autonomy (to have choice and control over one's life), for competence (to be effective), and for social relatedness (to feel connected to others, loved, and cared for) (Deci & Ryan, 2008; Ryan & Deci, 2000). The authors indicate that educators can play a role in supporting the motivational climate of the educational setting, influencing student learning by supporting autonomy, competence, and social relatedness. Reynolds & Chiu (2012, submitted) explore contribution of *students'* intrinsic and extrinsic motivational orientation to outcomes, finding that intrinsic orientation contributes positively.

Findings here indicate that educators' varying attitudes appear to relate to student learning outcomes in the expected direction. These findings may in fact indicate that educators' *own* self-efficacy and/or motivational disposition (intrinsic versus extrinsic perhaps, or self-efficacy) influence their capacity to support the motivational climate of the educational setting.

If intrinsic and extrinsic orientations among educators are linked to their own and student outcomes, this may have implications for educator training, support (and hiring). More research is needed to strengthen the evidence base, and better understand the interplay among educator and student processes, motivations, and learning gains within the co-learning model. Continued multi-level modeling research following up on the findings reported here is underway.

REFERENCES

- Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology, 49*, 14-23.
- Harel, I, & Papert, S. (1991). *Constructionism*. Norwood, NJ: Ablex Publishing.
- Hmelo-Silver, C. E., Duncan, R. G., Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark (2006). *Educational Psychologist, 42*, 99-107.
- Kirschner, P.A., Sweller, J. & Clark, R.E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry based teaching. *Educational Psychologist, 41*, 75-86.
- Kuhlthau, Carol Collier, & Caspari, Ann K., & Maniotes, Leslie K. (2007). *Guided inquiry : learning in the 21st century*. Libraries Unlimited, Westport, Conn.
- Papert, S. (1980) *Mindstorms*. New York: Basic Books, A Division of HarperCollins Publishers, Inc.
- Reynolds, R. (2011). Possible contributors to evaluated student outcomes in a discovery-based program of game design learning. Paper presented at the annual conference of the American Education Research Association, April 2011, New Orleans, LA.
- Reynolds, R & Harel Caperton, I. (2011). Contrasts in student engagement, meaning-making, dislikes, and challenges in a discovery-based program of game design learning. *Educational Technology Research and Development, 59*(2): 267-289.
- Reynolds, R & Chiu, M.M. (2012, submitted). Contribution of Motivational Orientations to Student Outcomes in a Discovery-Based Program of Game Design Learning. Submitted to the *International Conference of the Learning Sciences, 2012*.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.

Rebecca Reynolds, Assistant Professor

Rutgers University, School of Information and Communication, 4 Huntington Street, New Brunswick, NJ 08901.

rebecca.reynolds@gmail.com

Go Un Kim, Doctoral Candidate

Rutgers University, School of Information and Communication, 4 Huntington Street, New Brunswick, NJ 08901.

gounkim@gmail.com

Strategic Repositioning: Crossing disciplinary, institutional and traditional boundaries in LIS education in the Caribbean.

Paulette A. Kerr, University of the West Indies, Mona, Jamaica

paulette.kerr@uwimona.edu.jm

Introduction

The need for change is a common factor in LIS programs and this leads to issues such as departmental reorganization, integration and alignment (Chow, Shaw, Gwynn, Martensen and Howard, 2011). The authors argue that although all expected benefits from change do not always materialize, the process results in greater levels of institutional acceptance of LIS programs. The literature on change in library and information studies is quite robust and this robustness is reflected in the varied and sometimes contentious discussions on how LIS programs are being redefined, broadened and repositioned. Gregory (2009) confirms the notion of necessary change and argues that education for library and information science has always sought to keep pace with change primarily to maintain relevance and contends that the recent growth in “I-Schools” where information is taught as the overarching discipline is a possible response to developing professionals to meet the changing information needs of users.

Other researchers have examined curricula and programmatic changes, compelling drivers behind these changes and how the changes reflect the expanding reach of LIS education in new domains. Rehman (2010) describes the redesign of LIS curriculum in Kuwait to meet the “changing information market” while Mammo (2011) compares traditional and contemporary curricula in Ethiopia and concludes that “reorienting of programs to meet rapidly changing

needs” expands the reach of these courses. The issue of changing market forces is also linked to the development of non-traditional curricula including programs in archival studies (Long, 2011), museum informatics (Marty & Twidale, 2011), digital curation (Fulton, et. al, 2011), and courses which emphasize community engagement (Mehra & Robinson, 2009). The defining role of collaboration and interdisciplinary outreach initiatives in expanding LIS curricula is also addressed with Gunawardena, Weber and Agosto (2010), encouraging LIS educators to harness the benefits of interdisciplinary collaboration. Long’s report (2011) provides evidence of the benefits of cross-institutional collaborations especially in expanding LIS education to new arenas.

The process model of curriculum review towards change and outreach is reported by Zimmerman, Jorgensen and Lyon (1998). The authors identify the steps, strategies and challenges involved in overhauling a LIS program.

This paper reports on the intense planning process and strategies, undertaken by the Department of Library and Information Studies (DLIS) at the University the West Indies (UWI), Mona Campus, towards strategic repositioning of LIS education across disciplinary and traditional boundaries. It identifies internal and external drivers, challenges and opportunities, and details the preliminary course of action.

Background

Driven by mandates from the Principal of the University of the West Indies (UWI), Mona Campus, and the Dean of the Faculty of Humanities and Education, and faced with other external as well as internal demands for change, the Department of Library and Information Studies embarked on an extensive programmatic review in 2011 towards repositioning LIS education in the Caribbean. Having served as the premier institution in the Caribbean for developing librarians and information professionals for almost 40 years, the DLIS in 2011 was at a crossroad which necessitated curriculum and programmatic review and renewal.

The Principal’s agenda for change reflected the UWI’s Strategic Plan 2007-2012, *Strategic Transformation for Relevance, Impact, Distinctiveness and Excellence (STRIDE)* which addressed distinct focus areas of ‘teaching and learning’, ‘graduate studies’, ‘research and

innovation’ and ‘service to UWI-12 countries and other underserved communities’. To prepare the distinctive UWI graduate for the 21st century, The Principal stressed the re [de]fining of curricula, and programs to i) include critical and analytical readiness; ii) reflect collaboration and integration across disciplines, departments and institutions; iii) emphasize regional Caribbean (in addition to national) focus and outreach; iv) highlight expanded international partnerships in teaching and research v) develop ‘exportable’ innovative technology.

Strategic aims of the Dean centered on curricula redesign aimed at reaching new and different constituents to enhance the profile of the Faculty.

The UWI STRIDE document (UWI, 2007) was employed to set the tone for and to guide a series of activities within the curriculum review process. These included a brief SWOT analysis followed by a bench marking exercise aimed at identifying required attributes for LIS graduates. Although substantial review and change had been made to the Department’s programmes over time, the exercises revealed substantial gaps in relation to new directions in LIS education and the demands of the market place.

The paper details Phase 1 (2011) of the DLIS’ path towards expanding programmatic horizons in an effort to strategically resituate itself in the changing UWI and the global information environments. Phase 1 includes intense internal planning and review stages as well as preliminary interdisciplinary outreach initiatives. The paper captures the ‘double-sided’ vision behind the repositioning of the programme, by briefly describing significant tenets of the institutional mandates as well as internal LIS demands. The focus is on the planning processes including main players, strategies developed, barriers and tensions which emerged in the process as well as emergent and created opportunities for expanding LIS education. The following are captured and examined:

- Curriculum Review Process
 - SWOT Analysis
 - Benchmarking Exercise
 - Strategic Objectives
 - Programmatic Repositioning towards Information Management

- Course development/amendment
- Quality Assurance Review Process
- Interdisciplinary Outreach initiatives e.g. to business via the Mona School of Business; to journalism via the Caribbean School of Media and Communication; law via the Faculty of Law
- Institutional Outreach e.g. to Community and Teachers' Colleges
- 'Open Campus' Outreach initiatives
- Capacity building proposals

Significance

This paper aims to present a model of change, expansion and outreach for LIS education while drawing on the multiple dimensions of change addressed in the literature. It provides details of the multistep process of curriculum and programmatic change driven primarily by external pressures and fuelled by internal vision. The paper demonstrates that institutional objectives while presenting challenges may provide LIS educators with opportunities to strategically resituate their programs while extending the reach of the curriculum beyond current boundaries.

Future Work

The next step will involve detailed description and analysis of Phase 2 (2012-13) and validating of the repositioning model which emerged during the intense planning process. Discussions will address issues of sustainability, success, and challenge via analysis of products such as interdisciplinary, cross-institutional curricula and programs, as well as perceptions of students and faculty and institutional constituents.

References

- Chow, A. S., Shaw, T., Gwynn, D., Martensen, D., & Howard, M. (2011). Changing times and requirements: Implications for LIS education. *LIBRES*, 21(1), 1-22.
- Fulton, B. Botticelli, P., & Bradely, J. (2011). Digin: A hands-on approach to a digital curation curriculum for professional development. *Journal of Education for Library and Information Science* 52 (1), 95-108.

Gregory, V. (2009). Education for Library and Information Science Professionals. *Encyclopedia of Information Science and Technology*, (pp.1251-1254).

Gunawardena, S., Weber, R., & Agosto, D. (2010). Finding that special someone: Interdisciplinary collaboration in an academic context. *Journal of Education for Library and Information Science*, 51(4), 210-221.

Long, C. (2011). Developing and implementing a Master of Archival Studies Program: A collaborative effort of a State University, a State Archives and the National Archives and Records Administration. *Journal of Education for Library and Information Science*, 52 (2), 110-121.

Mammo, Y. (2011). Rebirth of library and information science education in Ethiopia: Retrospectives and prospectives. *International Information & Library Review*, 43, 110-120.

Marty, P. & Twidale, M. (2011). Museum informatics across the curriculum: Ten years of preparing LIS students for careers transcending libraries, archives, and museums. *Journal of Education for Library and Information Science*, 52(1), 9-22.

Mehra, B., & Robinson, W. (2009). The community engagement model in library and information science education: A case study of a collection development and management course. *Journal of Education for Library and Information Science*, 50(1), 15-38.

Rehman, S. (2010). Redesigning LIS curriculum for a changing market: the case of Kuwait University. *Libri*, 60, 298-305.

University of the West Indies. (2007). *Strategic Plan 2007-2012: Strategic Transformation for Relevance, Impact, Distinctiveness and Excellence*. Retrieved from <http://www.uwi.edu/Files/PlanningOffice/StrategicPlan/STRIDE.pdf>

Zimmerman, N., Jorgensen, G., & Lyon, C. (1998). Seizing the day: A case study of one school's core curriculum revision process. *Journal of Education for Library and Information Science*, 39(2), 134-147.

*Reading as a Communal Practice: Examining the Reading Engagements, Identity
Constructions, & Social Factors Present in an Online Young Adult Book Club*

Presenter:
Delicia Tiera Greene
dtgreene@syr.edu
646-234-9687

Syracuse University
School of Information Studies
245 Hinds Hall
Syracuse, New York 13244

Introduction

This case study explores how young adults' identities are constructed in an online Facebook Book Club. Identity construction will be examined from the following perspectives: (1) how facilitation influences identity construction, (2) how a sense of community influences identity construction; and (3) how gendered perspectives influences identity construction.

Significance of Research Study

With the ever growing popularity of social networking sites and many users taking a multi-purpose approach to using them, this study goes beyond technology as a tool, but explores technology as a socially- constructed environment (Johnstone, 2008). We are living in a technological society and with the demands on schools and public libraries to infuse technology into the learning process this study explores how young adults communicate in a Facebook Book Club. More specifically, this study explores how identity is constructed in the following ways: through the facilitation of discussion by library media specialists, through the creation of

community by young adult participants, and through young adults' gendered perspectives. Based on the overwhelming appeal of online book clubs, this study seeks to explore young adults' level of engagement with literacy in the hopes of influencing the work of librarians, teachers, and web designers.

Literature Review

Most researchers, librarians, teachers interested in adolescents' reading agree that reading plays an important role in the construction of both personal and social identities. Although there tends to be much variation in how the term "identity" is used across disciplines, it is commonly held to be the process of defining the self in relation to others, based on self- categorization and group identification (Bulholtz & Hall, 2005). The development of an individual identity is one of the major tasks of adolescence, as young people negotiate the attachments and alienation of various friendships, peer groups, and families (Coterell, 1996, p, 5).

Reading then helps us understand who we are and what our place in the world is and might become. Furthermore, "self-identity is based on a shifting understanding of self in relation to various social structures and social constraints" (Ross, McKechnie, & Rothbauer, 2006, p.115). The relationships that readers create with fictional characters and fictional worlds allow readers to test and explore interpretations of various identities (Sumara, 1998). "Studies of reading that ask young adults why they like to read and what they choose to read give overwhelming evidence that reading plays an important role in helping young adult readers understand the world and their places in it" (Ross, McKechnie, & Rothbauer, 2006, p. 115).

The Internet enables million of people worldwide to exchange information and conduct business (Gupta & Kim, 2004). In particular, the Internet's potential for multi-way information

transformation provides a mechanism for forming shared interest groups or communities (Rothaermel & Sugiyama, 2001). With the prevalence of the Internet, virtual communities have emerged as a new place for individuals to communicate with each other. Virtual communities encompass social connections among people who might never meet in a face-to-face interaction but whose communication with one another is mediated through electronic and digital technologies (Ross, 2006; Rheingold, 1993). One of the most common ways to foster virtual communities based on reading activities is through the use of web-based gateways or social networking sites.

Methodology

The Syracuse City School District Facebook Book Club included both students and school media specialists from four local high schools: Nottingham, Fowler, Corcoran, Henninger. The Syracuse City School District Book Club was moderated and facilitated by four school media specialists. More than one hundred high school students participated in the online book club. Student participants ranged in age from 14-17.

Discourse Analysis was used to analyze book club posts by both students and school media specialists. Chat A and Chat B are both excerpts of book discussions based on the novel *Thirteen Reasons Why*. Chat A focuses on facilitation and identity construction, while Chat B focuses on sense of community and identity construction. Lastly, Chat C is an excerpt of a book discussion based on the novel *PUSH*. Chat C focuses on gendered perspectives & identity construction.

Theoretical Frameworks

Bucholtz & Hall's Identity Framework (Emergence Principle) (Chat A, Chat C)

Bucholtz & Hall's (2005) analysis of identity framework examines interactions and identity construction among participants. The Emergence Principle challenges more traditional views of identity that focuses on an individual's sense of self within an individual mind by focusing on how identities are discursively created in social interaction (Bucholtz & Hall, 2005, p. 587).

Rosenblatt's Reader Response Framework (Chat A, Chat C)

Rosenblatt's (1995) Reader Response Theory suggests that readers use their own experiences and knowledge bases to make meaning from written texts (Rosenblatt, 1995, p. 91). It also illustrates how they may respond with an efferent stance, in which they pull text, moral renderings and cautionary warnings from the stories (Rosenblatt, 1995).

McMillan & Chavis' Sense of Community (Chat B)

McMillan & Chavis' (1986) Sense of Community is "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986, p.9).

Conclusion

Overall, this case study reveals that facilitator's question types influence how participants respond and help to shape identity. In addition, it reveals how "sense of community" influences young adult participation and also shapes one's personal and social identity. Lastly, this case study addresses how one's gendered identity influences one's position in the world and demonstrates and determines how one asserts himself in an online conversation with members of the opposite sex.

Extending Our Virtual Reach: A Longitudinal Study of Query Type and Accuracy in Live Chat and IM Reference

Proposal Submitted by:

Marie L. Radford, Ph.D.
Associate Professor
Rutgers, the State University of NJ
4 Huntington St.
New Brunswick, NJ 18901-1071
Voice: 732-932-7500 ex.8233 Fax: 732-932-2644
E-mail: mrادford@rutgers.edu

Lynn Silipigni Connaway, Ph.D.
Senior Research Scientist
Research, OCLC, Inc.
Voice: 303-246-3623 Fax: 614-718-7378
E-mail: connawal@oclc.org

Susan T. Wengler
Doctoral Student
Rutgers, the State University of NJ
4 Huntington St.
New Brunswick, NJ 18901-1071
E-mail: swengler@eden.rutgers.edu

Libraries provide human-mediated, web-based information assistance to users through various modes of virtual reference services (VRS). A pioneer format of synchronistic VRS, live chat reference has become “an integral part of a library’s reference portfolio” (Luo, 2007, p. 195). VRS providers have simultaneously extended their reach and expanded user horizons by monitoring communication preferences and behaviors and by adopting new “technologies of choice” (Agosto, Rozklis, MacDonald, & Abels, 2011, p. 238) accordingly. As Instant Messaging (IM) has grown increasingly popular with users, libraries have responded by adding IM reference to their VRS suite. The IM format achieved widespread acceptance with the introduction of OCLC’s QuestionPoint Qwidget (Introducing Qwidget, 2008). Both the live chat and IM/Qwidget reference modes generate transcripts in the form of verbatim texts of completed VRS interactions between users and librarians. These fascinating mirrors of practice allow researchers to unobtrusively capture the nuances of actual reference practice, and in-depth qualitative transcript analysis generates data and insights which are unattainable in face-to-face (FtF) settings (Maximiek, Rushton, & Brown. 2010). This paper reports the findings of a longitudinal study, which compares a large set of chat transcripts from 2004-2006 to a set of chat and IM/Qwidget transcripts from 2010. The investigation of these international, randomly selected QuestionPoint (OCLC, 2011) transcripts includes a comparison by query type (e.g., Ready Reference, Policy & Procedural, Subject Search) and by accuracy of answers to those queries identified as Ready Reference.

Research Questions: This project investigates the following research questions:

In a longitudinal comparison of the initial transcript sample from 2004-2006 to a second sample drawn from 2010:

- How have the mix and frequency of types of VRS questions changed?
- How frequently are ready reference questions asked in VRS?

- How has the rate of accuracy of answers to VRS ready reference questions changed?
- What differences are there in mix, frequency, and accuracy for live chat compared to IM/Qwidget VRS modes?

Method: The *Seeking Synchronicity: Evaluating Virtual Reference Services from User, Non-User, and Librarian Perspectives*ⁱ project involved four phases of data collection, one of which was an analysis of 850 live chat transcripts (Connaway & Radford, 2011; Radford & Connaway, 2005-2008). These transcripts were randomly selected between July 2004 to October 2006 from a corpus of 651,687 sessions drawn from QuestionPoint and 24/7 (OCLC, 2011).

A second sample of 560 transcripts (including 350 live chat and 210 IM/Qwidgets) were selected during June 2010 to December 2010 from 296,797 transcripts drawn from QuestionPoint live chat sessions and from their Qwidget, sessions. Note that the IM/Qwidget software was added in 2008 to QuestionPoint VRS, so were not present in 2004-2006 data.

All transcripts were stripped of identifying information (e.g., name, email address, IP address) and subject to a number of different types of analyses including:

- Type of query (using Category Schemes from Katz, 1997; Arnold & Kaske, 2005; Radford & Connaway, 2005-2008)
- Accuracy of Ready Reference answers (using Arnold & Kaske, 2005)

Preliminary Results: Analysis of the initial sample (2004-2006) has been completed and analysis of 2010 data is currently in progress and on schedule for completion by January 2012. Figure 1 presents the preliminary results of the longitudinal comparisons for the most frequent types of query. It compares results from 850 live chat transcripts from 2004-2006 (which yielded 915 questions) to an initial analysis of 150 live chat and 30 IM/Qwidget transcripts from 2010 (which yielded 159 live chat and 28 IM/Qwidget questions). Subject Searchⁱⁱ was the most frequent type in 2004-2006 live chat while preliminary results for the 2010 data show that Ready Referenceⁱⁱⁱ was the most frequent type of question in live chat sessions, and Policy & Procedural^{iv} was the most frequent in IM/Qwidget sessions.

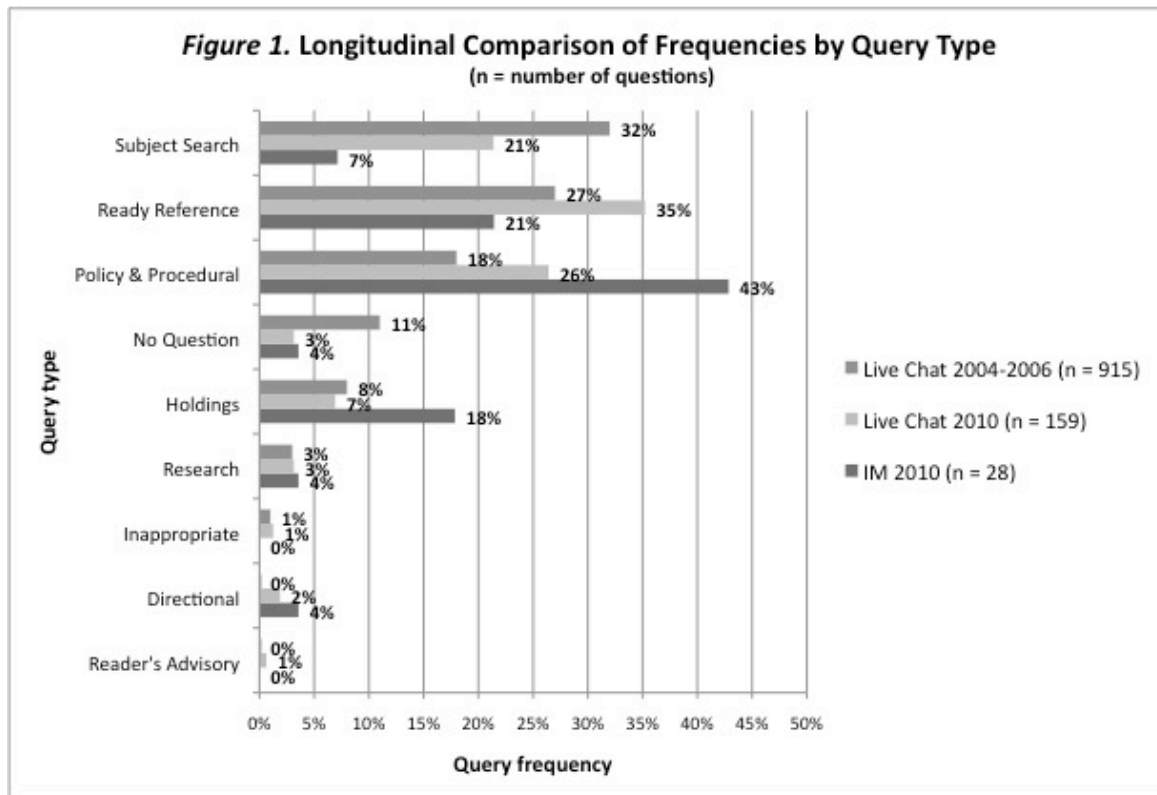
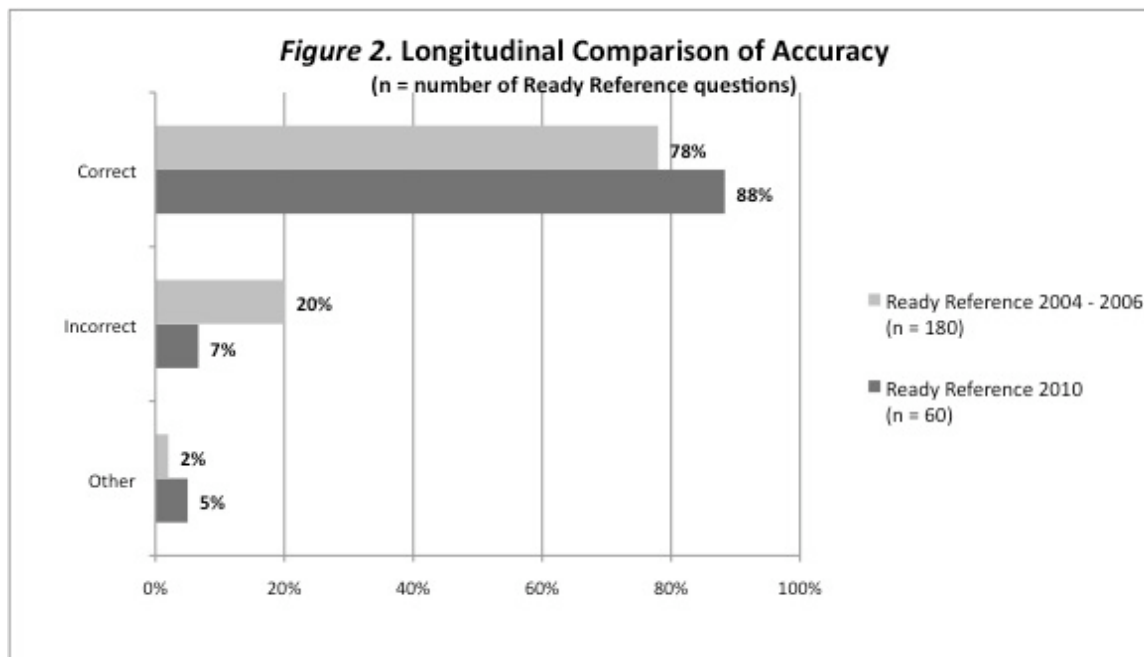


Figure 2 presents a longitudinal comparison of accuracy of a subset of 180 Ready Reference questions from 2004-2006 data to the preliminary results of a subset of 60 Ready Reference questions from 2010 combined live chat and IM/Qwidget Ready Reference questions. As can be seen in Figure 2, accuracy of the initial subset of Ready Reference answers improved from 78% (141 of n=180) to 88% (53 of n=60 Ready Reference questions).



Discussion: Even though the analysis of 2010 data is in the preliminary phase, indications are that there will be differences among most frequent types of queries for live chat in both 2004-2006 and 2010 data sets as well as in IM/Qwidget queries from 2010. Also, accuracy appears to have increased compared to the initial 2004-2006 data set. This improvement is an interesting finding that needs to be further explored as data analysis concludes in 2011, given previous recommendations to increase accuracy (see Ross, Nilsen, & Radford, 2009).

Future Research: In addition to completing the analysis of query type and Ready Reference accuracy, a number of other longitudinal analyses are being conducted with the transcripts. These include subject analysis using the *Dewey Decimal Classification* (Dewey, 2011), query clarification, interpersonal communication, generational differences (Millennial generation versus older adults), wait and session times, presence and type of instruction, and referrals.

Potential Impact or Significance: This research project is among the first to perform a longitudinal analysis of large random samples of international chat transcripts. As VRS have become more pervasive, it is increasingly vital to have guidelines for service excellence. An emerging opportunity for reference has been created as library applications have been developed that allow mobile access to VRS modes including chat, IM, and Short Message Service (texting) (Pearce, Collard, & Whatley, 2010). According to the Pew Internet and American Life Project,

35% of Americans own a smart phone (Pew Internet, 2011). This trend will result in additional traffic to VRS so benchmarking and longitudinal research is essential and has practical implications for library education, service development, and training. Based on the research findings, the authors will discuss these implications and provide recommendations for Library and Information Science education that promotes reflective practice and service excellence in both FtF and virtual environments.

Cited References

Agosto, D., Rozklis, L., MacDonald, C., & Abels, E. (2011). A model of the reference and information service process: An educators' perspective. *Reference & User Services Quarterly*, 50(3), 235-244.

Arnold, J., & Kaske, N. (2005). Evaluating the quality of a chat service. *portal: Libraries and the Academy*, 5(2), 177-193.

Connaway, L. S. & Radford, M. L. (2011). *Seeking Synchronicity: Revelations and Recommendations for Virtual Reference*. Dublin, OH: OCLC Research. Retrieved October 17, 2011 from <http://www.oclc.org/reports/synchronicity/default.htm>

Dewey, M. (2011). *Dewey Decimal Classification and Relative Index* (23rd ed.). J.S. Mitchel, J. Beall, R. Green, G. Martin, & M. Panzer, (Eds). Dublin, OH: OCLC.

Introducing Qwidget, the Question Point Widget. (2008). Retrieved on October 17, 2011 from http://questionpoint.blogs.com/questionpoint_247_referen/2008/01/introducing-qwi.html

Katz, W. A. (1997). *Introduction to reference work* (7th ed.). New York: McGraw-Hill.

Luo, L. (2007). Chat reference competencies: Identification from a literature review and librarian interviews. *Reference Services Review*, 35(2): 195-209.

Maximiek, S., Rushton, E., & Brown, E. (2010). Coding into the great unknown: Analyzing Instant Messaging session transcripts to identify user behaviors and measure quality of service. *College & Research Libraries*, 71(4), 361-373.

OCLC (Online Computer Library Center). (2011). *QuestionPoint: 24/7 reference services*. Retrieved July 27, 2011 from <http://wiki.questionpoint.org/w/page/13839418/24-7-Coop-FAQs>

Pearce, A., Collard, S., & Whatley, K. (2010). SMS reference: Myths, markers, and modalities. *Reference Services Review*, 38(2), 250-263.

Pew Internet & American Life Project. (July 2011). Retrieved on July 27, 2011 from <http://www.pewinternet.org/Reports/2011/Smartphones.aspx>

QuestionPoint: 24/7 Reference Services. (n.d.) *24 7 Coop FAQs*. Retrieved October 17, 2011 from the QuestionPoint 24/7 Wiki: <http://wiki.questionpoint.org/w/page/13839418/24-7-Coop-FAQs>

Radford, M. L., & Connaway, L. S. (2005-2008). "Seeking synchronicity: Evaluating virtual reference services from user, non-user, and librarian perspectives." Funded by the Institute for Museum and Library Services (IMLS). Retrieved on October 17, 2011 from <http://www.oclc.org/research/activities/synchronicity/default.htm>

Ross, C. S., Nilsen, K., & Radford, M. L. (2009). *Conducting the Reference Interview* (2nd ed.). New York: Neal-Schuman.

ⁱ This research project, "Seeking Synchronicity: Evaluating Virtual Reference Services from User, Non-User, and Librarian Perspectives," was funded by the Institute of Museum and Library Services, Rutgers, The State University of New Jersey, and OCLC, Inc.

ⁱⁱ Subject search is defined as a search on a topic, e.g., "Where can I find information about ADHD?" (Chat transcript, 2010).

ⁱⁱⁱ Ready Reference questions according to Arnold and Kaske (2005) “are the typical ready-reference or data queries that require only a single, usually uncomplicated, straightforward answer...Who? What? When? Why? Where?” (p. 179). For example: “Who won the world cup game between South Africa and France?” (IM/Qwidget transcript, 2010).

^{iv} Policy & Procedural questions, according to Arnold and Kaske (2005) are “Questions pertaining to policies or procedures within the library system.” (p.180) For example: “What is the max for checkout on blu ray dvids [sic]?” (IM/Qwidget transcript, 2010).

Modalities, Motivations, and Materials: Investigating Traditional and Social Online Q&A Services

Chirag Shah*, Vanessa Kitzie
School of Communication & Information (SC&I)
Rutgers, The State University of New Jersey
4 Huntington St, New Brunswick, NJ 08901
chirags@rutgers.edu, vkitzie@gmail.com

Introduction

The role of the brick-and-mortar libraries and, more specifically, of traditional reference services is changing quickly. Library patrons are often more comfortable using online services for their information needs than walking up to a reference librarian. In response, online reference services are being developed and offered, such as Ask-a-Librarian and Internet Public Library (IPL). On a different front, an increasing number of people are posing questions on various social/community question-answering (Q&A) sites to obtain contextualized and personalized answers, rather than doing keyword-based searches and retrieving a list of documents. Both of these movements have resulted in matching results in terms of people’s information behavior, leading to unsurpassed traffic for Q&A in online environments (Shah *et al.*, 2008).

The new behavior and environments require librarians and information scientists to understand where and how people are asking these questions, who is answering the questions and why, and how good is the information thus shared. The paper describes an ongoing investigation, funded by the OCLC/ALISE Library & Information Research Grant, of the following research questions from three main themes: modalities, motivations, and materials in online Q&A.

1. Why do people choose an online form of the same real-world service (e.g., virtual referencing over physical reference desk)?
2. What are a patron’s expectations from virtual referencing services?
3. What are the motivations for a user of an online Q&A service for posting as well as answering a question?
4. Where do people look for answers by posting their questions? Why do they choose one service over the other?

5. How can we measure the quality of content (questions, answers, comments, sources, etc.) posted on online Q&A sites by an expert or an ordinary user?

6. How does information obtained from online Q&A sites get used? In other words, do people use such information for real decision-making or for reference only?

Work and Results So Far

To explore these main themes, we began by identifying a series of factors that users employ when judging the “goodness” of an answer, or more appropriately, a response. A comprehensive literature review of LIS literature, focusing on Social Q&A (SQA) services and Virtual Reference (VR) best practices, identified over 200 factors.

Scholars argue that many of these factors overlap and can be winnowed down to an exhaustive list of around 10-30 factors, however a comprehensive, standard list has yet to be generated. From this review, we observed that these factors could be grouped into three high level categories: quality, relevance and satisfaction. These categories account for both the qualities inherent to the objective content of the information, as well as the subjective expectations of the end user, the two of which combine to produce a judgment of information value.

These findings take us beyond earlier works on evaluating answers or responses for quality or relevance only

* Contact author

(Agichtein *et al.*, 2008; Harper *et al.*, 2008; Kim & Oh, 2009). To determine which factors to classify under our three high level categories, we turned to insights garnered from both experts and users regarding the criteria they employ when making value judgments.

Using interviews with experts (librarians) and end-users (students), we attempted to look at both sides of the online Q&A coin, hoping to compare SQA and VR at some level. We found that users and experts most often identified topicality and validity as important factors used in making value judgments of information. Students value information that is accurate and will often test the veracity of answers provided to them on a SQA site. If they could verify the truth to an answer, or at least had the opportunity to verify if desired, they exercised a propensity toward SQA. Students who indicated participation in library instruction sessions emphasized continued use of search strategies learned to find resources that were more in-depth and on-topic with their information need. This falls in line with the experts’ similar indicated value of these two attributes and the noted success of the library instruction sessions suggests that future study should be completed to further analyze the effectiveness of these sessions in aligning user and expert information behaviors, as well as to examine the efficacy of these services across different platforms.

Ongoing and Future Work

As our ongoing research, we are using findings from the literature review and our two sets of interviews for creating a list of factors that characterize a “good” response. Using this list, we will collect quantitative rank data from users that assess Q&A sets collected from Yahoo! Answers across these factors. A statistical model will then be created to determine the influence

of each variable on determining value judgments using expert rankings of the same Q&A sets as a baseline. We hope results obtained from this model will yield implications for how the VR field and online Q&A can be improved in providing quality information to the end user.

Conclusion

As people become more familiar with online media, mobile devices, and the ubiquitous Internet, a wave of online participation and exchange of information is rapidly engulfing traditional libraries and reference services, and driving development of virtual references services. Most research on these technologies has focused on increasing system performance in delivery of information to the end user through analysis of non-textual features. While increased system performance may lead to increased user satisfaction, it constitutes only one side of the information seeking coin. Through our investigation into digital/virtual referencing and social Q&A, we aim to incorporate a humanistic element in understanding the subjective perceptions of users when employing different factors that influence resultant value judgments of information. In essence, this will help us understand where people are looking for answers to their questions, how and why they are doing so, and what is the quality and impact of such information, allowing us to extend the reach of both VR and SQA services to broader audiences, and create unseen opportunities for researchers and practitioners in LIS.

References

- Agichtein, E., Castillo, C., Donato, D., Gionis, A., & Mishne, G. (2008). Finding high-quality content in social media. In *Proceedings of the International Conference on Web Search and Web Data Mining* (pp. 183-194). New York: ACM.
- Harper, M. F., Raban, D. R., Rafaeli, S., & Konstan, J. K. (2008). Predictors of answer quality in online Q&A sites. In *Proceedings of SIGCHI Conference* (pp. 865-874). New York: ACM.
- Kim, S., & Oh, S. (2009). Users relevance criteria for evaluating answers in a social Q&A site. In *JASIST*, 60(4), 716-727.
- Shah, C., Oh, J. S., and Oh, S. (2008). Exploring characteristics and effects of user participation in online social Q&A sites. *First Monday*, 13(9).

Title: Who or What Is Constrained by the Library Bill of Rights? A Theoretical Analysis of Intentionality and Collective Action for Library and Information Science

C. Sean Burns, Doctoral Student (Primary Contact)
School of Information Science and Learning Technologies
University of Missouri, Columbia
111 London Hall
Columbia, MO 65211
210-704-7326

csbc74@mail.mizzou.edu

Matthew C. Altman, PhD
Director, The William O. Douglas Honors College
Assistant Professor of Philosophy, Department of Philosophy and Religious Studies
Central Washington University
400 E. University Way
Ellensburg, WA 98926-7521
509-963-1440
altmanm@cwu.edu

Abstract

Wengert (2001) notes that ethical discussions in librarianship typically define obligations in terms of rights and corresponding responsibilities. These rights are often framed by ethical theories such as deontology (Elgesem, 2008), social contract theory (Frické, Mathiesen, & Fallis, 2000), or utilitarianism (Doyle 2002). In some cases, rights-based theories lay the foundation for other frameworks such as discourse ethics (Budd, 2006). By appealing to rights, these theories assume things about action: what an action is, who can perform an action, and who is morally responsible. In the context of library ethics, it is important to clarify what action is, especially collective action. However, this topic has not received the requisite attention in library and information science. Action theory provides the tools for such an analysis. Since librarianship is a profession (Abbott, 1998) that binds together diverse people and establishes a common identity (Goode, 1957), it requires an analysis concentrated on its collective nature, actions, and moral responsibility. In this paper, the authors justify the attribution of collective responsibility by providing a proper analysis of librarians as a collective entity. We use the Library Bill of Rights as a starting point, and this allows us to frame questions and discussions about the meaning of moral responsibility within the profession and as a profession. The outcome will be a framework for future work on action and moral responsibility within library and information science (LIS) that will explore specific issues such as collection development, intellectual freedom, organization of information, and privacy.

Background and Brief Analysis

Many philosophers conceptually distinguish between individual and collective action. They do so because of the nature of intentionality and the "individuation of actions" (Chant, 2006, p. 422). Philosophers of mind approach action with a focus on intentions -- those mental states that cause an action. They describe actions in terms of intentions: I did *A* because I intended to do *A*; or, my intention to do *A* caused me to do *A*. In such cases, the following dilemma arises: if I did not intend to do *A*, although *A* happened as a result of my intending to do *B*, then I did not do *A* (see Bratman, 1984). This dilemma highlights the metaphysics of action -- its individuation or essence. Thus, in the metaphysics of action philosophers will ask: What is the difference between an event and an action? What separates actions from other actions? And what differentiates an individual doing action *A* and a group doing action *A* (Chant, 2006)?

Explaining actions poses other difficulties. Essentially, we may need to establish a

causal link between intention and action. Davidson's (1980) analysis shows that action explanations make actions intelligible and differentiate them from events. To make an action intelligible, we rationalize the reasons for it: the primary reason for an action is the action's proper description. This is its logical cause as opposed to its empirical cause. Whereas empirical causality implies a predictive, material relation, logical causality expresses the consequences that follow from an intent (a state of mind containing an attitude or a belief). Since descriptions of actions are *ex post facto* and responsive to an agent's attitudes and beliefs, if we hold an agent responsible for an action, we must show the most probable logical connection between the agent's intention and the agent's action.

Intentionality leads to the individual and collective action problem. If we require intent from an agent to say the agent acted, and if intention is a state of mind that motivates the agent to act, then we face the problem of describing how agents share intentions (states of mind) in collective action cases (see Copp, 2007; Ludwig, 2007). If they can share intentions in some way, then we can say they acted as a collective. Consequently, we could assign blame or praise to the collective for its action and we could hold the collective responsible as if it were an agent. However, if agents cannot share intentions, then we must find an explanation that traces responsibility to agents in the collective. Practically, this poses problems for describing actions and assigning responsibility to those who *seem* to act as a collective agent (e.g., professions bound by a common identity).

Whether a collective can be morally responsible also depends on agency. McKenna (2006) argues that agency entails personhood and this further entails other conditions like free will and moral understanding. Since collectives are not true persons, they cannot be morally responsible even if they are responsible in other ways (e.g., legally). If this is true, then this has ethical implications for librarianship. For example, four out of the six Library Bill of Rights (LBR) policies begin with the word "Libraries" and then prescribe actions for "libraries" as if libraries were personified agents capable of acting. However, if libraries are not moral agents, then libraries can neither be morally obliged to adhere to the LBR nor morally accountable for their actions. Our analysis of collective action will explain how collective entities, properly organized, are capable of intentions without having individual psychological traits such as free will and moral understanding. We will thus give a philosophically sophisticated account of who is morally responsible to carry out the policies of the LBR.

References

- Abbott, A. (1998). Professionalism and the future of librarianship. *Library Trends*, 46, 430-443.
- Bratman, M. (1984). Two faces of intention. *The Philosophical Review*, 93, 375-405.
- Budd, J. M. (2006). Toward a practical and normative ethics for librarianship. *The Library Quarterly*, 76, 251-269. doi:10.1086/511140
- Chant, S. R. (2006). The special composition question in action. *Pacific Philosophical Quarterly*, 87, 422-441. doi:10.1111/j.1468-0114.2006.00270.x
- Copp, D. (2007). The collective moral autonomy thesis. *Journal of Social Philosophy*, 38, 369-388. doi:10.1111/j.1467-9833.2007.00386.x
- Davidson, D. (1980). *Essays on Actions & Events*. New York: Oxford University Press.
- Doyle, T. (2002). A critical discussion of "The ethical presuppositions behind the Library Bill of Rights." *The Library Quarterly*, 72, 275-293.

-
- Elgesem, D. (2008). Search engines and the public use of reason. *Ethics and Information Technology*, 10, 233-242. doi:10.1007/s10676-008-9177-3
- Frické, M., Mathiesen, K., & Fallis, D. (2000). The ethical presuppositions of the Library Bill of Rights. *The Library Quarterly*, 70, 468-491.
- Goode, W. J. (1957). Community within a community: The professions. *American Sociological Review*, 22, 194-200.
- Ludwig, K. (2007). The argument from normative autonomy for collective agents. *Journal of Social Philosophy*, 38, 410-427. doi:10.1111/j.1467-9833.2007.00388.x
- McKenna, M. (2006). Collective responsibility and an agent meaning theory. In P.A. French, & H.K. Wettstein (Eds.), *Shared Intentions and Collective Responsibility*, (pp. 16-34). Boston: Blackwell Publishing.
- Wengert, R. G. (2001). Some ethical aspects of being an information professional. *Library Trends*, 49, 486-509

Perceptions of Education and Continuing Education in Technical Services Librarianship

Heather Lea Moulaison^{iv}

Assistant Professor, University of Missouri

Shilpa Rele

Metadata Librarian, University of Miami

A rapidly-evolving informational landscape requires professionals in all branches of librarianship to acquire foundational knowledge and skills while in school, and to continue to develop knowledge and skills for the duration of their careers. These ties between formal university-based masters-level education and less formal continuing education are evident in the ALA's *Core Competences for Librarianship*. The competences (American Library Association, 2009) stipulate the need for basic skills along with the "continuing professional development of practitioners in libraries and other information agencies".

Technical services librarianship is one of many rapidly evolving fields in librarianship, relying on theory to inform new practices. Practicing technical services librarians work primarily as acquisitions librarians, catalogers, collection development librarians, digital initiatives librarians, and metadata librarians. Technical services librarians employed in all kinds of libraries continually need to expand their horizons not only to advance professionally, but to remain relevant on a basic level. While continuing education and training in new technologies, standards, and approaches are essential for staying connected to their profession, it is unclear the extent to which technical services librarians' foundations in LIS enable them to engage with new technologies by seeking out and learning new skills. LIS education is a masters-level degree; it does not purport to train graduates fully to take on technical services librarian tasks. However, it does prepare these librarians to understand broadly and theoretically the evolving information environment in which they work.

The analysis and discussion of results of an online survey of technical services librarians conducted during the summer of 2011 are presented in this paper. Two primary research questions are explored:

RQ1: How adequate is LIS education in technical services, both theoretically and practically, for technical services librarianship?

RQ2: To what extent do librarians working in technical services feel the need for continuing education?

The respondents' perceptions of formal LIS education and its relationship with continuing education will be presented and analyzed.

Review of selected literature

In modern library and information centers, new knowledge and skills must be learned on a continual basis. Hill states that, “[i]t is well recognized that the education afforded by graduate programs in library and information science cannot and will not ever address all of the education and training needs for librarians and other library workers” (Hill, 2007, p. 50). Although training and skills can be learned on the job, there is an expectation that the foundations of the profession will be learned in library school along with enough skills to function effectively in a work environment. A gap has been identified between that which is learned and that which needs to be learned. According to Fessler, “[a]ddressing the competency gaps for present and future librarians is the most obvious and critical need” (2007, p. 143). It is unclear, however, which gaps technical services librarians perceive, and whether these gaps should ideally be addressed in the masters program or on the job.

The amount of information librarians need to master has grown over the years (Hill, 2007). In order to remain connected to library patrons and their information needs, practicing technical services librarians must find ways to enhance their technical skills on the job. Han and Hswe (2010) see both metadata librarianship and cataloging librarianship as evolving rapidly, stating “it is incumbent on both metadata and cataloging librarians to be self-motivated, willing to learn, and flexible” (Han & Hswe, 2010, p. 137). Are technical services librarians able to connect with the right continuing education opportunities once in the field, and has the education they received in library school prepared them adequately in terms of the theoretical foundations necessary to expand and grow as information access changes?

Method

An online survey of technical services librarians was carried out from July 14 to 31, 2011. The survey was made available through Qualtrics survey software and was advertised widely on a variety of library-related email distribution lists. The primary focus of the survey was the perceived education and continuing education needs of technical services librarians with an emphasis on their access to continuing education opportunities. Nearly 1000 respondents participated in the survey and from their responses, exactly 700 completed responses from masters-level technical services librarians were retained for analysis in this paper.

Results and Discussion

Of the 700 masters-level respondents working in technical services librarianship, almost half (n=308, 44%) graduated in 2000 or later. Responses about the adequacy of the skills and knowledge learned will be explored more in-depth in the full paper, but preliminary analysis

reveals that over half of respondents feel they possess both necessary skills and theoretical background although some tie these to time spent in paraprofessional positions. In terms of continuing education, nearly half (n=303, 43%) feel that it is somewhat easy, easy, or very easy to anticipate future profession skills that will be necessary to acquire. Almost 70% (n=487) feel that it has been somewhat easy, easy, or very easy to learn additional necessary skills. Only 6% (n=43) of respondents had not sought out any continuing education opportunities in the past year.

Based on their responses and in light of the literature on the topic, this paper focuses on the adequacy of LIS education for preparing librarians to work in technical services, including their understanding of the necessity of continuing education. Because survey respondents have varying years of experience, their impressions at different points in their careers will be of particular interest in the analysis. The paper also focuses on the extent to which librarians working in technical services feel the need for continuing education and whether they are able to acquire necessary new knowledge and skills.

Observations about the kinds of challenges and opportunities technical services librarians are encountering will also be made. As technical services librarians move to provide themselves with the continuing education opportunities they perceive are needed to maintain their place in the current information ecosystem, they must draw on knowledge gained in library school. Implications for technical services education and continuing education will be discussed along with suggestions for further research in this area.

Select Reference List

- American Library Association. (2009). *Core competences for librarianship*. Available online: <http://www.ala.org/ala/educationcareers/careers/corecomp/corecompetences/finalcorecompstat09.pdf>
- Deeken, JoAnne, & Thomas, Deborah. (2006). Technical services job ads: Changes since 1995. *College and Research Libraries*, 67(2), 136-145.
- Dulock, Michael. (2011). New Cataloger Preparedness: Interviews with new professionals in academic libraries. *Cataloging & Classification Quarterly*, 49(2), 65-95.
- Fessler, Vera. (2007). The future of technical services (it's not the technical services it was). *Library Administration & Management* 21(3), 139-144, 155.
- Hall-Ellis, Sylvia D. (2008). Cataloger competencies ... What do employers require? - Sylvia D. *Cataloging & Classification Quarterly*, 46(3), 305-330.
- Han, Myung-Ja, & Hswe, Patricia. (2010). The evolving role of the metadata librarian: Competencies found in job descriptions. *Library Resources and Technical Services*, 54(3), 129-141.

-
- Harrison, Rachel. (2010). Unique benefits of conference attendance as a method of professional development for LIS professionals, *The Serials Librarian*, 59, 263-270.
- Hill, Janet Swan. (2007). Education for and about technical services: Where we are and where do we go next? In P. Bluh, Ed. *Commemorating the past, celebrating the present, creating the future: Papers in observance of the 50th anniversary of the Association for Library Collections and Technical Services*, Chicago: American Library Association, pp. 40-59.
- Hillman, Diane I. (2007). Adding new skills to our skill set. *Technicalities*, 27(5), 9-11.
- Hsieh-Yee, Ingrid. (2002). Cataloging and metadata education: Asserting a central role in information organization. *Cataloging & Classification Quarterly*, 34(1), 201-220.
- Intner, Shelia S. (2002). Persistent issues in cataloging education: Considering the past and looking toward the future. *Cataloging & Classification Quarterly*, 34(1), 15-28.
- Riemer, John J. (2010). Expansion of Cataloging to cover the digital object landscape. *Cataloging & Classification Quarterly*, 48(6), 551-560.
- Vega, Robert D., & Connell, Ruth S. (2007). Librarians' attitudes toward conferences: A study. *College & Research Libraries*, 68(6), 503-515.
- Westbrock, Theresa, & Fabian, Sarah. (2010). Proficiencies for instruction librarians: Is there still a disconnect between professional education and professional responsibilities? *College & Research Libraries*, 71(6), 569-590.
- Wilder, Stanley J. (2002). Demographic trends affecting professional technical services staffing in ARL libraries. *Cataloging & Classification Quarterly*, 34(1) 51-55.

Framework for Applying Postcolonial Theory in ICT Research

Navadeep Khanal

khanal@illinois.edu

PhD Student

Graduate School of Library and information Science

University of Illinois, Urbana-Champaign

Extended Abstract

This study explores a framework for critical analysis in research and practice within LIS to better understand questions, circumstances, location, and positioning of researchers particularly in the area of Information and Communication Technology (ICT) use for development in underserved, rural and remote communities. For a body of sustained critical thought, the study turns to postcolonial theory (PCT). Guided by postcolonial discourses of representation, identity, and resistance I examine literature in the field to identify and discuss some problematic issues.

The study is in part a response to the concern of a number of scholars and my own observation as a graduate student that more critical interpretation is needed when research in LIS looks at technology as a tool for rapid and positive social change. My focus in this direction is as much the result of my admiration of the humanity and the dedication prevalent in the field of LIS to do what is good and just, as it is a result of my belief that if we stop being constantly vigilant and constructively critical of our actions and thought processes, we run the risk of believing that anything we do should result in positive outcomes as long as we have our intentions in the right place. These inclinations and the resulting interactions are not always immediately visible since they are subtle and evolving, but I argue that PCT has a unique advantage of illustrating complex relations, interactions, and the drawn-out results.

Social theorists of information technology, notably Castells (2000/1996), point out that human society at present is marked by the dominance of information technology with its inevitable power to propagate change in any aspect of human life. In the age where access to information is increasingly discussed as a human right, ICTs seem to have emerged as the dominant toolset that

can easily provide access to information. The logic often applied is that the world wide web along with the associated technological toolset with the capability to carry information in a timeless fashion through seemingly nonexistent distances, has the ability to bridge all kinds of divides, including the digital divide, that separates the ‘haves’ and the ‘have-nots’.

At the same time, the speed at which technologies emerge driven by market forces, and the unintended and innovative ways they are put to use with unpredictable results, often confound researchers as they try to keep up (Wajcman, 2008). In such an environment Warschauer’s (2003) observation that “the worst failures occur when people attempt to address complex social problems with a narrow focus on provision of equipment,” becomes especially resonant. Warschauer explains that such technocentric approaches, i.e. neglecting social, political, and economic aspects, reflect gross naivety and often yields social research that ends at the distribution of ICT equipment while alleging social benefits.

The question is not generally about the motives of researchers who usually undertake time-consuming studies and projects with the best of motives and intentions. The question is, however, about critical self-examination of even our best intentions and our assumptions as researchers. This is not a case against the researcher’s objective role but a caution against a pre-assumed claim of ‘objectivity’ in understanding problems, conducting research, finding solutions, and in understanding the perspective and needs of others. Assumed ‘objectively’ can mean the appropriation of vision of the ‘other’ as Haraway (1991, 183-201) points out, which offers “transcendence of all limits and responsibility” and “infinite mobility and interchangeability.” Such qualities give the researcher, Haraway explains, the ability to see everything from nowhere.

In doing research with and about people, critical examination of identity of self and others, of location and positioning in interactions, of methods being contemplated and questions being explored, of the representation of others who are inevitably being spoken for, and of conclusions being reached is imperative. Uncritical actions limit what we can learn and skew research outcomes and our conclusions. More importantly they can be harmful to the very people we work with not only because our interaction plays a role in shaping their identities and our own, but also because research outcomes have the potential to perpetuate ‘truths’ that result in policy formulation.

However, a critical understanding cannot be sufficiently arrived at solely out of individuals’ best judgments and good intentions. A body of sustained critical thought and discussion is required. To that effect I examine Postcolonial Theory (PCT) while focusing on three general discursive areas: *Representation, identity and resistance*. By examining *representation*, I look for the interplays of power, knowledge, and appropriation of vision; with *identity* I examine the concepts of ambivalence, mimicry, and hybridity. I explore the nature of identity as being

flexible and therefore cannot be understood at any fixed or singular level. At the same time, I also propose taking a look at the identity of the researcher, its dynamics and interplays in the research process and ask about consequences of not seeing these shifts and interplays, or to resisting or rejecting their occurrence altogether. Resistance becomes an interesting issue to look at particularly in examining ICT in the context of community development and issues of divide. I posit that understanding resistance can provide valuable insights into the effectiveness and course of research and development projects.

Grounding research and practice within such a critical framework ultimately helps us forge strong and mutually beneficial partnerships with communities and people who are the real subject matter at the heart of the field. In exploring PCT as an analytical framework in LIS, the study also helps to expand its theoretical application beyond the post-colonial context with which it is generally identified, and into a dynamic field such as LIS.

References

- Castells, Manuel (1996, second edition, 2000). *The Rise of the Network Society, The Information Age: Economy, Society and Culture Vol. I.*, Cambridge, MA: Blackwell.
- Haraway, D. (1991). *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge, [183-201].
- Wajcman, Judy. (2008). Life in the fast lane? Towards a sociology of technology and time. *The British Journal of Sociology*, Vol. 59 Issue 1.
- Warschauer, M. (2003). Demystifying the Digital Divide. *Scientific American*, Vol. 289 Issue 2.

Understanding Human Multitasking Behaviors through a lens of Goal-Systems Theory

The rapid development of information and communication technologies and wireless networking has led to many users to switch between multiple tasks with their computing devices (Wallis, 2006). Multitasking behaviors have received great attention recently; many scholars from various disciplines have started to research multitasking with different perspectives and methods (Spink et al., 2008; Salvucci et al., 2009; Benbunan-Fich et al., 2011). Nevertheless, there remains an unexplained aspect. The purpose of this paper is to identify and analyze users'

multitasking factors to develop a design framework with the goal-systems theory. This study will expand the perspective of how to interpret users' behaviors and situations in order to understand user needs precisely.

First, this paper reviews definitions of multitasking from various perspectives to understand how researchers have defined and interpreted users' multitasking behaviors and situations. Benbunan-Fich et al. (2009) define computer-based multitasking behavior as it occurs when a user performs several unrelated computer-based tasks concurrently, employing one (or more) computer-based applications. Similarly, Preece et al. (1994) define multitasking that requires a user to conduct several tasks within a time-period by alternating between tasks. From a slightly different perspective, Salvucci and colleagues (2009) define users' multitasking as a *continuum* in which concurrent and sequential multitasking are overarched into a unified theoretical framework. In the present paper, the term 'human multitasking behaviors' indicates that users perform multiple information tasks at once in computing environments.

Second, this paper reviews goal system theories that can be applied to explaining the phenomena of humans' multitasking behaviors and situations. Kruglanski et al. (2002) define the behavior of goal-systems as "the mental representations of motivational networks composed of inter-connected goals and means" (p.3). The distinction between *goals* and *means* helps designers and researchers to identify and analyze different levels of users' needs in multitasking situations. Markman et al (2004) also claim that the *goals* and *means* affect users' decision making on value and choice. The distinction between goals and means provides a way to interpret and classify users' needs more systemically in design processes. Specifically, when researchers focus on *goals*, they provide more straightforward tasks and objective purposes. While when the researchers focus on *means*, they consider users' interpersonal traits when the users perform multiple tasks at once. These two different perspectives help to expand designers' interpretation of users' information multitasking behavior contexts and needs so as to come up with specific ideas and design implications.

Third, three key concepts and six experiment criteria are extracted from goal-systems theory. The three most relevant topics from Kruglanski et al. (2002)'s goal system theories are "depicting dynamism" (p.2), "Interconnectedness" (p.4), and "Configurational patterns: Multifinality" (p.30). Kruglanski et al. (2002) suggest through "depicting dynamism" that humans' wishes, interests, and desires are constantly changing from one moment to the next by distractions, temptations, and digressions (p.2). "Depicting dynamism," explains the reasons why users switch from one task to another. Users' multitasking behaviors tend to be complicated and undefined because of the dynamic nature of multitasking contexts (Salvucci et al., 2009; Wickens, 2008). The concept of "interconnectedness" is another crucial factor that explains the relationship between users' cognitive processes and switching multiple tasks, and how tasks are connected to each other. The empirical exploration of goal-systems specifies the associative links between goal-system elements. The third concept of "multifinality" promises multiple associated goals by means' preferences. Kruglanski et al. (2002) suggest that the topic of preferences plays a major role in decision-making of priorities among multiple goals. From this perspective, understanding how separate goals affect users' multitasking in negative or positive ways is essential to create multitasking support systems. Kruglanski and colleagues borrowed the

notion from Nisbett and Wilson (1977)'s studies that found two goals that affect participants' choice: 1) "making a reasonable choice," and 2) "a strong position-effect: reaching quick closure after the entire array of what has been examined, which refers that what is more multifinal than its alternatives"(p.31).

The six most relevant criteria for analyzing multitasking from Kruglanski et al. (2002)'s goal system theories are: "time vs. non-time pressure," "background goals," "number of active goals," "current vs. future goals," "the degree of associations-strength," and "single goal vs. alternative goals." The goal-systems criteria and conditions provide systematic ways to analyze complex and undefined situation such as humans' multitasking in computing environments. The different types of goals and priorities affect how humans manage multiple tasks in a limited time. In particular, depending on the number of active goals and alternate goals, multitasking can be performed successfully and efficiently. These concepts and criteria can be applied to a design process and framework for user research, interpreting and analyzing humans' cognitive factors and goal associations in multitasking behaviors.

Lastly, these three goal-systems theory concepts and six criteria are adapted to interpreting users' multitasking in the context of an e-learning environment as an example. An elearning environment differs from an offline-learning environment (Downe, 2005). E-learning environments provide more selections of media, learning materials, and information than offline ones (Rosen, 2010). Therefore, an online class requires students to spend much more effort managing multiple tasks than physical classroom settings. In this study, I conducted a user observation method and analyze users' multitasking data based on the six criteria of goal-systems theory. These criteria provide an objective and systematic approach to interpreting the relationship among tasks and users' goals and means.

In conclusion, this paper addresses the growing needs to extend our understanding of humans' multitasking behaviors and contexts. The goal-systems theory provides a unique perspective and approach to interpreting users' multitasking contexts. The ultimate goal of this study is to develop a design framework, which provides a way of interpreting human-computer interaction. The design framework takes into consideration humans' cognitive processes and socio-technology factors of human multitasking. This research will contribute to developing efficient multitasking interface designs – not only of web interface designs, but of all multitasking related, information interaction systems.

Ji Hyun Park

Doctoral Student, School of Information
The University of Texas at Austin
1616 Guadalupe
Suite #5.548,
Austin, TX 78701---1213
email: jhpark@ischool.utexas.edu
phone: +1(512)897-4563

Randolph G. Bias

Associate Professor, School of Information
The University of Texas at Austin
1616 Guadalupe
Suite #5.424,
Austin, TX 78701-1213
e-mail: rbias@ischool.utexas.edu
phone: +1(512)--471-7046

***Appendix: References for the abstract**

Benbunan-Fich, R., & Adler, R. (2009). Towards new metrics for multitasking behavior. In *CHI EA '09 Proceedings of the 27th international conference extended abstracts on Human factors in computing systems*. Boston, MA, USA.

Benbunan-Fich, R., Adler, R. F., & Mavlanova, T. (2011). Measuring multitasking behavior with activity-based metrics. *ACM Transactions on Computer-Human Interaction*, 18(2), 1–22.
doi:10.1145/1970378.1970381 Downes, S. (2005).

E-learning 2.0. *e-Learning magazine*.

http://www.cmb.ac.lk/newsletter/ext_pages/Vlc/E-learning%202.pdf
(<http://www.downes.ca/post/31741>) (last accessed 7-28-2011).

Kruglanski, A.W., & Webster, D. M. (1996). Motivated closing of the mind: “seizing” and “freezing”. *Psychology Review*. Vol. 103(2):263-83.

Kruglanski, A.W., Shah, Y.J., Fishbach, A., Friedman, R., Chun, W., & Sleetho-Keppler, D. (2002).

A theory of goal-systems. Chapter in M.P.Zanna (Ed.) *Advances in Experimental Social Psychology*, Vol. 34, pp.331-378.

Markman, B.A., and Blendl, M.C. (2004). The influence of goals on value and choice. *Psychology of Learning and Motivation*, Vol. 39, 2000, pp.97-128.

Nisbett, R.E., & Wilson, T.D (1977). Telling more than we can know: Verbal reports on mental processes. *Psychology Review*. Vol.87, 231-259.

Preece, J., Rogers, Y., Sharp, H., Benyon, D., Holland, S. & Carey, T. (1994). *Human-Computer Interaction: Concepts And Design (ICS)*. Massachusetts: Addison Wesley.

Rosen, D.L. (2010). *Rewired*. New York, NY: Palgrave Macmillan.

Salvucci, D.D., & Taatgen, N.A. (2009). Toward a unified theory of the multitasking continuum: From concurrent performance to task switching, interruption, and resumption. *Artificial Intelligence*, 1819-1828. ACM Press.

Spink, A., & Cole, C. (2008). Multitasking behavior. *Annual Review of Information Science and Technology*, 39(1), 93-118.

Wallis, C. (2006). The multitasking generation. Time. Retrieved from:
<http://www.ncbi.nlm.gov/pubmed/16579497>.

Wickens, C.D. (2008). Multiple resources and mental workload. *The Journal of Human Factors*, 50(3), 449-455.

TITLE: The Effect of School Library Closings on Public Libraries in Sacramento, CA

AUTHORS:

Mega M Subramaniam, mmsubram@umd.edu

University of Maryland, College of Information Studies, 4105 Hornbake Building, South Wing,
College Park, MD 20742-4325

Natalie Greene, nngreene@gmail.com

University of Maryland, College of Information Studies, 4105 Hornbake Building, South Wing,
College Park, MD 20742-4325

Denise Davis, ddavis@saclibrary.org

Sacramento Public Library, 828 I Street, Sacramento, CA 95814

ABSTRACT

In the current economic climate, school libraries are experiencing extreme cuts in funding. In many cases, these cuts mean eliminations of entire school library positions or the consolidation of positions resulting in as many as four schools per librarian. For example, there will be 20 schools without trained librarians or media specialists in North Carolina's Charlotte-Mecklenburg school district; a district in Wisconsin let 19 librarians go, potentially bringing 10-15 back as "innovation specialists;" and in Wichita, KS, high school librarians will be replaced by non-certified aides (Resmovits, 2011). These cuts directly impact both the students and teachers in these schools as well as the area public libraries that now have a population requiring more attention than before.

While there have been a variety of studies on collaboration between public and school libraries (Brown, 2004; Bundy, 2002; Fitzgibbons, 2000), there has been little research on what happens when one of the entities no longer exists. To address this disparity, we undertook a study on the repercussions of school library closings on public library services and use. Specifically we focused on the questions: (1) Is there a change in public library services as school libraries close? (2) Is there an increase in public library usage as school libraries close? (3) How well do public libraries address the loss of school library curriculum and activities? (4) More generally, do school library closings affect public libraries in any way?

To address these questions, we formulated a case study that examined Sacramento Public Library (SPL) and the public school districts located in the SPL service area. This specific area is somewhat unique in that many of the school libraries in the county share space with the public libraries. However, because some of these school librarians have been cut - there was a reduction in school library force by 50% state-wide - it is unclear how materials intended for schools, such as textbooks and other resources, will actually get to the teachers and students. Because of this close relationship between public and school libraries, this case study presents an opportunity to

understand the ways in which school library closings have affected public library use and services.

This case study was carried out through the use of surveys, public library usage data, and school library staffing data. We began with an examination of the school library data over the past two years with the help of a representative at the California Department of Education. We also were able to gather public library data with the help of the Sacramento Public Library System, including programming notes from the past two years, library card registration figures, open hours, total number of visits, and total circulation for each branch. The SPL also urged their branch managers to complete a short survey we developed using questions from the 2010-2011 *Public Library Funding and Technology Access Survey* (Bertot et al, 2011). Using the data points across the period studied, we were able to determine whether services had been affected by recent school library closings (while acknowledging that this is corollary evidence, not causative.)

Based on the data compiled, we suggest several recommendations for the future of school and public library collaboration. Following the findings of de Groot and Branch (2009), we find that while partnerships are essential for successful programs, public libraries alone cannot properly educate students on information literacy. Public libraries need strong school libraries to supplement their work. The State Library of Iowa developed a guide for the pros and cons of combining school and public libraries (the de facto result of closing one or the other). Among the “cons” was the problem of mission:

“The public library provides a wealth of services designed to enrich the lives of all community members, regardless of age [and] contains materials of interest to all ages and on all topics...The materials in the school library support the school’s curriculum and are selected at the appropriate reading level of the students in the school. The librarian is a certified teacher with special responsibility for helping students become skilled users of information tools, including the Internet. Helping students learn to read and develop an interest in reading are part of the teacher librarian’s job” (State, 2006).

The mission of the school library is “to ensure that students and staff are effective users of ideas and information” (American Association of School Librarians, 2009). Examples of public library missions include language about community and inclusiveness, such as the New York Public Library’s mission, “To inspire lifelong learning, advance knowledge, and strengthen our communities” and SPL’s mission, “*To provide open access to diverse resources and ideas that inspire learning, promote reading, and enhance community life.*” Clearly there are different goals in schools and public libraries. For either organization to be successful, each must be able to focus on the purpose for its existence.

In addition to recommendations for clarifying the differences between school and public libraries, this study has tremendous implications for future policy decisions. School libraries are necessary and students require separate and strong school library programs. Public libraries are also underfunded (more so every year), and cannot sustain additional responsibilities without increases in budgets. 44.9 percent of libraries have insufficient connection speeds some or all of

the time and 76.2 percent of libraries do not have enough public access computers to meet demand (Bertot et al, 2011). As more social services, job applications, and government news goes online, public libraries often serve as the only source for many in the community to access vital information (Sigler, in press). Policymakers should realize 1) the differences in public and school libraries and their strengths in serving the community, 2) the necessity for both, and 3) the need for adequate staffing and funding for each institution.

This research will lead to future studies, such as expansions in focus to state-wide or nation-wide school and public libraries. With the unfortunate reality of nation-wide school library closings, it is imperative to see the impact this is having on public libraries and, in effect, on students and communities.

SELECTED REFERENCES

- American Association of School Librarians. (2009). Empowering learners: Guidelines for school library media programs. Chicago, IL: American Association of School Librarians.
- Bertot, J.C., Sigler, K., DeCoster, E., McDermott, A., Katz, S.M., Langa, L.A., and Grimes, J.M. Information Policy and Access Center. (2011). *Public library funding and technology access survey: Survey findings and results*. College Park, MD: Information Policy and Access Center. Available: http://www.plinternetsurvey.org/sites/default/reports/PLFTAS_Report2010-11.pdf
- Brown, C.A. (2004). Characteristics of successful partnerships between libraries, schools, and community agencies. *Library Philosophy and Practice*, 6(2). Available: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1007&context=libphilprac&sei-redir=1#search=%22Characteristics+of+successful+partnerships+between+libraries,+schools,+and+community+agencies.+Library+Philosophy+and+Practice%22>.
- Bundy, A. (2002). Essential connections: School and public libraries for lifelong learning. *The Australian Library Journal*, 51(1), 47-70. Available: <http://alia.org.au/publishing/alj/51.1/full.text/essential.connections.html>.
- de Groot, J. & Branch, J. (2009). Solid foundations: A primer on the crucial, critical, and key roles of school and public libraries in children's development. *Library Trends* 58 (1), 51-62.
- Fitzgibbons, S.A. (2000). School and public library relationships: Essential ingredients in implementing educational reforms and improving student learning. *American Association of School Librarians*. Available: <http://www.ala.org/ala/mgrps/divs/aasl/aaslpubsandjournals/slmrb/slmrcontents/volume32000/relationships.cfm>.
- Resmovits, J. (2011, May 31). Librarian positions cut in schools across the country. *Huffpost*

Education. Retrieved June 2, 2011 from
http://www.huffingtonpost.com/2011/05/31/librarian-positions-cut-schools_n_869458.html.

Sigler, K. I., Jaeger, P. T., Bertot, J. C., DeCoster, E. J., McDermott, A. J., & Langa, L. A. (in press). Public libraries, the Internet, and economic uncertainty. In A. Woodsworth (Ed.), *Advances in Librarianship, vol. 34: Librarianship in Times of Crisis*. Emerald Publishing.

State Library of Iowa. (2006). *Is a combined school/public library right for your community: A guide for decision makers*. Available: <http://www.statelibraryofiowa.org/ld/q-s/school-librarians/combined-sch-pl/guide>.

I like my horizon where it is!: Perceptions and experiences of on-campus students in online classes

Michelle M. Kazmer (corresponding author), Amelia N. Gibson, Kathleen Shannon
School of Library and Information Studies, Florida State University Post: 242A
Louis Shores Building, 142 Collegiate Loop, Tallahassee, FL 32306-2100
Email: mkazmer@fsu.edu
Phone: 850-559-2421

Introduction. Online, hybrid, blended, and mobile learning ("e-learning," when taken together) are not only increasingly common but also increasingly interwoven with face-to-face classroom experiences in today's educational, technological, and economic environments. As a result, even at brick-and-mortar educational institutions, many students who anticipate a completely face-to-face curriculum are required to engage in some form of e-learning. Some are officially required by institutional policy; others encounter a *de facto* requirement where it is impossible to complete a degree by taking on-campus classes only. Many students are required to use e-learning technologies in their on-campus classes. Still other students choose to augment their curriculum by taking online courses on topics not covered in their home institutions (e.g., through an agreement such as the Web-based Information Science Education consortium, <http://wiseeducation.org>).

Connection to Conference Theme. For LIS educators, e-learning has truly been a way to extend their reach and create new opportunities for distance students. At the same time, e-learning provides a platform to expand the horizons of the campus to encompass new locations, perspectives, and experiences. Students can develop real technical and communication skills while also encountering wider varieties of opinions and experiences among their fellow learners (Kazmer, 2005; Most, 2011). Some students and faculty resist some uses of technology, but it has been difficult to explore in depth the specific affective factors shaping that resistance and to keep these explorations current in a rapidly-changing sociotechnical environment (although see for example Holley & Oliver, 2010; Conole, de Laat, Dillon, & Darby, 2008).

Methods. As part of the larger process of developing a greater theoretical and practical understanding of the experiences of on-campus students in the e-learning environment, and as a way to focus that understanding specifically on library and information science (LIS), we completed an exploratory study. We conducted in-depth, face-to-face, semi-structured interviews with 20 on-campus students at the Florida State University School of Library and Information Studies (SLIS). This population was appropriate for the exploratory study because all students at

SLIS must take some online courses to complete their degree. The overarching research question guiding the study was: What are the factors influencing the *perceptions* and *affective experiences* of on-campus graduate students who take courses taught via web-based instruction? The interview questionnaire asked students about: their current and prior educational experiences, focusing on interactions with students and faculty; emotional experiences in online and on-campus class settings; and experiences with content delivery and group work in both settings. The interviews were audio-recorded and transcribed. We used grounded theory analysis methods to allow the factors that were most important to the interviewees to emerge clearly in the analysis.

This paper will present the major factors identified in this data analysis, firmly contextualizing them within the larger picture of literature and theory about e-learning in LIS (including hybrid, blended, and mobile learning) and the affective experiences of students in face-to-face *and* technology-mediated settings. The paper also develops and explores implications for practice in librarianship. The ability and willingness of librarians to engage with emerging technologies in the library and to use them to their full extent to serve patrons is shaped in part by their educational experiences with technologies, so techniques to improve those experiences can directly affect library practice (Luo, 2010). The paper will conclude by providing suggestions for instructional design, course delivery, and additional research, based on our findings.

Selected Findings. The following example findings provide a representative sense of what will be included in the paper; more findings, and additional explication of these, will also be presented.

First, participants in this study explicitly deprecated the ability to make and foster social contacts "online," and indicated that they believed that as a result their learning suffered. Even while students deprecated the social uses of mediating technologies, though, many of those same participants indicated they regularly use Facebook (or other social networking tools) to socialize with each other and with others. We explore this apparent conflict in some depth in the paper, discussing the factors—not all of which are technological—that make the difference.

Second, participants indicated that differences among faculty using the same instructional technology, and in particular the instructor's ability to "come across personally" online, affected their perception of online classes. In the LIS e-learning literature, the topic of differences between individual instructors has been sort of the "elephant in the corner" that is often studiously ignored (it is very difficult for researchers to label their faculty colleagues as ineffective). Without labeling individual instructors as "good" or "poor" users of e-learning technologies, this paper explores in some depth the personal factors associated with instruction that led to students' different perceptions.

Third, after taking online classes and being exposed to a variety of e-learning modes, the students interviewed in this study indicated they would like to add valuable aspects of the online environment, such as the ability to hold extended asynchronous discussions, to their on-campus classes. In other words, students are quick to seize upon the aspects of e-learning which they perceive provide the most personal benefits to their education, and this paper explores in some depth the underlying characteristics that affect those perceptions.

Conclusion. We argue that while it is important to understand the affective experiences and perceptions of *all* students engaged in online learning, it is especially important to explore those feelings among students who did not necessarily prefer or choose a highly technologized educational environment. This is especially true because the ability of LIS educators and LIS professionals to reach beyond existing boundaries will require a deft mix of what used to be called "high tech and high touch." The findings in this study may lead us toward adjustments in our use of technology and pedagogy not only for "on-campus" students but also for all e-learners, and in turn also for our students and graduates as they interact with information users in a variety of mobile, hybrid, and blended settings. Finding ways to improve e-learning for everybody, not just those who specifically seek out an online experience by choice, will be important for our continued success.

Selected References

- Conole, G., de Laat, M., Dillon, T., & Darby, J. (2008). Disruptive technologies, pedagogical innovation: What's new. Findings from an in-depth study of students' use and perception of technology. *Computers and Education, 50*, 511–524.
- Holley, D., & Oliver, M. (2010). Student engagement and blended learning: Portraits of risk. *Computers and Education, 54*, 693-700. doi: 10.1016/j.compedu.2009.08.035
- Kazmer, M. M. (2005). Community-embedded learning. *Library Quarterly, 75*, 190-212. doi: 10.1086/431333
- Luo, L. (2010). Social Networking Websites: An Exploratory Study of Student Peer Socializing in an Online LIS Program. *Journal of Education for Library and Information Science, 51*(2), 86-102.
- Most, L. R. (in press). Hands on from a distance: The community-embedded learning model contextualizes online student coursework. *Journal of Education for Library and Information Science, 52*.

How Many Librarians Does It Take?: A Honduran Case Study in LIS Education Efforts

Abstract (994 words)

How much of Library and Information Science (LIS) education is cultural? How many librarians does it take to build a culture of LIS education? And can that cultural background be built without external support and consultation? This paper looks at the growth of library and information science education in Honduras with a focus on how collaboration with external consultants can still lead to a culturally appropriate curriculum for LIS education.

While there have been periodic LIS training efforts sponsored and provided by Iberoamerican and United States (US) educators in Honduras, there has never been an established school or program for terminal degrees in LIS. This is not to say that Honduras does not have a system of libraries or librarians. The National Library oversees the 135 public libraries around the country and most universities and schools have libraries as well. But, as is the case in many nations around the world, Honduran administrators and organizations have little concept of the complexities of information service provision. In fact, most do not consider librarianship or archiving as professions at all. They are thought of as duties that take little knowledge beyond housekeeping skills and a willingness to discipline errant users if books are manhandled or go missing.

In 2003 a small team of administrators from the National Library, some academic libraries, the US Embassy Information Resource Center, and the Honduran International Cultural Center banded together to create the Honduran Librarian and Documentalists Association (ABIDH) to promote collaborative efforts in LIS education in-country and to improve the image of library and information professionals. Their objective of promoting LIS education in Honduras has consisted of two focused efforts: 1) the establishment of an annual three-day training conference for information professionals and 2) the proposal of an LIS Master's degree.

These endeavors show great initiative and promise; however, it is a slow process, with social, cultural, economic, and political roadblocks along the way. For example, even though the conference subsidizes as much of participant costs as possible (with grants from the US and Colombia), many conference attendees are one-time participants because of the costs in time off from work, travel to the capital city, etc. associated with attending. Because of this, session content tends to be kept at a basic, introductory level year after year. In addition, training for these conferences is largely provided through the import of international Spanish-speaking LIS experts. The body of international experts is limited to those who can present on topics that are basic enough to meet generic audience needs. Unfortunately, imported experts, even those from other Latin American countries, do not always have experience with the particular Honduran

context and so often find it difficult to provide training that is compatible with the information infrastructure and environment in which the conference attendees work. Because of these limitations connected with imported LIS education and educators, the second ABIDH initiative is critical to the future of LIS in Honduras.

The second ABIDH initiative for LIS education in Honduras has been to propose a program of Master's level LIS education. In 2005, the first draft of a proposal for two-year Master's degree in LIS at the Francisco Morazán National Pedagogical University (UPNFM) was couched in the UPNFM Educational Technology Department, and was supported by the ABIDH board of directors, the UPNFM Library Director Dr. Nitida Carranza, and the Director of the LIS School in Buenos Aires, Argentina, Dr. Elsa Barber. Further advances on the proposal took place between 2006 and 2008, as Fulbright Scholars Drs. Paul Christensen and Denice Adkins, respectively, were invited to consult on further development and restructuring of the Master's curriculum proposal in order to meet guidelines and recommendations made by the Department of Graduate Studies and Curriculum of the UPNFM.

In 2009, a political coup interrupted educational processes in Honduras for some months. As the national infrastructure has had to readjust to the sudden change in administration, educational proceedings and research have been relegated to a low political position in terms of national priorities. In 2010 Dr. Kim M. Thompson, also a Fulbright Scholar, collaborated with the Educational Technology Department and ABIDH to revise and resubmit the proposed curriculum with a shift toward a new set of University competency-based curriculum objectives. At present, the proposal has worked its way through the UPNFM administrative echelons and is currently on the table for national review.

This proposed Master's program shows promise of making Honduras self-sufficient in LIS education. In Honduras, university-level educators must hold at least a Master's degree, thus within two years of the start of the Master's degree program it would be possible for graduates of the program to begin teaching the next cohort of LIS students and an undergraduate degree and other basic technical and certificate trainings could be considered. In addition, Honduran graduate studies programs are required to include a strong research element as well as a strong pedagogical element, and so this has the potential to have a very positive impact on LIS research at national and even regional levels.

Honduras' neighboring countries will also benefit from this graduate level education, as the formal academic programs in El Salvador, Guatemala, and Nicaragua are at certification, technical degree, or undergraduate levels and are geared to provide the countries with library and archive technicians rather than researchers, library directors, and other leaders in the field. It is not common for Central Americans to seek undergraduate or technical training in neighboring countries, but looking to other countries for graduate education is not uncommon, and the closer and less expensive the graduate process, the more accessible it is to potential enrollees.

The case of LIS education in Honduras demonstrates that promoting and designing LIS education curricula requires cultural understanding and cooperation. While the US and other countries have gone to great lengths to support the development of Honduran LIS education, neither the US nor Iberoamerican cultures of LIS education would be appropriate for Honduras, a country with its own literary history and challenges.

Author info

Dr. Kim M. Thompson^{iv}
Lecturer
School of Information Studies
Charles Sturt University
Boorooma Street
Locked Bag 588
Wagga Wagga NSW 2678
Australia
Email: kithompson@csu.edu.au
Phone: +61 2 6933 2808

Dr. Denice Adkins
Associate Professor
School of Information Science & Learning Technologies
College of Education
University of Missouri
303 Townsend Hall
Columbia, MO 65211
Email: adkinsde@missouri.edu
Phone: (573) 884-9804

Expanding horizons through pleasure reading: the diverse experiences of LGBTQ readers

Jen (J.L.) Pecoskie

Assistant Professor

Wayne State University

Detroit, MI USA 48202

Ph. 888-497-8754 ext. 702

Fax. 313-577-7563

Email. jpecoskie@wayne.edu

Juried Paper Abstract for ALISE 2012

Connectivity within the information lifecycle is not only limited to reaching out to other individuals or groups, but it can occur by expanding on what is understood as connecting to information types, sources, and practices. This reaching out can occur through certain learned skills; including those related to the information lifecycle or information behavior. Pleasure reading, described as an unimposed and unprescribed practice that readers do because they enjoy it (Krashen 2004), is one practice that can help individuals as they progress through their information lifecycle as it allows readers access to information based on their viewpoints and experiences in conjunction with their books and reading. Louise Rosenblatt ([1938] 1985) helps to frame this work by explaining reading as a dynamic event where meaning making for the individual reader occurs between the text and the reader's corpus of life experiences and emotions. This work also looks to Kenneth Burke ([1941] 1998) who discusses literature as "equipment for living" as it offers strategies to help readers cope with the dilemmas of everyday life.

Reading for pleasure and the meaning making (information) that results from the practice has been acknowledged as an important aspect of the information lifecycle (Wiegand 1997) and a means to extending reach and expanding horizons with regard to learning and other information practices (Ross 1999; Ross, McKechnie, and Rothbauer 2006), yet in the scope of LIS studies this is an arena that continues to be limited in scope and understanding, especially as related to sexuality and adult age readers. Paulette Rothbauer (2004) has looked to youth populations and investigated reading by young people claiming non-mainstream sexualities. Research on information behavior of individuals who claim non-mainstream identities indicate that books and reading is a preferred method of finding out (See Yeh 2008; Stenback and Schrader 1999; Creelman and Harris 1990).

For LGBTQ [1] (lesbian, gay, bisexual, and queer) individuals, navigating their coming out process and living as part of an oft-marginalized community can be a challenging aspect of day-to-day living. Given that pleasure reading is an important practice for learning about the self and social worlds, it is important to understand the implications for pleasure reading for this diverse group. This paper aims to explain how, for adult, female readers who claim non-mainstream sexualities, their reading allows them to connect to viewpoints which provide information that develops their self- and cultural- identities.

In this paper I will share data from a larger research project that explored the relationship between personal and social pleasure reading in the lives of lesbian, gay, bisexual, and queer

women. This work uses open-ended interviews with 19 female, adult pleasure readers who self-identify as lesbian, gay, bisexual, or queer from the Southern Ontario, Canada area, and analyzes these interviews following the principles of naturalistic inquiry including emergent, inductive methods of analysis. Findings show how information derived from pleasure reading helped these participants explore their personal sexual and gender identities, navigate the social world through building relationships between readers, and by 'opening doors' to the wider LGBTQ community.

This practice of meaning making through reading provided necessary information which expanded the participants' horizons about themselves and their social worlds. Pleasure reading provided information, confidence, and comfort that was not available through other individuals, sources, or practices, therefore pleasure reading, as a practice within the information lifecycle, was an essential method of connectivity to self and others for this group of participants. This research contributes to what is known in information behavior and reading research, and it also reminds Library and Information Science educators about the power of story and of the implications of pleasure reading research for meaning making in teaching and learning.

Note

[1] The abbreviation of LGBTQ is used as it best reflects the claimed sexual identities of the participants in this work.

References

- Burke, Kenneth. [1941] 1974. "Literature as equipment for living." In *The philosophy of literary form: studies in symbolic action*, 293-304. Berkeley: University of California Press.
- Creelman, Janet E.A., and Roma Harris. 1990. Coming out: The information needs of lesbians. *Collection Building* 10 (3/4): 37-41.
- Krashen, Stephen D. 2004. *The power of reading: insights from the research*. 2nd ed. Westport, Conn.: Libraries Unlimited.
- Rosenblatt, Louise M. [1938] 1995. *Literature as exploration*. 5th ed. New York: Modern Language Association of America.
- Ross, Catherine Sheldrick. 1999. Finding without seeking: the information encounter in the context of reading for pleasure. *Information Processing & Management* no. 35 (6): 783-799.
- Ross, Catherine Sheldrick, Lynne McKechnie, and Paulette M. Rothbauer. 2006. *Reading matters : what the research reveals about reading, libraries, and community*. Westport, Conn.: Libraries Unlimited.
- Rothbauer, Paulette M. 2004. Finding and Creating Possibility: Reading in the Lives of Lesbian, Bisexual and Queer Young Women. Unpublished Ph.D. dissertation. Faculty of Information and Media Studies, University of Western Ontario.
- Stenback, Tanis L. and Alvin M. Schrader. 1999. Venturing from the closet: a qualitative study of the information needs of lesbians. *Public Library Quarterly* 17, no. 3: 37-50.
- Wiegand, Wayne A. 1997. Out of sight, out of mind: Why don't we have any schools of library and reading studies? *Journal of Education for Library & Information Science* no. 38 (4): 314 - 326.
- Yeh, Nei-Ching. 2008. The social constructionist viewpoint on gays and lesbians, and their information behaviour. *Information Research* no. 13 (4): paper 364. [Available at

Community College Students' Perceptions on Library Website Features & Evaluation Criteria

Xin Wang, xwbt8@mail.mizzou.edu

School of Information Science & Learning Technologies, University of Missouri
111 London Hall, Columbia, MO 65211

Ben Richardson, Benjamin.Richardson@mail.mizzou.edu

School of Information Science & Learning Technologies, University of Missouri
111 London Hall, Columbia, MO 65211

Josipa Basic, jbyv7@mail.mizzou.edu

School of Information Science & Learning Technologies, University of Missouri
111 London Hall, Columbia, MO 65211

Introduction

As academic libraries seek to redesign their websites there is still a trend to incorporate social networking and web 2.0 tools into the functionality of the library website (Xu et. al., 2009; Gerolimos & Konsta, 2011; Chaua and Dion, 2010; Harinarayana & Vasantha Raju, 2010; Dickson & Holley, 2010). This practice is under much debate as emerging evidence is suggesting that the majority of student users do not utilize these tools and furthermore do not believe that the library website is a place to practice social networking (Kim & Abbas, 2010). Furthermore, libraries run the risk of arbitrarily introducing emerging technologies at the expense of the libraries core mission which is to serve the primary information needs of its patrons (Booth & Guder, 2009).

The body of these past studies, concerning academic libraries and innovative features, are most often concerned with students at traditional colleges and universities without feedback from community college students. As enrollment in community colleges escalate, it is becoming imperative that members in the LIS (Library & Information Science) field begin to examine and include community college students in their studies, especially when one considers that in the United States one in three college students are enrolled at a community college (Moltz, 2008).

The purpose of this study is to determine how community college students perceive the importance of library website features and how they evaluate library websites. This preliminary study, as the first phase of a broader research project, focuses on two issues:

- 1) How do community college students perceive the importance of library website features?
- 2) What are the criteria employed by community college students when they evaluate a

library website?

Methodology

This study was conducted at an urban mid-west community college. The data collection involved surveying and interviewing nine community college students who are currently using their community college library website. For each participant, it took 60-90 minutes to complete the survey and interview. Before starting the interview, each student responded to a survey which served to determine users' demographic information and how do community college students perceive the importance of library website features. Sixteen interview questions were designed to uncovering the criteria employed by community college students when they evaluate a library website. All sessions were recorded using Morae 3.2.1 software.

Preliminary Findings

1. How do community college students perceive the importance of library website features?

Through analyzing the online survey data and the semi-structured interview, we identified three dimensions of library website features that are very important to community college students:

1st dimension-- Collection Access: this is the core mission of the library. From the user survey, we found that community college students perceived the following site features are very important to access various library resources: "Search books (by subject, format, etc.), "Access to database", "Find an internet resource", "Access to e-books", "Check book availability online", "Request a Book Online". These findings were also reflected from their actual use of the STL community college library website. For example, during the interview sessions, four out of nine students mentioned Access to Databases (journal articles) was one of the most useful features, because they need to use the article resources to complete their research paper.

2nd dimension -- Services Access: site features supporting the access to library services were another prominent dimension that is in favored by student users. These features include: "Renew a Book Online", "Check fines for Overdue Book Online", "Request Material from another Libraries", "Obtain Instruction about Evaluate Websites" "Writing & Citing", "Research Guides", "Ask a Librarian", and "Check Your Library Account". For example, student users liked the "Renew/My Library Account" function existing on the current STL library site and considered it an important reason for them to revisit the site.

3rd dimension --Information about Library: The user survey and interview data showed that community college students perceive specific information about "Library Hours and Locations" and "Contact Information (Name of employees) were very important to them. These students mentioned that the "Library Hours and Location" link on the STL library website was extremely important to them and should be placed in an obvious place on the site.

An interesting finding of this study is that we found most of those innovative features (the use of "Web 2.0" tools) were not perceived very important to community college students. Students did not think the features such as "RSS for library news and events", "Live chat", "Blogs", "Wikis", "Social networks (Facebook, Twitter)", and "Rate comments" are inevitable components of a

community college library site. It seemed that these innovative features had not heavily employed by community college students yet.

2. What are the criteria employed by community college students when they evaluate a library website?

We identified a series of criteria that were employed by community college students when they judge a library site: 1) Consistence; 2) Ease of understanding terminology; 3) Personalized management (e.g., My Library account); 4) Aesthetics (e.g., more pictures); 5) self-learn ability; 6) Helpfulness (e.g., list database in alphabetical order); 7) Findability; 8) Simplicity.

Conclusion

This study revealed that from community college students' perspective, the most important features of a library website are those that may provide easy and helpful access to library collections and services. Web 2.0 features were not perceived very important among community college students. It is likely because community college students were not research intensive library users and they do not have strong motivation to participate into the virtual scholarship community. Their primary work task is to complete assignments from their classes with using library resources and services. In addition, another possible reason of the less valued Web 2.0 features among community college student is likely because the lack of awareness of these web features among students. To engage more student users on library websites, more promoting actions need to be taken to market these functions. Our future studies will be conducted to investigate how web 2.0 features could become more useful tools for community college students.

References

- Booth, C. & Guder, C. (2009) . If you build it , will they care? Tracking student receptivity to emerging library technologies. In D. Mille r, Ed. , *Pushing the edge: Explore, extend, engage*.
- Chaua, A. Y. & Dion, H. G. (2010). A study of Web 2.0 applications in library websites. *Library Hi Tech*, 27 (3), 393 - 402.
- Dickson, A. and Holley, R. P. (2010). Social networking in academic libraries: the possibilities and the concerns. *New Library World*, 111(11/12), 468-479.
- Moltz, D. (2008). The Community College Enrollment Boom. *Inside Higher Ed*. Retrieved from <http://www.insidehighered.com/news/2008/08/22/growth>.
- Gerolimos, M. & Konsta, R. (2011). Services for academic libraries in the new era. *D-Lib Magazine*, 17 (7/8)
- Harinarayana, N. S. & Vasantha Raju, N. (2010). Web 2.0 features in university library websites. *The Electronic Library*, 28 (1), 69-88.
- Kim, Y. M & Abbas, J. (2010). Adoption of Library 2.0 functionalities by academic libraries and users: a knowledge management perspective. *Journal of Academic Librarianship*, 36 (3), 211-218.
- Xu, C., Ouyang, F. & Chu, H. (2009).The academic library meets Web 2.0: applications and implications. *The Journal of Academic Librarianship*, 35 (4), 324-331.